

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-028150**Date Inspected:** 13-Aug-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1930**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:

OBG 12W (Interior)

This QA observed the following welders working in OBG 12W at various locations:

Authorized welder Chris Bruce #8901:

Welder Chris Bruce was observed welding on welds 12W PP115.5 W2.1-BW2 (3G, CJP) utilizing Caltrans approved Welding Procedure Specification's (WPS) ABF-WPS-D15-1040A; on weld 12W PP115.2 W2.1 PS3 (1G & 4G, CJP) utilizing Caltrans approved Welding Procedure Specification's (WPS) ABF-WPS-D15-1030; and on weld 12W PP115.2 W2.1 PS2 (1G & 4G, CJP) utilizing Caltrans approved Welding Procedure Specification's (WPS) ABF-WPS-D15-1040A. This QA observed welder Chris Bruce applying pre heat to the welds prior to welding and QC Chris Conche was observed measuring amps and checking welding parameters as per QC Inspector duties. Measured amps at time of welding was 129 amps using E7018 H4R electrode with a preheat of 150 degrees Fahrenheit. All welding parameters within limits of (WPS) ABF-WPS-D15-1040A and ABF-WPS-D15-1030 as verified by this QA.

Authorized welder Roby Smith #4245:

Welder Roby Smith was observed excavating and welding on the repairs for weld 12W 13W A1.1 (1G & 4G, CJP)

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and A1.2 (1G & 4G,CJP), utilizing Caltrans approved Welding Procedure Specification's (WPS) ABF-WPS-D1.5-1004-Repair. Deck plating was preheated to 225 degrees Fahrenheit before excavation. After indication excavation the repairs were Magnetic Particle Tested (MT) before welding. After welding the weld was then Post Weld Heat Treated (PWHT) to 450o F for 1 hour before allowing it to cool. Following locations were weld repaired by the welder.

Weld 12W 13W-A1.1:

Y locations 470 – 580 (Area 150 x 40 x 7mm Deep).

Y location 1000 – 1023 (Area 23 x 20 x 7mm Deep).

Weld 12W 13W-A1.2:

Y locations 100 & 200 (Area combined 320 x 30 x 11mm Deep).

Y locations 450 – 580 (Area 180 x 25 x 11mm Deep).

OBG 13W (Exterior)

Authorized welder Xiao Hua Luo #1291:

Welder Xiao Hua Luo welding on weld 13W PP120 W2.0-FB1 (2G) and FB2 (3G), utilizing Caltrans approved Welding Procedure Specification's (WPS) ABF-WPS-D1.5-1040A. Welder was observed pre heating weld to the WPS specified temperature before welding the back gouge.

Authorized welder Mike Jimenez #4671:

Welder Mike Jimenez welding on weld 13W PP121 W2.0-BW1 (2G & 3G), utilizing Caltrans approved Welding Procedure Specification's (WPS) ABF-WPS-D1.5-1040A. Welder was observed pre heating weld to the WPS specified temperature before welding the back gouge.

This QA randomly observed OBG 12W QC Chris Conche, checking fit up of various welds, and checking WPS compliance of welders throughout the day and performing Magnetic testing (MT) on back gouges as they become available for testing.

Magnetic Particle Testing

This QA performed Magnetic Particle Testing (MT) on the following welds:

Weld 12W PP115.5 W2.1-BW2:

- 100% MT of Weld Back Gouge (625mm, MT Accept.)

Weld 12W PP115.5 W2.1-PS2:

- 100% MT of Weld Back Gouge (60mm, MT Accept.)

Weld 12W PP115.5 W2.1-PS3:

- 100% MT of Weld Back Gouge (130mm, MT Accept.)

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

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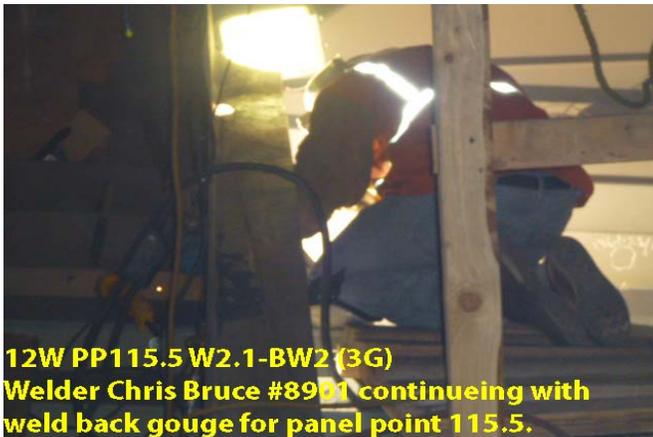
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**12W 13W-A1.1 (4G)
Welder Roby Smith #4245 welding repairs at Y
location 470.**



**13W PP120 W2.0-FB1 (2G) & FB2 (3G)
Welder Xiao Hua Luo #1291 welding back
gouge of weld.**



**12W PP115.5 W2.1-BW2 (3G)
Welder Chris Bruce #8901 continuing with
weld back gouge for panel point 115.5.**



**13W PP121 W2.0-BW1
Welder Mike Jimenez #4671 welding 2G and 3G
on weld back gouge.**

Summary of Conversations:

Conversations relevant to work performed on this date.

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.

Inspected By: Belford,Fritz

Quality Assurance Inspector

Reviewed By: Levell,Bill

QA Reviewer
