

**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 #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-029125**Date Inspected:** 08-Feb-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** As noted 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:** SAS OBG**Summary of Items Observed:**

Quality Assurance Inspector (QA) Douglas Frey was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

This QA observed the following welders working on the OBG at various locations:

This QA Inspector randomly observed ABF/JV welder Mike Jimenez #4671 performing the Carbon Arc Gouging (CAG) process in the 4G overhead position on the root side of the weld of the Deck Access Hole of 14W PP126. 5-W2-DAH. Upon completion of the welder grinding the back gouge to clean shiny metal, QC Inspector Salvador Merino tested the back gouge by performing Magnetic Particle (MT) testing. This QA inspector observed no rejectable indications and the welder began the SMAW process utilizing ABF-WPS-D1.5-1040C-CU in the 4G overhead position with amperage of 134. The QA Inspector made subsequent observations throughout the shift to monitor quality and noted that the work is in progress and appears to be in general conformance to the contract requirements.

ABF welder Richard Garcia #5892 was observed performing FCAW welding on the 6mm x 75mm plates on the threaded holes of counterweight numbers 40 and 42. The welder was observed utilizing WPS ABF-D1.5-F2200-2 for the Partial Penetration Joints. The welder was observed preheating the welds prior to welding. Other welding parameters as inspected by the QC Inspector were recorded as 310 Amps and 22 volts and appeared to be in compliance with the WPS noted above. RFI-002670R00 was referenced during this observation.

---

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---

---

ABF welder Wai Kit Lai #2953 was observed performing FCAW welding on the 6mm x 75mm plates on the threaded holes of counterweight numbers 60, 68 and 70. The welder was observed utilizing WPS ABF-D1. 5-F2200-2 for the Partial Penetration Joints. The welder was observed preheating the welds prior to welding. Other welding parameters as inspected by the QC Inspector were recorded as 306 Amps and 21 volts and appeared to be in compliance with the WPS noted above. RFI-002670R00 was referenced during this observation.

This QA observed QC Inspector Fred Michels and Salvador Merino performing welding parameter checks such as voltage, amps, electrodes and preheats throughout the day. This QA also observed QC Inspector's John Hays performing various Non-Destructive Testing (NDT) on completed weld repairs as they became available for testing. Non-Destructive Testing methods utilized by the QC Inspectors were Visual Testing (VT), Magnetic Particle Testing (MPT) and Ultrasonic Testing Shear Wave (UTSW). QC Inspectors were observed performing inspection per applicable code and or contract criteria. Unless otherwise noted, all work observed on this date appeared to generally comply with the contract documents.

### **Summary of Conversations:**

Conversations were relevant to work performed.

### **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 Gary Thomas 916-764-6027 , who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Frey,Doug	Quality Assurance Inspector
<b>Reviewed By:</b>	Reyes,Danny	QA Reviewer

---