

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-026539
Date Inspected: 18-Oct-2011

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1730
Location: Job Site

CWI Name:	Fred Von Hoff	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 Sections	

Summary of Items Observed:

This Quality Assurance (QA) Inspector, Craig Hager was on site at the job site between the times noted above. This QA Inspector was on site to randomly observe Quality Control (QC) personnel perform Non-Destructive Testing (NDT) and monitor American Bridge/Fluor (ABF) welding operations. This Quality Assurance (QA) Inspector, Craig Hager observed the following.

Orthotropic Bridge Girder (OBG) Sections:

12E/13E weld joint E-1 and E-2: This QA Inspector randomly observed ABF personnel installing longitudinal splice plates at the locations where welding had been completed the previous day and removing them from where welding had not been completed. This QA Inspector randomly observed as ABF personnel set up the Flux Cored Arc Welding (FCAW) track system at both E-1 and E-2. This QA Inspector observed the induction heating equipment appeared to working properly due to a steady preheat temperature slightly above the minimum of 200°F, which was verified with an electronic temperature gauge. This QA Inspector randomly observed as QC Inspector Fred Von Hoff and ABF Welding Foreman James Zhen (#6001) verified the shielding gas rate of flow with a hand held gauge covering the FCAW nozzle, for each of the three FCAW units to be used. This QA Inspector randomly observed as QC Inspector Fred Von Hoff verified the following welding parameters; FCAW track system at E-1 with ABF welding personnel Wai Kitlai (#2953) 285 amperes and 24.5 volts at a travel speed of 270 mm per minute to produce a heat input value of 1.55 Kj per mm and FCAW track system at E-2 with ABF welding personnel James Zhen (#6001) 285 amperes and 24.3 volts at a travel speed of 270 mm per minute to produce a heat input value of 1.54 Kj per mm. After the track welding had started ABF welding personnel Xiao Jian Wan (#9677) started using the FCAW process at the top of E-1 where the track system could not reach due to limited

WELDING INSPECTION REPORT

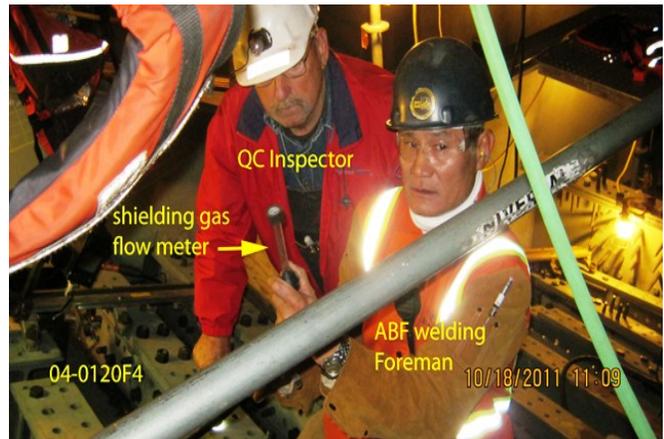
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access. This QA Inspector randomly observed QC Inspector Fred Von Hoff verify the following parameters; 266 amperes and 24 volts at a travel speed of 280 mm per minute to produce a heat input of 1.37 KJ per mm. The welding observed by this QA Inspector at this time and at random periods throughout the shift appeared to comply with Welding Procedure Specification (WPS) ABF-WPS-D15-3042A-1. This QA Inspector observed that during these random observations QC Inspector Fred Von Hoff was present and monitoring the work. ABF Welding Foreman James Zhen (#6001) informed this QA Inspector and QC Inspector Fred Von Hoff late this shift that welding had been completed and requested a preliminary visual inspection be performed by QC for any gross areas of under fill. This QA Inspector randomly observed as QC Inspector Fred Von Hoff performed the preliminary visual inspection of the weld face from inside the OBG section for gross areas of under fill and none were noted by QC at this time.

This QA Inspector verbally informed QA SPCM Lead Inspector, Daniel Reyes, of the issues noted in this report for compliance therefore for further details of issues of significance see QA SPCM Lead Inspector, Daniel Reyes, Daily Inspection Report (6031) for this date.

Summary of Conversations:

This QA Inspector had general conversations with American Bridge/Fluor (ABF) and Caltrans personnel during this shift. Except as described above and noted above there were no notable 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: Hager, Craig

Quality Assurance Inspector

Reviewed By: Levell, Bill

QA Reviewer