

**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 #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018467**Date Inspected:** 24-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**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 Segments**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

**Weld Lab**

This QA Inspector observed the welding of the following Procedure Qualification Records (PQR):

HP2010153 using the Flux Cored Arc Welding (FCAW) process in the 3G (vertical) position using ESAB E71T-1M Dual Shield 70 Ultra Plus electrode. The electrode is 1.4mm in diameter, Lot # 89926. The Welding Procedure Specification (WPS) followed was PWPS-B-T-2233-T-ESAB. The test plate configuration was a Complete Joint Penetration (CJP) Single V Groove weld Butt Joint, 25mm in thickness and 700mm in length using ceramic backing. The test plate material is identified as A709 GR345. Seven (7) weld passes were used to complete the groove weld. The welder was identified as Zhou Bin.

HP2010152 using the Flux Cored Arc Welding (FCAW) process in the 1G (flat) position using ESAB E71T-1M Dual Shield 70 Ultra Plus electrode. The electrode is 1.4mm in diameter, Lot # 89926. The Welding Procedure Specification (WPS) followed was PWPS-B-T-2231-T-ESAB. The test plate configuration was a Complete Joint Penetration (CJP) Single V Groove Butt Joint, 25mm in thickness and 700mm in length using ceramic backing. The test plate material is identified as A709 GR345. Eleven (11) weld passes were used to complete the groove

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# WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

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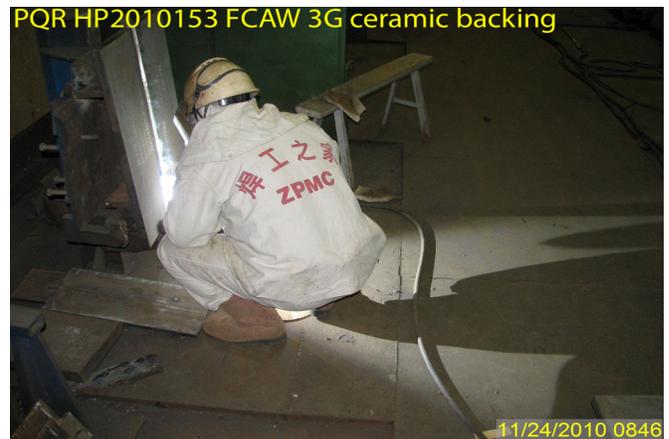
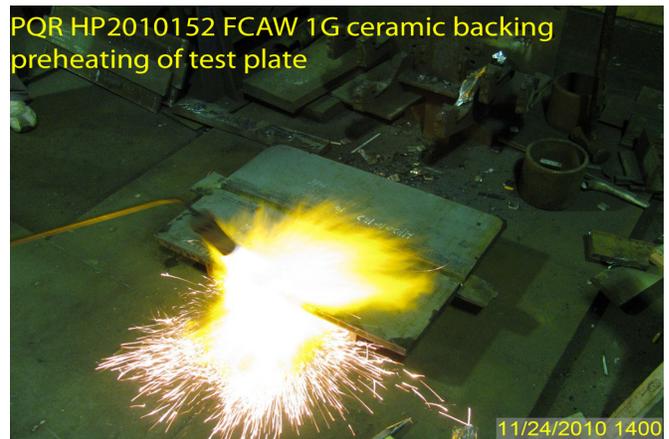
weld. The welder was identified as Zhou Bin.

The Following personnel were present during PQR qualification:

ZPMC-CWI Li Yang

ABF-Steve Lawton, Peter Ferguson

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



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# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

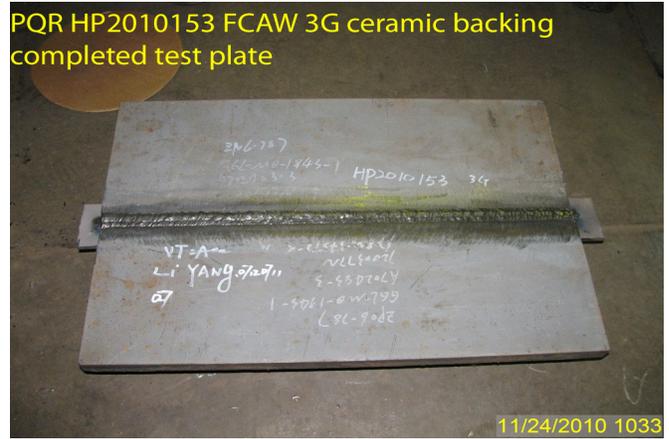
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PQR HP2010152 FCAW 1G ceramic backing completed test plate



PQR HP2010153 FCAW 3G ceramic backing completed test plate



## Summary of Conversations:

No relevant 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 Eric Tsang, 150-0042-2372 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Hernandez,Dan	Quality Assurance Inspector
<b>Reviewed By:</b>	Dsouza,Christopher	QA Reviewer

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