

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023275**Date Inspected:** 30-Apr-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**Summary of Items Observed:**

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

Trial Assembly

This QA Inspector observed the following work in progress for Trial Assembly.

ZPMC was using the Shielded Metal Arc Welding (SMAW) process.

ZPMC QC is identified as Shen Jian Bo and An Qing Ziang.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components; OBG 14W

PCMK: SEG3020AH

Weld No: 003,004

Welder: 066674, 067520

WPS-B-P-2212-TC-U4b-FCM-1

Components; OBG 13AW

PCMK: SEG3013P

Weld No: 157

Welder: 047864

Weld Report No. B-WR20695

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

WPS-345-SMAW-4G(4F)-FMC-Repair-1

Components; OBG

PCMK: SEG3013P 13AW

Weld No: 193

Welder: 067904

Weld Report No. B-WR20695

WPS-345-SMAW-4G(4F)-FMC-Repair-1

Components; OBG 14W

PCMK: SEG3013AH

Weld No: 001

Welder: 037779

WPS-B-P-2214-B-U2-2

PCMK: SEG3013L 13AW

Weld No: 105

Welder: 066326

Weld Report No. B-WR20693

WPS-345-SMAW-4G(4F)-FMC-Repair-1

This QA Inspector observed the following work in progress for Trial Assembly.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Shen Jian Bo and An Qing Ziang.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components; OBG 13AW

PCMK: SEG3013N

Weld No: 217

Welder: 201215

WPS-B-T-2233-ESAB

Components; OBG 13BW (see photos)

PCMK: OBG13

Weld No: 001

Welder: 066673

WPS-B-T-2231-ESAB

Components; OBG 13CW

PCMK: SA3126

Weld No: 004,005,006

Welder: 045230

WPS-B-T-2231-ESAB

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

Components; OBG 13CW

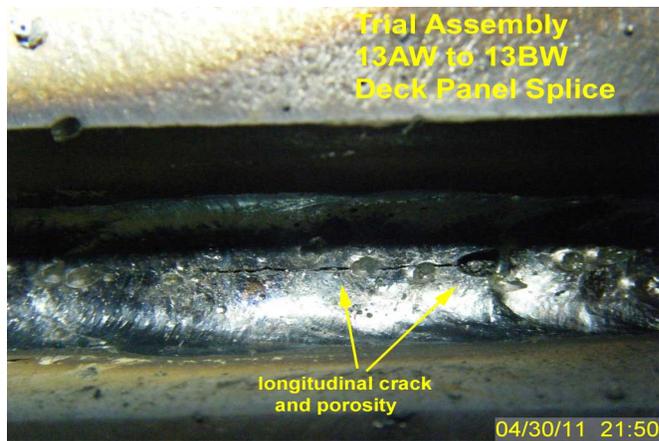
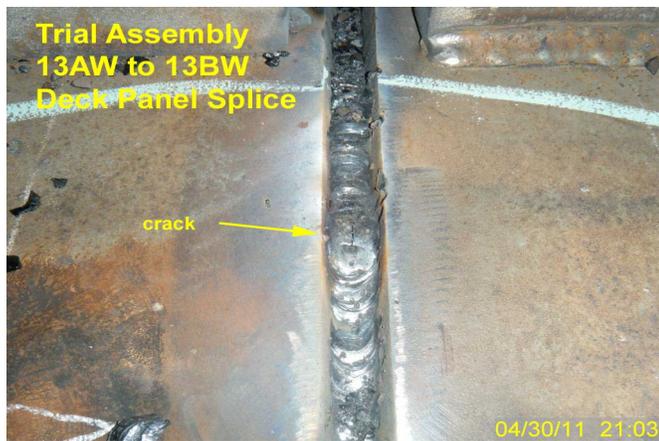
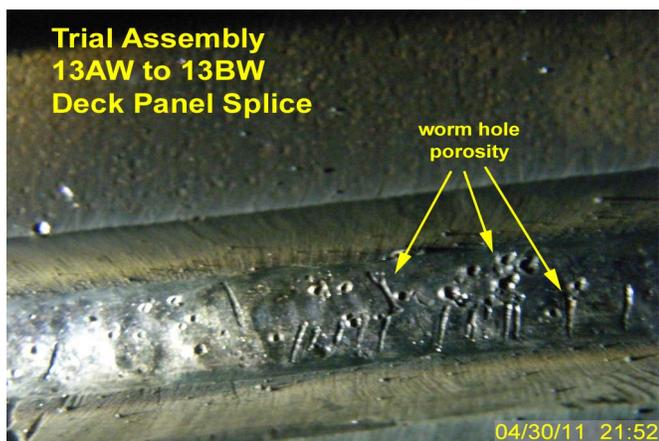
PCMK: SA3126

Weld No: 005~008,010

Welder: 045143

WPS-B-T-2231-ESAB

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



Summary of Conversations:

This QA Inspector observed longitudinal cracks and porosity in the root of weld number OBW13-001, 13AW to 13BW deck panel splice. ZPMC was alerted of the problem and CWI Wong Zhu investigated and stopped the welding at 22:00 hours. The weld is to be a complete joint penetration with a flux core arc weld for a root, the rest filled with submerged arc, then the B side ceramic removed, back gouged with carbon arc cutting, magnetic particle tested for imperfections and filled with shielded metal arc welding. All FCAW welding components were checked against WPS-B-T-223(2)1T-ESAB and found to be within the parameters of that document. Pictures and statement of findings was turned over to day shift lead personal through e-mail for follow up. No other investigation is warranted at this time. (see photos)

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

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 1500026784, who represents the Office of Structural Materials for your project.

Inspected By:	Leavitt,Kelly	Quality Assurance Inspector
----------------------	---------------	-----------------------------

Reviewed By:	Riley,Ken	QA Reviewer
---------------------	-----------	-------------