

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 #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012036**Date Inspected:** 01-Feb-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:** Mr. Shazhi**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:** Orthotropic Box Girder (OBG)**Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG TRIAL ASSEMBLY

This QA Inspector observed the following work in progress:

SEGMENT: 6CW

Flux Cored Arc Welding (FCAW) welding of weld joint CA029-002. Welder is identified as 070046. ZPMC Quality Control (QC) is identified as Mr. Feng Ya Jun. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2232-TC-U4b-F.

SEGMENT: 7AE-7BE

Shielded Metal Arc Welding (SMAW) welding of weld joint DP655-001-021. Welder is identified as 067656. ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-3213-B-U3b.

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

Shielded Metal Arc Welding (SMAW) welding of weld joint DP663-001-021. Welder is identified as 066179. ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-3213-B-U3b.

SEGMENT: 6AW

Shielded Metal Arc Welding (SMAW) welding of weld joint SSD29-PP47.5-003. Welder is identified as 050433. ZPMC Quality Control (QC) is identified as Mr. Zhang Qiang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-P-2113-FCM-1.

AREA: MATERIAL STORAGE AREA (North side of Bay 1~9)

This QA performed Material number punching verification of Batch number, Grade, Thickness and Heat numbers against the “List of Material for Caltrans Check Test Samples (the 239, 242 & 243rd batch) Plate List 280, 283 & 284 respectively” and the procedure is “Check Sampling Procedure-Inspector” (issued from the Engineer).

The purpose of this is to cut the test samples from the plates to check chemical analysis.

The plates are identified as follows:

1. Material No: 13177, Batch No: 09208177060101, Heat No: 09208177, Grade: A709M-345F2-X and Thickness: 25 mm.
2. Material No: 13187, Batch No: 09108068330101, Heat No: 09108068, Grade: A709M-345F2-X and Thickness: 45 mm.
3. Material No: 13185, Batch No: 09207926340103, Heat No: 09207926, Grade: A709M-345F2-X and Thickness: 07 mm.
4. Material No: 13156, Batch No: 09208183040103, Heat No: 09208183, Grade: A709M-345F2-X and Thickness: 30 mm.
5. Material No: 13145, Batch No: 09208178310101, Heat No: 09208178, Grade: A709M-345F2-X and Thickness: 35 mm.
6. Material No: 13148, Batch No: 09208180310102, Heat No: 09208180, Grade: A709M-345F2-X and Thickness: 40 mm.
7. Material No: 13146, Batch No: 09208179010101, Heat No: 09208179, Grade: A709M-345F2-X and Thickness: 35 mm.
8. Material No: 13082, Batch No: B918387, Heat No: 09303660N2, Grade: A709M-345T2-X-S and Thickness: 14 mm.
9. Material No: 13083, Batch No: B918517-1-1, Heat No: 07307530N0, Grade: A709M-345F2-X-Z25 and Thickness: 18 mm.

