

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 #: 74.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-008634**Date Inspected:** 18-Aug-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1300**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1800**Contractor:** Goodwin Steel, UK**Location:** Stoke-on-Trent, UK**CWI Name:****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:** Cable Band**Summary of Items Observed:**

The following report is based on METS observations at Goodwin Steel Castings, Stoke-on-Trent, UK on this date.

QA inspector witnessed buildup welding of casting B3/M-8, GG29421-8 as documented on the weld map submitted with verbal authorization to process Lot No. B243-095-09. The welder, Gordon Douglas, was observed welding in the flat position utilizing approved welding procedure WPS04-0120F4B. He was observed using 4 mm E7018-1 electrode. The ammeter on this machine showed amperage between 105 and 118 amps which is within the WPS limits of 100 to 180 amps. Parameters were observed to be within the limits of the WPS. The rod oven temperature indicator was registering 150 degrees Centigrade, and the welder was using a rod quiver.

The following tensile testing was performed by Goodwin Steel Castings Quality Control Technician, Mr. Martyn Hilditch. The testing was witnessed and completed today:

GG29417-1, Heat C7322 After PWHT

Yield Strength	401 N/mm ²
Ultimate Tensile Strength	585 N/mm ²
Elongation	30 %
Reduction of area	49 %

GG29432-2, Heat F7609 Initial Test

Yield Strength	441 N/mm ²
Ultimate Tensile Strength	646 N/mm ²

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

Elongation	24 %
Reduction of area	46 %

The above results are in compliance with ASTM A148 Grade 550-345.

Anneal is in progress on castings B8-1-F GG29433 - 7, and B8-1-F GG29433 - 10 which are in furnace number 5, and B14-CBB GG29447 - 4 and B8-1-F GG29433 - 3 which are in furnace number 4.

Goodwin Steel Castings personnel were observed removing riser material and feeds from the exterior surface of Casting GG29429-4 B7-1-F. The material was removed utilizing an Oxygen Fuel Gas Torch method. Work was not completed on this date and appears to meet the minimum requirements of the 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.

Inspected By:	Riegler,Randy	Quality Assurance Inspector
Reviewed By:	Lanz,Joe	QA Reviewer
