

**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-001006**Date Inspected:** 12-Dec-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 1300**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2330**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Wu Ming Kai**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 & 114 Meter Mock-Up**Summary of Items Observed:**

Mock Up 114 Meter

This Quality Assurance Inspector observed the preheating of MUC-MA106 C/C weld joint 1A Upper Shaft Assembly between skin plates 'E' MUSC-MA108 and 'D' MUSC-MA113. The root weld is in and complete and welding of the intermediate passes is to begin at 2200. Preheating was being carried out and temperature was not up to the requirements of the welding procedure specification at this time 2030.

Mock Up OBG

Bay 1

This Quality Assurance Inspector observed ZPMC cutting samples from partial joint penetration welds of the close u-rib weld joints 1 & 2 of the weld trial assembly. Also observed that deck plate MU1 was deck side down and bent connection plates were partially bolted in between the 1750 millimeter and 13000 millimeter closed u-rib sections of ribs between U-01 & U-06, U-02 & U-07, U-03 & U-08, U-04 & U-09 and U-05 & U-10.

Bay 3

This Quality Assurance Inspector observed tack welding of various knife and t-stiffeners to side plates in the shop. ZPMC welder Wei Dashuai, welder identification 051246 was tack welding SP069-01-002 and SP069-01-003 with the flux core arc welding process. Some of the essential variables were checked and found to be as follows;

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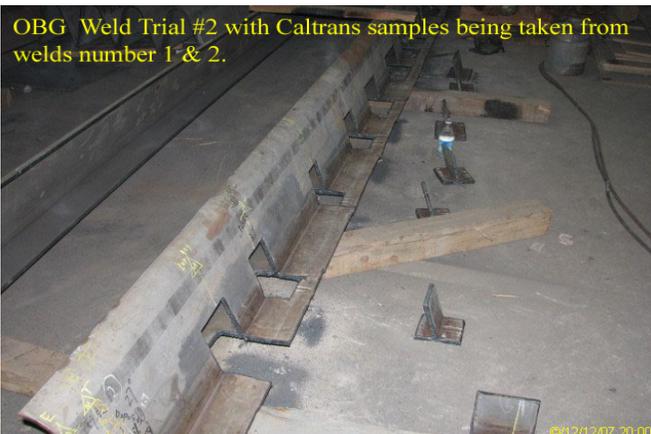
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volts 28.4, amperage 277 and travel speed 521 millimeter per minute. Xu Xian ping was observing and recording the welding variables. Welder Han Jian She, welder identification 06645 was observed tack welding knife plate weld joints SP040-01-009 and SP040-01-010. Li Peng fei was observing and recording the welding data for Han Jian She's welds. Welder Wu Zhi Bin, welder identification 049804 was observed welding with the submerged arc welding process on butt splice weld joint SP021-01-001. Some of the essential welding variables were check and found to be as follows; volts 30, amperage 484, travel speed 600 millimeters per minute and pre-heat 75 degrees Celsius. Mr. Ming Kai Wu was the Lead Certified Welding Inspector in Bay 3 this evening.



## Summary of Conversations:

No conversations held today.

## 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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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**Inspected By:** Berger, Bruce

Quality Assurance Inspector

**Reviewed By:** Cochran, Jim

QA Reviewer