

**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 #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023552**Date Inspected:** 08-May-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See below**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 and Tower Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA Inspector) George Goulet was present during the times noted above for observations relative to the work being performed.

**Bay 11**

This QA Inspector randomly observed the following work in progress in the Bay 11:

SMAW welding of weld joint ESD1-TBSA7-4B/B-9, 10, 11, 12 located on PCMK Tower, lift 7. Welder was identified as 202319. QC was identified as ZPMC CWI Zhu Feng (QC1). Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was ZPMC QC Wang Chuang Xin (QCA1), who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-B-P-2212 and WPS-B-P-2214 as verbally identified by QCA1.

**Heavy Dock**

This QA Inspector randomly observed the following work in progress onboard the ship moored at the end of the Heavy Dock:

SMAW repair welding of base metal on OBG lift 12CW deck plate I-rib and OBG lift 12CW bottom plate. Welders were identified as 066673 and 066398, respectively. ZPMC QA Inspector Zhang Jiadi was notified by Caltrans OSM Quality Assurance Inspector Ken Riley that no ZPMC QC was present, the preheat temperatures were insufficient, and Caltrans was not notified of base metal repairs would be made at these locations. This QA Inspector generated a Caltrans Incident Report for the above noted reasons. See the photos below and the Caltrans

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Incident Report for more details.

## OBG Trial Assembly Area

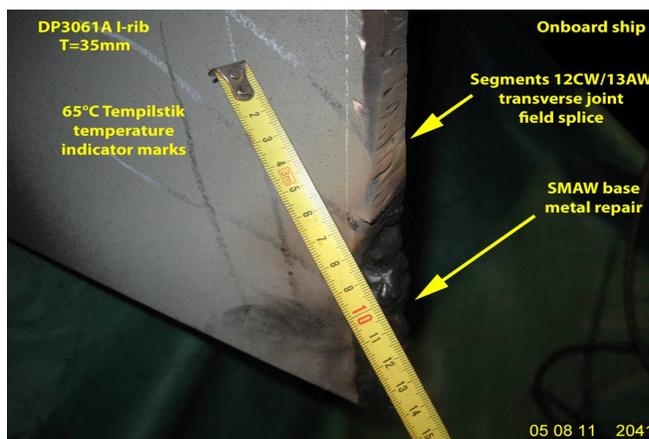
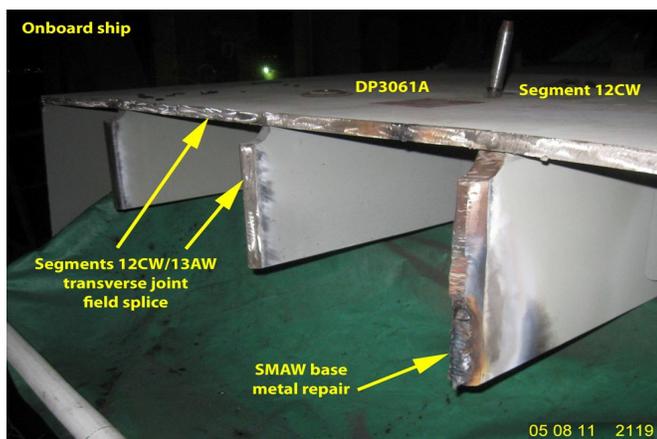
This QA Inspector randomly observed the following work in progress in the OBG Trial Assembly Area:

FCAW welding of weld joint SEG3020C-081 located on PCMK OBG 14W. Welder was identified as 070101. QC was identified as Li Yan Hua (QC2). Assisting QC2 at this location and appearing to be monitoring the welding operation and recording data was ZPMC QC Shen Jian Bo (QCA2), who was not a CWI. Weld variables recorded by QCA2 appeared to comply with WPS-B-T-2233-ESAB as verbally identified by QCA2.

FCAW welding of weld joints SEG3020AL-003, 303 located on PCMK OBG 14W. Welder was identified as 037705. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding operation and recording data was QCA2, who was not a CWI. Weld variables recorded by QCA2 appeared to comply with WPS-B-T-2233-ESAB as verbally identified by QCA2.

FCAW welding of weld joint SEG3013A-004 located on PCMK OBG 14W. Welder was identified as 200113. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding operation and recording data was QCA2, who was not a CWI. Weld variables recorded by QCA2 appeared to comply with WPS-B-T-2233-ESAB as verbally identified by QCA2.

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

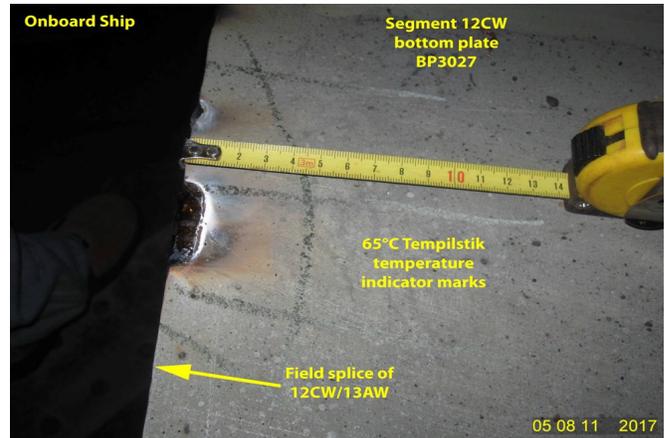
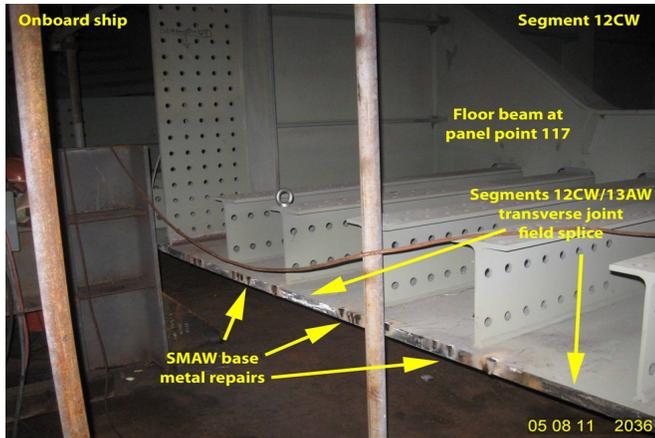


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## Summary of Conversations:

As noted above.

## 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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**Inspected By:** Goulet, George

Quality Assurance Inspector

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**Reviewed By:** Riley, Ken

QA Reviewer