

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 #: 13.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-009689**Date Inspected:** 19-Oct-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Oregon Iron Works Clackamas, Or.**Location:** Clackamas, OR

CWI Name:	Mike Gregson		
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:** Hinge K Pipe Beams**Summary of Items Observed:**

The Quality Assurance Inspector Sean Vance arrived on site at Oregon Iron Works, Inc (OIW) in Clackamas, OR, to randomly observe the in process welding of the Hinge K Pipe Beam assemblies. The QA Inspector arrived on site to randomly observe the OIW Quality Control (QC) Inspectors in process and completed visual and nondestructive testing. Upon the arrival of the QA Inspector the following observations were made:

OIW Fabrication Shop-Bay 3

Hinge-K Pipe Beam Assembly 102A-3: 10/19/09

a111-3 Forging to a110-3 Base Plate

QA Inspector noticed this assembly 102A-3 had been previously placed in position and welder #06, Mr. Tim O'Brian, was in process of performing submerged arc welding, on the d107 stiffener plate to a111-3 tubular forging, designated as weld joint # W1-135, in the flat position. QA Inspector noted that this weld joint was designated as a partial joint penetration (AWS D1.5 TC-P5-S) and QA Inspector verified Mr. O'Brian was currently qualified for this process/position. QA Inspector noted that Mr. O'Brian was utilizing OIW approved welding procedure specification (WPS 4016) and randomly recorded pre-heat temperatures of approximately 350 degrees Fahrenheit (177 C). QA Inspector noticed QC Inspector Mike Gregson was present to monitor in-process welding parameters (amps/volts) and noted that Mr. Gregson had previously recorded in-process welding parameters of 563 amps and 35 volts, on the submerged arc welding cover passes. QA Inspector verified in-process welding parameters of 570 amps and 35 volts, which appears to be in compliance with the applicable welding procedure specification and contract requirements. See attached picture below.

Note: QA Inspector later noted that the following weld joints, on the radial stiffeners, were completed by Mr. O'Brian, by end of shift: WJ #W1-135 and W1-137. QA Inspector noted that 100% magnetic particle testing was

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performed on the above mentioned root passes and no rejectable indications were found, per AWS D1.5 and contract requirements.

Hinge-K Pipe Beam Assembly 102A-4: 10/19/09

a111-4 Forging to a110-4 Base Plate

QA Inspector witnessed welder #T23 Mr. John Tellone, was currently in-process of performing submerged arc welding, on the a110 Base Plate to b106 stiffener, designated as weld joint #W2-18, in the flat (1G) position, utilizing OIW approved welding procedure specification (WPS 4020). QA Inspector noted that QC Inspector Mike Gregson, was present on this day and had previously verified the in-process welding parameters and pre-heat temperatures, to insure compliance with the applicable welding procedure specifications and AWS D1.5. QA Inspector reviewed Mr. Gregson's applicable documentation and noted that Mr. Gregson had previously recorded Mr. Tellone's in-process welding parameters of 570 amps/34 volts with a pre-heat temperature of approximately 350 degrees Fahrenheit (177 C). QA Inspector randomly performed an in-process verification of welding parameters and recorded amps/volts of 560/35 and a pre-heat temperature of approximately 350 degrees Fahrenheit (177 C). Mr. Tellone appeared to be in compliance with the applicable welding procedure specification and AWS D1.5, on this date. See attached picture below.

Material, Equipment, and Labor Tracking

QA Inspector Sean Vance performed a verification of material, personnel and equipment involved with the project. The QA Inspector observed at Oregon Iron Works: 5 OIW production personnel and 2 QC Inspectors.



Summary of Conversations:

As noted above.

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 Mohammad Fatemi (916) 813-3677, who represents the Office of Structural Materials for your project.

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Inspected By: Vance,Sean

Quality Assurance Inspector

Reviewed By: Adame,Joe

QA Reviewer