

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 #: 70.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-001197**Date Inspected:** 08-Jan-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 830**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1930**Contractor:** Japan Steel Works**Location:** Muroran, Japan**CWI Name:****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:** West Deviation Saddle Segment W2E2**Summary of Items Observed:**

Observed in house Ultrasonic Testing (UT) on West Deviation Saddle Segments numbered W2E1:

Caltrans QA observed Nikko Inspection Service (NIS) two NDT level II technicians performed straight beam UT on one side of West Deviation Saddle Segments numbered W2E1. The material of saddle segment is casing Gr. 415 (ASTM A148M G. 620-415) with has wall thickness form 150mm to 500mm and the test surface has been machining.

First, a 500mm range reflection calibrated on Krautkramer Branson USM 3 "A scan" tube display instrument was used, a straight beam UT test method has been applied and the search unit is a 24mm x 2 MHz single transducer applied a source of compression waves, and penetrated into segment W2E1 for laminar discontinuities scanning. The distance and sensitivity of straight beam is calibrated with the 3.0mm and 6.4mm FBH reference block and an additional test reference block made by same casting material. The liquid glycerin couplant is be used to couple the search unit to the test surface. This in house UT test is used as reference only before the final machining and post heat treating. Based on Caltrans observation, no discrepancies were noted.

Summary of Conversations:

The JSW Engineer Mr. Yoshihiro Itoh informed Caltrans QAI that in house UT test is used for reference only. The final UT test will be perform after the post heat treating. This in house test will be completed today. The in house Magnetic Particle Test (MT) will schedule tomorrow 1300. Caltrans QAI asked to Mr. Itoh Yoshihiro a copy report of in house UT test for reviewing. However, Mr. Yoshihiro Itoh response to QAI that he has to get approval by his manager before giving the UT report to Caltrans QAI for reviewing.

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

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remedial efforts please contact Venkatesh Iyer (858) 697-6363, who represents the Office of Structural Materials for your project.

Inspected By:	Pau,Wai	Quality Assurance Inspector
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Reviewed By:	Brasel,Ron	QA Reviewer
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