

**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 #: 69.21**WELDING WITNESS REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WWR-000395**Date Inspected:** 11-Aug-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>Witness:</b>	<b>Procedure Qualification Record</b>	<b>Welder Qualification</b>	<b>Fracture Critical</b>
	<b>Welding</b>	<b>Mechanical Testing, describe:</b>	
	<b>NDT</b>		
<b>Index Lot #:</b> B75-050-07		<b>Witness Lot #:</b> B75-050-07	
<b>Bridge No:</b> 34-0006		<b>Component:</b> Bid: 52	
<b>Welder:</b> Jiang Xian Hu/Zang Xin Jin		<b>ID #:</b> N/A	
<b>Joint Description:</b> Single "V" with Steel Backing		<b>WPS ID #:</b> PWPS-B-3221	N/A
<b>Base Metal:</b> ASTM A709M-HPS-485T2/Z		<b>PQR ID #:</b> HP2007153-1	N/A
<b>Thickness:</b> 90mm		<b>Process:</b> SAW	N/A
<b>Electrode Spec/Class:</b> AWS A5.17		<b>Positions:</b> 1G	N/A
<b>Backing Material:</b> ASTM A709M-HPS-485W		<b>CWI:</b> Huang Wei	N/A
<b>Average Amps:</b> 584 amps		<b>AWS Code:</b> D1.5-2002	N/A
<b>Average Volts:</b> 30.6 volts		<b>Applicable Sec:</b> 5.13	N/A
<b>Travel Speed:</b> 431.21 mm/min		<b>Heat Input:</b> 2.49kj/in	N/A
<b>Preheat:</b> 193 degrees F			

**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector Chuck Franco was present at the time requested to randomly observe welding being performed on a Procedure Qualification Record (PQR). The welding is being attempted with the submerged arc welding (SAW) process in the 1G or flat groove position. The PQR weld joint is a single V groove with a 20 degree included groove angle, a 16 millimeter root opening with a 20 millimeter thick by 200 millimeter wide steel backing strip. The QA Inspector observed ZPMC CWI Huang Wei monitoring welding amperage and welding voltage. Mr. Wei was being assisted by Fu Jun of the ZPMC Technological Department, who was monitoring preheat, travel speed and recording all weld parameters. The QA Inspector also performed random verification of the above weld parameters and documented same.

**Summary of Conversations:**

ZPMC CWI Huang Wei informed the QA Inspector that there would be no further PQR's performed until at least Wednesday or Thursday of next week.

**Observed welding, testing or results:**

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## WELDING WITNESS REPORT

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is in general conformance with the contract requirements.  
is not in conformance with the contract requirements.

### 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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Franco,Charlie	Quality Assurance Inspector
<b>Reviewed By:</b>	McClary,David	QA Reviewer

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