

**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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-010369**Date Inspected:** 17-Nov-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Zhu Zhong Hai**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 COMPONENT**Summary of Items Observed:**

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

Bay #13

This QA Inspector observed the following work in progress:

SMAW in the 4G position of the OBG Segment 11CW, weld No. SSD14-PP101-131. The welder is identified as #049339. ZPMC QC is identified as Mr. Zhang Qiuo. The welding variables recorded by QC appear to comply with WPS- B – P-2214-Tc-U4b-FCM-1.

Flux Core Arc Welding (FCAW) in the 2G position of the OBG Segment 11CE, weld No. SSD20-PP103-132.

The welder is identified as #050242. ZPMC QC is identified as Mr. Guoxing Hui. The welding variables recorded by QC appear to comply with WPS- B – T-2232-Tc-U4b-F.

Bay #14

This QA Inspector observed the following work in progress:

SAW in the 1G position at bottom plate of the OBG Segment, weld No. SEG-3004AL-003. The welder is identified as #045265. ZPMC QC is identified as Mr. Xu Tao. The welding variables recorded by QC appear to comply with WPS- B – T-2221-B-L2C-S-2.

SMAW in the 4G position of the OBG Segment 10AW, weld No. SEG-059-037. The welder is identified as #066326. ZPMC QC is identified as Mr. Xu Tao. The welding variables recorded by QC appear to comply with WPS- B – P-2214-Tc-U4b-FCM-1.

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# WELDING INSPECTION REPORT

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Trial Assembly Yard

QA Verification UT performed after repair on portion of Deck Plate to Edge plate weld of 1AE ,1BE and 1AAE (Cross beam side). This Inspection was performed after ABF UT Inspectors performed UT of this joint.

The Weld Designation are as follows

CA-107-001,004 and 006

CA-097-002,004 and 006

For further information See Caltrans Ultrasonic Transverse Indication Evaluation sheet on this date .

During random in-process visual inspection this Caltrans Quality Assurance (QA) Inspector observed ZPMC personnel performing Shielded Metal Arc Welding (SMAW) for repair of base material at multiple areas (where temporary attachments were removed) on bottom plate BP 144 R of Segment 7BW. Upon further inspection of the temporary attachment areas this QA Inspector observed a "crack like" linear indication approx. 15mm in length. This indication was confirmed using Magnetic Particle Testing (MT). In addition, this QA Inspector observed that the opposite side of the repaired area was covered with standing water.

This repair was performed on Seismic Performance Critical Material (SPCM) without prior engineer notification or approval.

This QA Inspector generated an incident report for this date.

During random in-process visual verification on Segment 10BW at weld joints SSD-13A-PP89-007 this Quality Insurance Inspector (QA) observed the ZPMC welding personal was welding on cracked tack weld area without remove the crack. This QA Inspector also found Crack like linear indication in all tack weld at weld joint SSD-13A-PP90-002 .These tack welds had been previously inspected and accepted by ZPMC Quality Control (QC) personnel.

This QA Inspector generated an incident report for this date.

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

## **Summary of Conversations:**

No relevant conversations

## **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 150-0042-2372, who represents the Office of Structural Materials for your project.

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# WELDING INSPECTION REPORT

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<b>Inspected By:</b>	Bera,Subhasis	Quality Assurance Inspector
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<b>Reviewed By:</b>	Patterson,Rodney	QA Reviewer
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