

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-020049**Date Inspected:** 29-Mar-2010**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:	Liu Hua Jie, Lu Li Qing, Geng 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:	Orthotropic Box Girder (OBG)		

Summary of Items Observed:

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

This QA Inspector observed the following work in progress:

Assembly, Bay 14, 12CW, PP116.5, Deck Panel Diaphragm.

During Random Visual in process Inspection, this QA inspector observed fit-up of Deck Panel Diaphragm DP3064-001-PP116.5. The attached photographs provide additional detail.

Assembly, Bay 14, 12CE, PP115.

During Random Visual in process Inspection, this QA inspector observed fit-up of Floor Beam identified as FB3036-001. The attached photographs provide additional detail.

Assembly, Bay 14, 12BE, DP3013, PP114, Deck Panel Diaphragm.

FCAW welding of weld joint DP3013-001-074, 75, 084, 085; located on assembly, Bay 14, 12BE. Welder is identified as 214945; ZPMC Quality Control Inspector (QC) is identified as Geng Wei. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-2133.

Assembly, Bay 14, 12AW, Deck plate (DP3047) to Deck plate (DP3048).

FCAW welding of weld joint SEG3004*-019; located on assembly, Bay 14, 12AW. Welder is identified as 201215; ZPMC Quality Control Inspector (QC) is identified as Liu Hua Jie. The welding variables recorded by

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Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-2231-B-U2-F.

Assembly, Bay 14, 12BE, Corner Assembly CA3002.

FCAW welding of weld joint CA3002C-1-015, 022 & CA3002C-2-015, 022; located on assembly, Bay 14, 12BE. Welder is identified as 055491; ZPMC Quality Control Inspector (QC) is identified as Geng Wei. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-2132.

Assembly, Bay 14, 12BE, CA3002, Edge plate to Deck plate.

FCAW welding of weld joint CA3002-004; located on assembly, Bay 14, 12BE. Welder is identified as 055491, 052696; ZPMC Quality Control Inspector (QC) is identified as Geng Wei. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-2232-TC-U4B-F.

Assembly, Bay 14, 12AE, CA6051, Deck plate to Edge plate.

During the Quality Assurance (QA) random in-process visual inspection, this QA inspector observed ZPMC Personnel performing Ultrasonic Testing (UT) of Deck plannel to Deck plate to Edge plate weld Identified as CA6051-004. The attached photographs provide additional detail.

Assembly, Bay 14, 12CE, PP115.

During the Quality Assurance (QA) random in-process visual inspection, this QA inspector observed ZPMC Personnel performing fit up of longitudinal diaphragm Identified as LD3011-001. The attached photographs provide additional detail.

Assembly, Bay 14, 12BE.

FCAW welding of weld joint SEG3002C-099, 139; located on assembly, Bay 14, 12BE. Welder is identified as 058551, 044824; ZPMC Quality Control Inspector (QC) is identified as Geng Wei. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-2133.

Assembly, Bay 13, Mock-Up for 13AE.

During the Quality Assurance (QA) random in-process visual inspection, this QA inspector observed ZPMC caring out Mock-Up for 13AE. This QA inspector noticed following things

- BP3032-005 Bottom panel plate welding in process.

Assembly, Bay 03, Mock-Up for 13AE.

During the Quality Assurance (QA) random in-process visual inspection, this QA inspector observed ZPMC caring out Mock-Up for 13AE. This QA inspector noticed following things

- FB3123A, FB3124A Floor Beams being Heat straightened.
- ZPMC heating by flame.
- Heat being applied on the weld & adjacent area (including HAZ).
- Temperature observed above 230 degree Celsius & below 600 degree Celsius.
- Static Load of "8 tones" was being applied at the same time.

This QA Inspector carried out NDE on following

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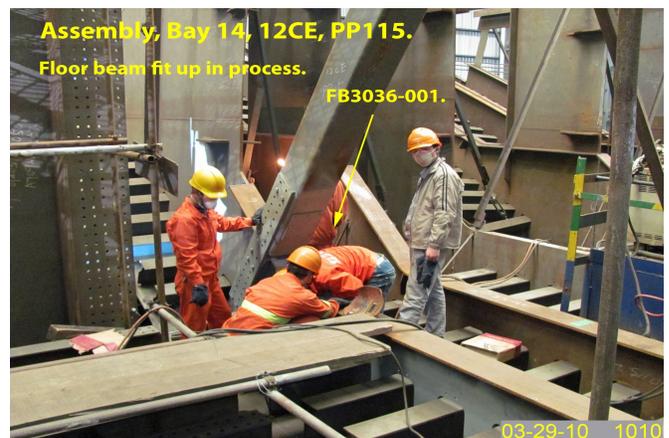
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Bay 16, Tower Façade Plate.

This QA inspector performs Random Magnetic Particle Testing (MT) of approximately 15% area previously tested and accepted by ZPMC Quality Control personnel (Notification # 005433). This QA Inspector generated an MT report (TL-6028) for this date. The members are identified as

- 1)WD1-A224-1-10, 11, 22.
- 2) ED1-A204-2-1, 3, 5, 8, 21, 35, 49, 51.
- 3) ED1-A222-2-7, 5, 9.
- 4) ED1-A227-1-13, 14, 15.
- 5) ED1-A206-1-1, 2.
- 6) ED1-A204-1-1, 3, 5, 8, 21, 35, 49, 51.
- 7) ED1-A222-1-7, 5, 9.

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



Summary of Conversations:

No relevant conversations.

Comments

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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, 1500.042.2372, who represents the Office of Structural Materials for your project.

Inspected By:	Juvekar,Amit	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer
