

**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 #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-029934**Date Inspected:** 21-Aug-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

<b>CWI Name:</b>	Bernie Docena, Jesse Cayabyab	<b>CWI Present:</b>	Yes	No	
<b>Inspected CWI report:</b>	Yes No N/A	<b>Rod Oven in Use:</b>	Yes	No	N/A
<b>Electrode to specification:</b>	Yes No N/A	<b>Weld Procedures Followed:</b>	Yes	No	N/A
<b>Qualified Welders:</b>	Yes No N/A	<b>Verified Joint Fit-up:</b>	Yes	No	N/A
<b>Approved Drawings:</b>	Yes No N/A	<b>Approved WPS:</b>	Yes	No	N/A
		<b>Delayed / Cancelled:</b>	Yes	No	N/A
<b>Bridge No:</b>	34-0006	<b>Component:</b>	SAS Tower		

**Summary of Items Observed:**

Caltrans Quality Assurance Inspector (QA) Joe Adame arrived at the American Bridge/Fluor (ABF) JV job site between the times noted above in order to monitor ABF Quality Control functions and the in process work being performed by ABF production personnel. The following items were observed:

## NDT Inspection of Electroslag Welds (ESW)

RWR-201308-008

ESW S-042, Location "L"- Face A, B:

The QA Inspector observed ABF QC Inspector Jesse Cayabyab performed Ultrasonic Testing (UT) on Tower Electroslag Complete Joint Penetration (CJP) shear plate weld designated as ESW "L" at face A, B. Mr. Cayabyab stated that he was instructed by ABF to perform pulse echo UT to document the depths and indications prior to repair (pre-repair verification). The areas will be reinspected after SMAW repairs. The original Y locations were indications identified with pitch/catch UT as rejectable or recordable and designated to be removed and repaired. Y Location was noted as - 6430mm and HAZ areas located 300mm above and below the prosed repair locations. QC/QA did not observe any rejectable indications with pulse echo UT.

QC/QA observed two recordable indications with pulse echo UT.

The QA Inspector also performed UT of the above mentioned ESW location in accordance with the ABF approved supplemental procedure for confirmation and evaluation of planar defects. Tandem report for work performed on this date will be completed by QC Inspector Jesse Cayabyab and signed by both QA/QC parties. Items listed on tandem report reflect indications agreed upon by QA/QC. See TL-6027 for additional details on the items inspected on this date.

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ESW Repair excavation

RWR-201308-003

ESW E-043, Location "Q"-Face A:

The QA Inspector observed ABF welder Donald Plumb (WID-0891) performing excavation of ESW "Q" Face A @ Y=3980mm to verify indications observed during Ultrasonic Testing pulse/echo & pitch/catch. Mr. Plumb was performing the excavation using an air carbon arc gouging and a grinder. Mr. Plumb was instructed by ABF QC Inspector Bernie Docena to notify him when indications are visible to allow QC/QA time to inspect the excavation.

Location of the repair is as follows:

Weld excavated at 32mm dp- slag observed @ 4170.

Weld excavated at 40mm dp- slag observed @ 4200.

Weld excavated at 50mm dp- slag/porosity observed @3950, 3980,4120,4150,4180.

Weld excavated at 60mm dp- slag/porosity observed @3980, 4120, 4180.

Excavation Y=3800mm~4300mm, Current depth-60/65mm. The QA Inspector observed the QC Inspector perform an informational MT inspection of the unground excavation and observed that the indications remained at the above mentioned depths. Mr. Docena stated that the porosity and slag observed was possibly from a previous weld repair using FCAW. Mr. Docena also mentioned that the excavation work on this repair will continue on 8/22/13. The information regarding the indication observed was passed along to ABF and CT METS representatives for additional review.



## Summary of Conversations:

Only general conversations with ABF/JV QC NDT personnel relevant to work and testing performed during this shift.

## 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.

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**Inspected By:** Adame,Joe

Quality Assurance Inspector

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**Reviewed By:** Mertz,Robert

QA Reviewer