

**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-019798**Date Inspected:** 02-Dec-2010**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 observations relative to the work being performed.

This QA Inspector observed the following work in progress:

Bay 2

This QA Inspector observed the following work in progress for Bay 2.

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

ZPMC QC is identified as Tian Lei.

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.

Component: Diaphragm Sub Assembly

PCMK: FB3343

Weld No: 001~014

Welder: 067904

Repair No: C-WR 2333

WPS-345-SMAW-2G(2F)-Repair

Component: Diaphragm Sub Assembly

PCMK: FB3343

---

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 4 )

---

---

Weld No: 326  
Welder: 066038  
Repair No: C-WR2340  
WPS-345-SMAW-2G(2F)-Repair

Component: Diaphragm Sub Assembly  
PCMK: FB3343  
Weld No: 312  
Welder: 067707  
Repair No: C-WR2337  
WPS-345-SMAW-2G(2F)-Repair

Component: Diaphragm Sub Assembly  
PCMK: FB3343  
Weld No: 389  
Welder: 037997  
Repair No: C-WR2333  
WPS-345-SMAW-2G(2F)-Repair

Component: Diaphragm Sub Assembly  
PCMK: FB3343  
Weld No: 342  
Welder: 066258  
Repair No: C-WR2339  
WPS-345-SMAW-2G(2F)-Repair

Component: Diaphragm Sub Assembly  
PCMK: FB3343  
Weld No: 290  
Welder: 068097  
Repair No: C-WR2338  
WPS-345-SMAW-2G(2F)-Repair

Component: Diaphragm Sub Assembly  
PCMK: FB3343  
Weld No: 385  
Welder: 066261  
Repair No: C-WR2330  
WPS-345-SMAW-2G(2F)-Repair

Heat straightening of PCMK, LD3049 under approved Heat Straightening procedure, HSR1(B)-9795. The in process temperature was observed as 230°C. The ZPMC CWI was identified as Tian Lei. The approved HSR procedure stated that a maximum temperature of 650°C with 1~3 numbers of applications was allowed. The distortion that was previously measured and recorded on the HSR was Maximum 10mm.

---

---

## WELDING INSPECTION REPORT

( Continued Page 3 of 4 )

---

---

### Bay 3

This QA Inspector observed the following work in progress for Bay 3.

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

ZPMC QC is identified as Ghang Ya Xu.

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.

Component: OBG Lift 14, Diaphragm Sub Assembly

PCMK: SEG3019K

Weld No: 127,128

Welder: 058102

Repair No: WR16805

WPS-345-SMAW-2G(2F)-Repair

### Bay 7

This QA Inspector observed the following work in progress for Bay 7.

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

ZPMC QC is identified as Shu Yong Hun.

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.

Component: OBG Cross Beam Assembly

PCMK: CB3003

Weld No: 014~031

Welder: 295083

WPS-B-P-3113-Pad Eye

Component: OBG Floor Beam

PCMK: FB3243

Weld No: 070,069,061

Welder: 057795

WPS-B-P-2212-B-U2-Fem

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

### Summary of Conversations:

No significant 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 15000422372, who represents the Office of Structural Materials for your project.

---

---

# WELDING INSPECTION REPORT

( Continued Page 4 of 4 )

---

---

---

<b>Inspected By:</b>	Leavitt, Kelly	Quality Assurance Inspector
----------------------	----------------	-----------------------------

---

<b>Reviewed By:</b>	Riley, Ken	QA Reviewer
---------------------	------------	-------------