

**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-029423**Date Inspected:** 18-Apr-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:** 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:**

Quality Assurance Inspector (QA) Fritz Belford 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:

**Welder Carlos Garcia:**

The welder was observed performing stud welding of 1/4" threaded studs for electrical conduits on the E2/E3-EB and E2/E3 WB travelers. The welder was observed using the Nelson Series 4500 Model 101 welding machine with the Nelson Nelweld stud gun. The current was set at 350 Amps with weld time at .17 seconds to produce a 0.215" weld base diameter as per Procedure Qualification Record (PQR) S003. All (100%) of the welded studs were then torque tested to 5ft-lbs as per Figure 7.3 of AWS D1.5 2002 by QC Inspector Fred Michael. Out of 39 stud welds 3 failed as witnessed by this QAI. The base metal of failed stud welds were ground flush for the rewelding of a new stud and were torque tested once they were cooled. The QC Inspector Fred Michaels was onsite monitoring the welding parameters. Welding parameters appeared to be in compliance with the PQR noted above.

**Welder Rick Clayborn #2773:**

The welder was observed performing in process welding on the Cover Plates seal welds at OBG 12E Panel Point 119 (-1500) in way of the K plate for the West Saddle Grillage Dehumidification Zone as per ABF-RFI-003256R00. The welder was observed pre heating the "K" plates to 300 degrees Fahrenheit prior to welding. The welding was performed utilizing the Welding Procedure Specification (WPS) ABF-WPS-D15-F1200A Rev.2 for Shield Metal Arc Welding (SMAW). The welding parameters were verified

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# WELDING INSPECTION REPORT

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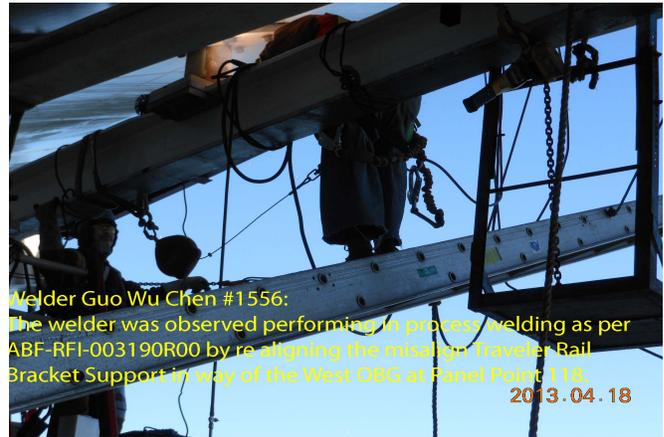
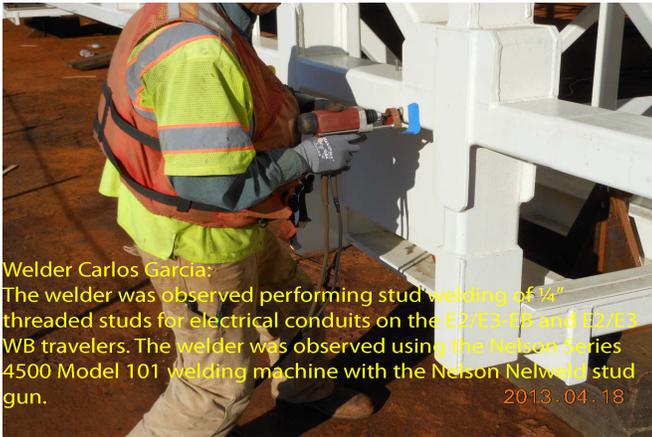
by QC Inspector Tony Sherwood throughout the day and appeared to be in compliance with the WPS noted above.

Welder Guo Wu Chen #1556:

The welder was observed performing in process welding as per ABF-RFI-003190R00 by re aligning the misalign Traveler Rail Bracket Support in way of the West OBG at Panel Point 118. The welder was observed welding utilizing the Welding Procedure Specification (WPS) ABF-WPS-D15-1060A for Shield Metal Arc Welding (SMAW). The welding parameters were verified by QC Inspector Tony Sherwood throughout the day and appeared to be in compliance with the WPS noted above.

The completed and accepted work observed at this location appeared to be in compliance with the contract specifications.

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



## Summary of Conversations:

Conversations this day as required for scope of work.

## 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.

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**Inspected By:** Belford,Fritz

Quality Assurance Inspector

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**Reviewed By:** Reyes,Danny

QA Reviewer