

**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 #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-028120**Date Inspected:** 05-Aug-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job site**CWI Name:** Steve Jensen**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:**

Quality Assurance Inspector (QAI) Rodney Patterson 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 Inspector performed ultrasonic machine "Horizontal Linearity" and "Decibel Accuracy" verifications as specified by AWS D1.5 paragraphs 6.22.1 and 6.22.2. The following Krautkramer ultrasonic machines, models USN58L and USN60 serial numbers 01XD6V, 01X0PV, 02290P, 01XH26 were calibrated. A calibration sticker was completed and attached to each of the ultrasonic machines and a calibration form was completed and E-mailed to the QA Lead Inspector Daniel Reyes.

The QA inspector observed at random intervals, ABF/JV qualified welder Chris Bowles #9317 performing Flux Cored Arc Welding (FCAW) in the 4G position utilizing the Caltrans approved Welding Procedure Specification ABF-WPS-D1.5-3110-4. The welding observed was for the lift 12 east corner assembly deck splice at panel point 111 designated as 12E -E2.1. The weld surface and surrounding area was brought to temperature by the use of an induction heater and the preheat temperature as well as welding parameters were confirmed by ABF QC Steve Jensen at the beginning of the shift.

**Ultrasonic Testing (OBG Deck)**

This QA performed verification Ultrasonic Testing (UT) on Complete Joint Penetration (CJP) deck drop-in splice connection for lift 13W. The welds have been previously tested and accepted by QC Ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. The QAI's findings are as follows;

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# WELDING INSPECTION REPORT

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## Lift 13W Deck Drop-in Splice (13W PP122.2)

The QAI performed 20% verification of this weld from Y=7500~8600 as well as random verification in way of previous repairs. No rejectable indications were observed at the time of inspection, however a number of recordable indications were observed throughout the weld. The total accumulative length of recordable indications marked by ABF QC totals approximately 2% of the overall weld length.

The QAI spent a portion of this shift reviewing and documenting the status and completion of various production welding tracking logs for lift 13W/14W drop-in deck work currently in-process. The QA recorded the information on the OBG tracking log.

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

### Summary of Conversations:

No relevant 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 Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Patterson,Rodney	Quality Assurance Inspector
<b>Reviewed By:</b>	Levell,Bill	QA Reviewer

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