

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-028553**Date Inspected:** 28-Sep-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** jobsite

CWI Name: Fred Michaels
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:** OBG**Summary of Items Observed:**

Quality Assurance inspector (QA) Matthew Daggett was at the American Bridge/Fluor (ABF) job site at the San Francisco/Oakland Bay Bridge 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:

This QAI from time to time observed the welder Jin Pei Wang grinding to a bright clean metal condition an excavation at the following location on Floor Beam Bottom Flange Splice 13W-PP114.5-W2.2-BF-1:

Y=315mm, D=17mm, L=110mm, W=20mm

Prior to welding Quality Control Technician Fred Michaels performed Visual and Magnetic Particle Testing on the above excavations. This Quality Assurance Inspector verified the results of the test by doing duplicate testing to the excavations. No indications were noted.

The welder spent part of the shift depositing the root passes and fill passes with approximately 100% being completed at the end of the shift. QC inspector Michaels was noted to be present in order to monitor the progress and ensure the welding was within the established Welding Procedure Specification (WPS) noted as ABF-WPS-D15-1001 Rev 0 and supporting Procedure Qualification Records (PQR). Prior to and during the welding at this location the QC inspector observed the preheat temperature using a Raytek non-contact Thermometer, was sufficient and compliant to the above-mentioned WPS. Using a Tempil Stick, (temperature indicating crayon) the pre-heat was then verified by this QA inspector to be greater than 150F. Using a Fluke brand Tong style meter, the parameters were verified to be 115 amps.

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This QAI from time to time observed the welder Lin E Yun grinding to a bright clean metal condition an excavation at the following location on Floor Beam Bottom Flange Splice 13W-PP113.5-W2.2-BW-3:

Y=40mm, D=10mm, L=80mm, W=40mm

Prior to welding Quality Control Technician Fred Michaels performed Visual and Magnetic Particle Testing on the above excavations. This Quality Assurance Inspector verified the results of the test by doing duplicate testing to the excavations. No indications were noted.

The welder spent part of the shift depositing the root passes and fill passes with approximately 80% being completed at the end of the shift. QC inspector Michaels was noted to be present in order to monitor the progress and ensure the welding was within the established Welding Procedure Specification (WPS) noted as ABF-WPS-D15-1001 Rev 0 and supporting Procedure Qualification Records (PQR). Prior to and during the welding at this location the QC inspector observed the preheat temperature using a Raytek non-contact Thermometer, was sufficient and compliant to the above-mentioned WPS. Using a Tempil Stick, (temperature indicating crayon) the pre-heat was then verified by this QA inspector to be greater than 150F. Using a Fluke brand Tong style meter, the parameters were verified to be 122 amps.

This QAI from time to time observed the welder Lin E Yun grinding to a bright clean metal condition an excavation at the following location on Floor Beam Bottom Flange Splice 13W-PP113.5-W2.2-BW-3:

Y=170mm, D=10mm, L=70mm, W=40mm

Prior to welding Quality Control Technician Fred Michaels performed Visual and Magnetic Particle Testing on the above excavations. This Quality Assurance Inspector verified the results of the test by doing duplicate testing to the excavations. No indications were noted.

The welder spent part of the shift depositing the root passes and fill passes with approximately 100% being completed at the end of the shift. QC inspector Michaels was noted to be present in order to monitor the progress and ensure the welding was within the established Welding Procedure Specification (WPS) noted as ABF-WPS-D15-1001 Rev 0 and supporting Procedure Qualification Records (PQR). Prior to and during the welding at this location the QC inspector observed the preheat temperature using a Raytek non-contact Thermometer, was sufficient and compliant to the above-mentioned WPS. Using a Tempil Stick, (temperature indicating crayon) the pre-heat was then verified by this QA inspector to be greater than 150F. Using a Fluke brand Tong style meter, the parameters were verified to be 133 amps.

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Summary of Conversations:

There were general conversations with Quality Control Inspector Fred Michaels, at the start of the shift regarding the location of welding, inspection personnel scheduled for this shift. All observations were relayed to Danny Reyes and Bill Levell.

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.

Inspected By: Daggett, Matt

Quality Assurance Inspector

Reviewed By: Levell, Bill

QA Reviewer