

**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-028126**Date Inspected:** 07-Aug-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1930**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Julian Razo**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:** SAS Tower**Summary of Items Observed:**

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At OBG 13W-WK- SK1 plate inside, QA randomly observed ABF/JV qualified welder Chau Tran continuing to perform CJP groove back welding fill pass on the K plate skewed butt joint. The welder was noted manual welding in the 2G (horizontal) position utilizing a Shielded Metal Arc Welding (SMAW) with 3.2mm diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1072. The plates were preheated to more than 200 degree Fahrenheit using Miller Proheat 35 Induction Heating System with the heater blanket put in place the back of the SK plate being welded. During welding, ABF Quality Control (QC) Julian Razo was noted monitoring the welding parameters of the welder with measured working current of 123 amperes. At the end of the shift, fill pass welding was still continuing and should remain tomorrow.

At OBG 13W-PP122.2-LS1 deck stiffener flange inside, QA randomly observed ABF/JV qualified welder Jose Torres perform PJP groove welding root pass to fill pass on the deck stiffener flange T-joint. The welder was observed perform manual welding in the 4G (overhead) position utilizing a Shielded Metal Arc Welding (SMAW) with 3.2mm diameter E9018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1162-4. The stiffener flange plate has a bevel groove being welded PJP T-joint to the longitudinal stiffener. The plates were preheated to more than 200 degree Fahrenheit using Miller Proheat 35 Induction Heating System. During welding, ABF Quality Control (QC) Julian Razo was noted monitoring the

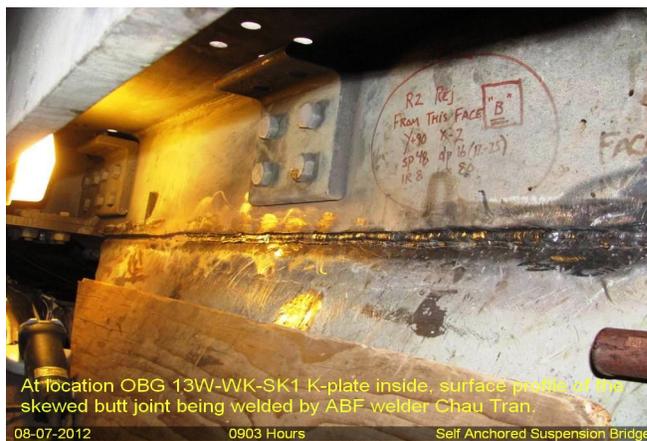
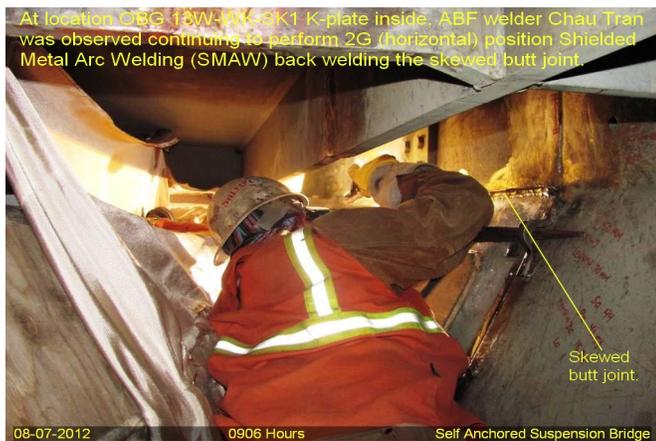
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welding parameters of the welder with measured working current of 124 amperes on the 3.2mm E9018H4R. At the end of the shift, fill pass welding was still continuing and should remain tomorrow. The welder held the same preheat of >200 degree Fahrenheit for three hours after welding as required.

At OBG 13W-PP121.6 @1900 drop-in top deck plate inside, QA randomly observed ABF/JV qualified welder Mike Jimenez continuing to perform CJP groove welding repair from location Y=0mm to Y=1000mm. The welder was observed welding in the 4G (overhead) position utilizing Shielded Metal Arc Welding (SMAW) with 3.2mm diameter E7018H4R electrode implementing welding procedure ABF-WPS-D15-1004-Repairs. The repair excavation was preheated to more than 325 degree Fahrenheit using Miller Proheat 35 Induction Heating System with the heater blanket put in plate on top of the deck prior/during welding. During the shift, ABF QC Julian Razo was noted monitoring the welder with measured working current of 135 amperes on 3.2mm E7018H4R electrode. At the end of the shift, repair welding at location mentioned above was completed and the welder performed the Post Weld Heat Treatment (PWHT) of 450°F and held it for one hour as required.

At OBG 13W-W2.8@12570 drop-in top deck plate inside, QA randomly observed ABF/JV qualified welder Richard Garcia and Ric Chouinard simultaneously perform excavation using carbon air arc gouging at locations from Y=6750mm to Y=9200 and from Y=4300 to Y=6750mm respectively. Both welders were excavating the Ultrasonic Testing (UT) detected defects continuously from end to end due to numerous defects that have various lengths and depths. The excavation of the welded butt joint is being performed on the same Caltrans approved Request for Weld Repair (RWR) #201208-001. The welders continued excavating the above mentioned locations until the end of the shift wherein it was not completed.



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**Summary of Conversations:**

No significant conversation occurred today.

**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 SMR Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Lizardo, Joselito	Quality Assurance Inspector
<b>Reviewed By:</b>	Levell, Bill	QA Reviewer

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