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

10. Material No: 13086, Batch No: B922519, Heat No: 09302545N3, Grade: A709M-345T2-X and Thickness: 12 mm.

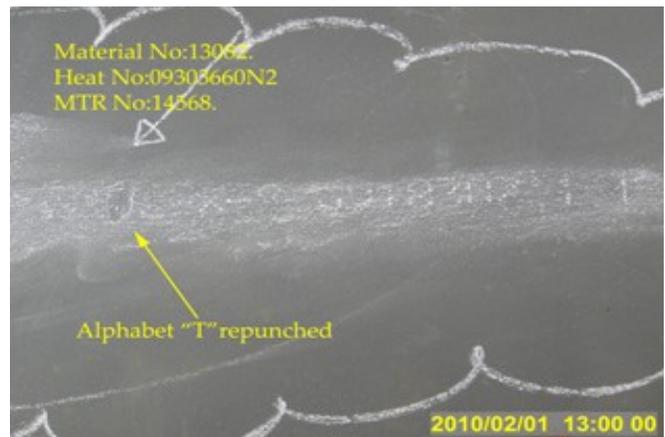
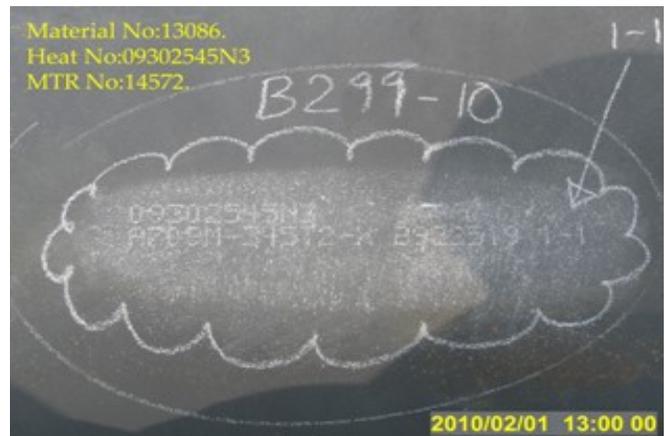
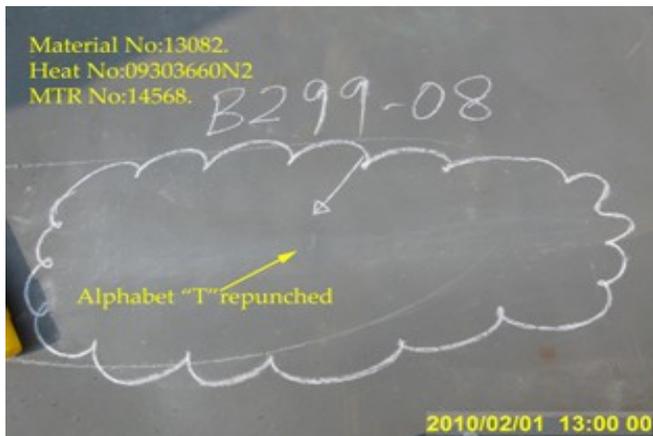
During Quality Assurance (QA) verification of Batch Numbers and Grade punched on the Plates, this QA discovered the following issues:

- Item No: 8(see above) as per the plate list 283 the Batch No is B918387 but actual on the plate is B918387-1-1.
- Item No: 10(see above) as per the plate list 283 the Batch No is B922519 but actual on the plate is B922519-1-1 and Material Grade A709M-345T2-X, the alphabet "T" was repunched on the plate.

The attached photographs provide additional detail.

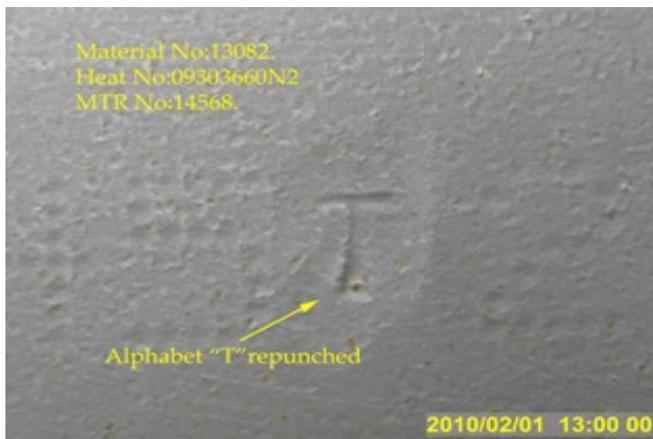
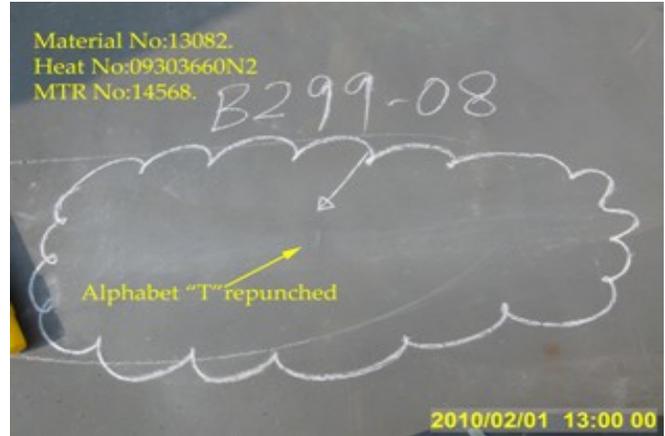
The above issue is reported to the Team leader and Engineer for further action.

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



WELDING INSPECTION REPORT

(Continued Page 4 of 4)



Summary of Conversations:

Only general conversation was held between QA and Quality Control (QC) concerning this project.

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 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Prabhu,Surendra

Quality Assurance Inspector

Reviewed By: Miller,Mark

QA Reviewer