

**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-007178**Date Inspected:** 02-Jun-2009**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:** Chen Chih Ming**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.

OBG Assembly

Bay 14

Segment 7DW

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SSD10-PP56-003. The welder is identified as #045203 and was observed welding in the 2G (horizontal) position using approved Welding Procedure Specification WPS-B-T-2232-TC-U4b-F.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SSD11-PP57-004. The welder is identified as #066401 and was observed welding in the 2G (horizontal) position using approved Welding Procedure Specification WPS-B-T-2232-TC-U4b-F.

---

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 4 )

---

---

### Segment 7EW

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SSD13-PP59-004. The welder is identified as #037907 and was observed welding in the 2G (horizontal) position using approved Welding Procedure Specification WPS-B-T-2232-TC-U4b-F.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SSD13-PP60-005. The welder is identified as #066283 and was observed welding in the 2G (horizontal) position using approved Welding Procedure Specification WPS-B-T-2232-TC-U4b-F.

### Segment 8AE

This QA Inspector observed ZPMC welder Cao Tao #066163 welding root pass over 3 cracked tack welds on a Complete Joint Penetration (CJP) single bevel groove weld. Tack welds were partially ground and were being incorporated into the final weld. The welder was using the Flux Cored Arc Welding (FCAW) process in the 3G (vertical) position on weld joint SSD19-PP65-135 at Panel Point 65, FB13A.

### Bay 13

#### Segment 8BE

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SSD19-PP65-135. The welder is identified as #066163 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-2223-B-U2-F.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SSD19-PP65-131. The welder is identified as #070212 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-2223-B-U2-F.

#### Segment 8AE

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated as SSD15A-PP61-124, 125. The welder is identified as #050242 and was observed welding in the 3F (vertical) position using approved Welding Procedure Specification WPS-B-T-2133.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated as SSD15-PP61-126, 125. The welder is identified as #050242 and was observed welding in the 3F (vertical) position using approved Welding Procedure Specification WPS-B-T-2133.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SSD15A-PP61-126. The welder is identified as #050242 and was

# WELDING INSPECTION REPORT

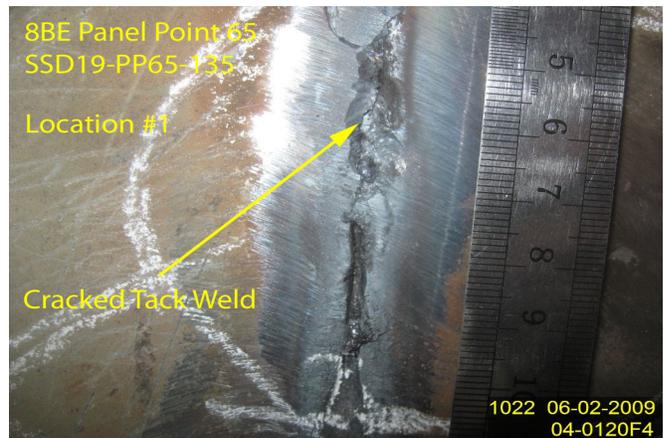
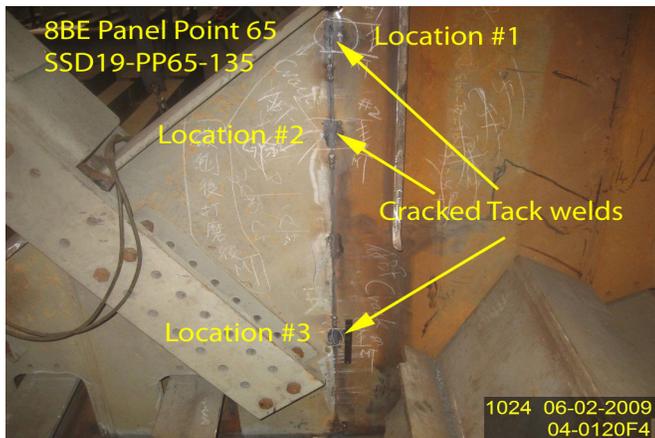
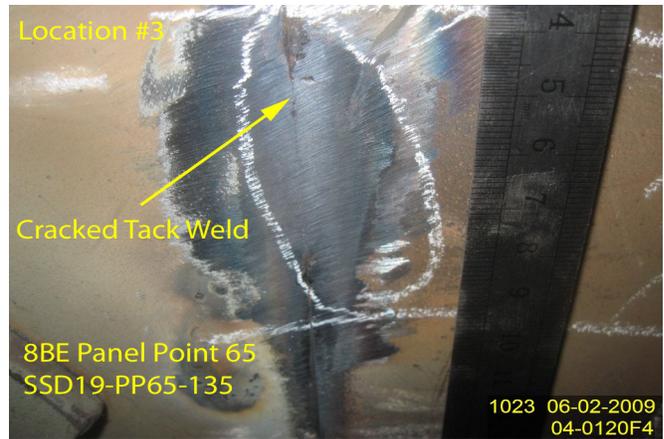
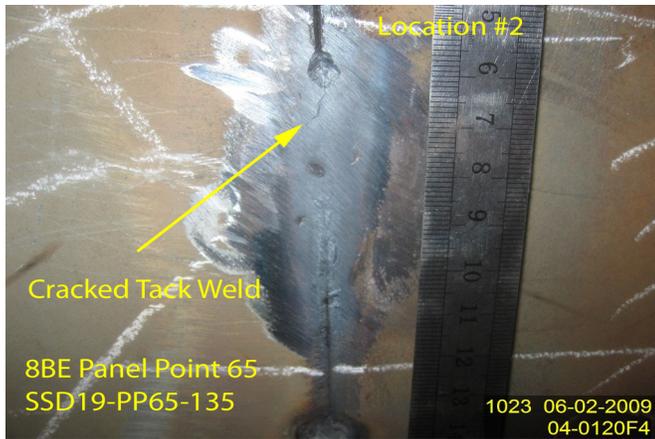
( Continued Page 3 of 4 )

observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-2231-TC-U4b-F.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated as SSD26-PP62-070 to 089. The welder is identified as #069683 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132.

ZPMC Quality Control (QC) Inspector is identified as Liu Ru Dan. QA Inspector observed QC Inspectors verify welding parameters. The welding variables recorded by QC appeared to comply with the Applicable WPS.

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



## 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.

---

---

# WELDING INSPECTION REPORT

*( Continued Page 4 of 4 )*

---

---

---

<b>Inspected By:</b>	Hernandez,Dan	Quality Assurance Inspector
----------------------	---------------	-----------------------------

---

<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer
---------------------	----------------	-------------

---