

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 #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-003343**Date Inspected:** 26-Jul-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Sun Wei**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:**

The Quality Assurance (QA) Inspector Gregory Bertlesman arrived on site at the Zhenhua Port Machinery Company facility on Changxing island, China to periodically monitor welding and Quality Control functions. While on site the Quality Assurance Inspector observed and/or discovered the following.

OBG Assembly Bay

Segment 5AE – The Quality Assurance Inspector observed ZPMC in the process of fitting up the side plate sub-assembly to the bottom plate sub-assembly.

Segment 5BE – No ZPMC personnel was observed working on the segment.

Segment 5CE – The Quality Assurance Inspector observed ZPMC performing miscellaneous grinding to the side panels.

Segment 3AE – The Quality Assurance Inspector observed ZPMC assembling scaffolding.

Segment 3BE – No ZPMC personnel was observed working on the segment.

Segment 4AE – No ZPMC personnel was observed working on the segment.

Segment 4BE – No ZPMC personnel was observed working on the segment.

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The Quality Assurance Inspector observed ZPMC in the process of fitting up and tack welding a corner assembly for the 3AE segment utilizing the shielded metal arc welding process.

Segment 5CW – ZPMC was observed fitting up the FL1-1 Floor Beam.

Segment 5BW – No ZPMC personnel was observed working on the segment.

Segment 5AW – No ZPMC personnel was observed working on the segment.

Segment 4BW – No ZPMC personnel was observed working on the segment.

Segment 4AW – ZPMC was observed performing grinding to the longitudinal diaphragm fillet weld that joins with the bottom plate.

Segment 3AW – The Quality Assurance Inspector observed base metal damage at the webs of the “T” stiffeners at Side Panels SP-70A and SP-73B. It appears the damage occurred while thermal cutting the adjacent bevel. In addition, ABF Representative Josh Read “green tagged” the parts implying the panels were completed. The Quality Assurance Inspector informed Mr. Read. Mr. Read stated he must have overlooked the damage, would remove the “green tag”, and request ZPMC to generate a critical weld repair report for approval prior to repairing the parts. Below are digital photographs illustrating the discrepancies.

Segment 3BW – No ZPMC personnel was observed working on the segment.

Deck Panel Production Welding

The Quality Assurance Inspector witnessed the welding of the production panels DP-118-002 (4 rib) and DP-334-002. The welding of the deck panel was performed on gantry 2 to produce the partial joint penetration groove weld. Upon completion of the gas metal arc welding (GMAW) root pass ZPMC performed the subsequent submerged arc welding (SAW) pass. The parameters appeared to be within welding procedure specification for dual process WPS-B-T-2342-U1 (U-rib)-3.



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Summary of Conversations:

As stated in the contents of the above report.

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 Ady Velasco(707) 552 7715, who represents the Office of Structural Materials for your project.

Inspected By:	Bertlesman,Greg	Quality Assurance Inspector
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Reviewed By:	Lanz,Joe	QA Reviewer
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