

**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 #: 13.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014617**Date Inspected:** 08-Jun-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1000**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1830**Contractor:** Oregon Iron Works Clackamas, Or.**Location:** Clackamas, OR

<b>CWI Name:</b>	M. Gregson, J. Salazar, G. Mundt	<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

**Bridge No:** 34-0006**Component:** Hinge K Pipe Beams**Summary of Items Observed:**

The Quality Assurance Inspector Sean Vance arrived on site at Oregon Iron Works, Inc (OIW) in Clackamas, OR, to randomly observe the in process welding of the Hinge K Pipe Beam assemblies. The QA Inspector arrived on site to randomly observe the OIW Quality Control (QC) Inspectors in process and completed visual and nondestructive testing. Upon the arrival of the QA Inspector the following observations were made:

**Hinge-K Pipe Beam Assembly 101A-3:**

The QA Inspector observed WID #S53 (Jerry Shephard), performing the backgouge on the Weld Joint #W4-01. The QA Inspector observed that this Complete Joint Penetration (AWS D1.5 B-U7-S), was the Fuse 120A-3 to Forging 102A-3 and that OIW QC Inspector Jose' Salazar was present, during this shift. QC Inspector Salazar explained that prior to the backgouging, he had verified a pre-heat temperature of approximately 150 degrees Fahrenheit (66 C). The QA Inspector noted that the interior portion of the weld had been previously completed and that the backgouging being performed was from the exterior, to clean the root pass to sound metal. The QA Inspector observed that WID #S53 was performing the backgouge utilizing the Carbon Arc process and was performing this from a scissor lift and that the Assembly was slowly rotating, for ease of performing the backgouge. The QA Inspector randomly verified pre-heat temperature to be in compliance with the minimum 150 degrees Fahrenheit. The QA Inspector spoke with QC Inspector Jose' Salazar and QC Inspector Salazar explained that the Carbon Arcing will remove most of the material and then a grinder will be utilized, to remove the remaining material. The QA Inspector noted that with the backgouging of the previous assemblies, OIW had utilized a hand held grinder with an attached 9" disc. The QA Inspector observed that the backgouging continued throughout the end of the shift.

The QA Inspector was present on this swing shift and observed that WID #V7 (Vincent Vue) was continuing to

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perform the backgouging, utilizing the carbon Arc process, on the above mentioned Weld Joint. The QA Inspector observed that OIW QC Inspector Gary Mundt was present and QC Inspector Mundt explained that he had verified the minimum pre-heat temperature of 150 degrees Fahrenheit. The QA Inspector then randomly observed WID #V7, perform a check with a 150 degree Fahrenheit Tempilstick indicator. QC Inspector Mundt explained that the backgouging will continue throughout the shift.

### Material, Equipment, and Labor Tracking (MELT)

QA Inspector Sean Vance performed a verification of material, personnel and equipment involved with the project. The QA Inspector observed at Oregon Iron Works Clackamas: 3 OIW production personnel and 2 QC Inspectors.



### Summary of Conversations:

As noted above.

### 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 Mohammad Fatemi (916) 813-3677, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Vance,Sean	Quality Assurance Inspector
<b>Reviewed By:</b>	Adame,Joe	QA Reviewer

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