

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-009447**Date Inspected:** 17-Sep-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 745**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1645**Contractor:** Goodwin Steel, UK**Location:** Stoke-on-Trent, UK

CWI Name:	N/A		
Inspected CWI report:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A

CWI Present:	Yes	No	
Rod Oven in Use:	Yes	No	N/A
Weld Procedures Followed:	Yes	No	N/A
Verified Joint Fit-up:	Yes	No	N/A
Approved WPS:	Yes	No	N/A
Delayed / Cancelled:	Yes	No	N/A

Bridge No: 34-0006**Component:** Cable Band Castings**Summary of Items Observed:**

The following report is based on METS Caltrans QA Inspector Mike Brcic's observations at Goodwin Steel Castings, Stoke-on-Trent, England, UK. The following operations observed on cable band castings are identified below.

Repair Welding - GG29441-2 (B10-F-2) Observed welder G.Douglas, weld ID 405, performing SMAW process, 5mm, E7018-1 electrode, in a 1G position. Parameters of WPS 04-0120F4B issue 4, were verified and followed, Amp average during observation was 236, voltage was 24.8. Temperatures of casting exceeded 160° Celsius (preheat) and was below 425° Celsius for an interpass temperature. Excavation in work was identified as #15, "Major", on the Weld Excavation Map.

The following tensile testing was performed by Goodwin Steel Castings Quality Control Technician, Mr. Martyn Hilditch. This testing was witnessed and completed on date of report:

GG29426-8, Heat F7587	Initial
Yield Strength	411 N/mm ²
Ultimate Tensile Strength	607 N/mm ²
Elongation	31 %
Reduction of area	53 %

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GG29429-9, Heat F7706	Initial
Yield Strength	365 N/mm ²
Ultimate Tensile Strength	615 N/mm ²
Elongation	30 %
Reduction of area	57 %
GG29446-5, Heat F7685	Initial
Yield Strength	389 N/mm ²
Ultimate Tensile Strength	604 N/mm ²
Elongation	27 %
Reduction of area	44 %
GG29447-6, Heat F7699	Initial
Yield Strength	370 N/mm ²
Ultimate Tensile Strength	562 N/mm ²
Elongation	32 %
Reduction of area	54 %

Unless otherwise noted, all observations reported on this date appeared to be in general compliance with applicable contract documents.

Summary of Conversations:

No significant conversations took place this day.

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, 1(510)385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Brcic,Michael	Quality Assurance Inspector
Reviewed By:	Lanz,Joe	QA Reviewer
