

**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 #: 69.25B**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT****Location:** Changxing Island, Shanghai, P.R. China**Report No:** NCR-000332**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 12-Jun-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0306**Type of problem:**

<b>Welding</b>	<b>Concrete</b>	<b>Other</b>	
<b>Welding</b>	<b>Curing</b>	<b>Procedural</b>	<b>Bridge No:</b> 34-0006
<b>Joint fit-up</b>	<b>Coating</b>	<b>Other</b>	<b>Component:</b> OBG Segment 1AAW
<b>Procedural</b>	<b>Procedural</b>	<b>Description:</b>	

**Reference Description:** Missed MT Indications by QC, Plate X181A, Segment 1AAW**Description of Non-Conformance:**

During random verification magnetic particle testing (MT) of the internal components of OBG Segment 1AAW, Caltrans Quality Assurance (QA) Inspector discovered a total of four (4) linear indications ranging from 5 to 12mm in length in the base metal (weld removal area) at location A13, plate X181A. These areas have been previously tested and accepted by ZPMC Quality Control (QC) MT technicians.

**Applicable reference:**

Special Provisions Section 8.3 – “Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents.”

AWS D1.5 (02) Section 6.26.2 – “Welds that are subject to MT in addition to visual inspection shall have no cracks.”

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 2 of 2 )

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**Who discovered the problem:** Hiranch Patel  
**Name of individual from Contractor notified:** Wang Wen Bin  
**Time and method of notification:** 1700 hours, 06/12/09, Verbal  
**Name of Caltrans Engineer notified:** Stanley Ku  
**Time and method of notification:** 800 hours, 06/15/09, Verbal  
**QC Inspector's Name:** Li Zhi Jiang  
**Was QC Inspector aware of the problem:** Yes No  
**Contractor's proposal to correct the problem:**

**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 Skyler Guest, (86) 1500-042-2360, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Guest,Skyler	SMR
<b>Reviewed By:</b>	Wahbeh,Mazen	SMR

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**DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge**  
666 Feng Bin Road Room 708, Changxing Island  
Shanghai 201913 PR China  
Tel: 021-56856666 ext 207061 Fax:

## NON-CONFORMANCE REPORT TRANSMITTAL

**To:** AMERICAN BRIDGE/FLUOR, A JV  
375 BURMA ROAD  
OAKLAND CA 95607

**Date:** 22-Jun-2009

**Contract No:** 04-0120F4  
04-SF-80-13.2 / 13.9

**Dear:** Mr. Charles Kanapicki

**Job Name:** SAS Superstructure

**Attention:** Mr. Thomas Nilsson Project/Fabrication Manager

**Document No:** 05.03.06-000296

**Subject:** NCR No. ZPMC-0306

**Reference Description:** Missed MT Indications by QC, Plate X181A, Segment 1AAW

The attached Non-Conformance Report describes an occurrence where the contractor did not comply with a requirement of the contract document as indicated below:

- Material or Workmanship not in conformance with contract documents.
- Quality Control (QC) not performed in conformance with contract documents.
- Recurring QC issue that constitutes a systematic problem in quality control.
- Non-Conformance Resolved.

**Material Location:** OBG **Lift:** 01

### Remarks:

During random verification magnetic particle testing (MT) of the internal components of OBG Segment 1AAW, Caltrans Quality Assurance (QA) Inspector discovered a total of four (4) linear indications ranging from 5 to 12mm in length in the base metal (weld removal area) at location A13, plate X181A. These areas have been previously tested and accepted by ZPMC Quality Control (QC) MT technicians.

See attached NCR No. ZPMC-306 for details.

### Action Required and/or Action Taken:

Propose a resolution for the identified recurring non-conformance which constitutes a systematic problem on both materials/workmanship and quality control issues to remedy the defected work and with revised procedures to prevent future occurrences. A response for the resolution of this issue is expected within 14 days.

**Transmitted by:** Ching Chao

**Attachments:** ZPMC-0306

**cc:** Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Doug Coe, Jason Tom, Contract Files, Ching Chao

**File:** 05.03.06

## NCR PROPOSED RESOLUTION

**To:** CALTRANS - SAS Superstructure  
333 Burma Road  
Oakland CA 94607

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000296

**Subject:** NCR No. ZPMC-0306

**Dated:** 14-Aug-2009

**Contract No.:** 04-0120F4  
04-SF-80-13.2 / 13.9

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000291 **Rev:** 00

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### Contractor's Proposed Resolution:

**Reference Resolution:** ZPMC has noted the action to prevent recurrence by the ABF QCM and has attached the relative inspection reports. ZPMC requests closure of these NCR's.

ZPMC has provided response to NCR's ZPMC-0279, 281, 283, 309. With this response ZPMC has noted the action to prevent recurrence by the ABF QCM and has attached the relative inspection reports. ZPMC requests closure of these NCR's.

### Submitted by:

**Attachment(s):** ABF-NPR-000291R00;

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### Caltrans' comments:

**Status:** CLO

**Date:** 24-Aug-2009

The proposed resolution is acceptable. The welds in question have been accepted by VT, MT, and UT as shown in the attached documents. The Department concurs that Non-Conformance ZPMC-0306 is closed.

**Submitted by:** Wright, Doug

**Date:** 24-Aug-2009

**Attachment(s):**



No. B-439

## LETTER OF RESPONSE

**TO: American Bridge/Flour**

**DATE: 2009-8-7**

**REGARDING: NCR-000305,307,309,332 (ZPMC-279,281,283,306)**

With this letter of response, ZPMC requests closure for Caltrans NCR-000305,307,309,332 (ZPMC-279,281,283,306).

We agree what describe in the non-conformance report, and have instructed our QC that avoid to miss-discover any linear indication:

- (1) Each NDT operator should be control the conduct speed and provide the enough light both free hand and on the machine touch.
- (2) We calibrated all of the old MT machines and witness the process by ABF.
- (3) We purchased some new machine which the type is same with the caltrans used on site for the inspection.
- (4) The ABF FQAM has made a training for all of the ZPMC NDT guy with the specification provision. The mainly attitude is how to improve the conductor workmanship that to decrease the miss-discovery.

By the way we clarify the process as the follow: the record of the cracks on base material, please find the MT report (MT-11633), all the cracks found after removing the stiffener is here. According to the MT report, ZPMC had submitted the CWR-559 and approved. Now all the cracks had been removed, and the base material had also been repaired and verified NDT by ZPMC and CT.

Please reference attached document for acceptance and closure the NCR-000305,307,309,332 (ZPMC-279,281,283,306)

**ATTACHMENT:**

ZPMC interior NCR (NCR-B-190)

NCR-000305,307,309,332 (ZPMC-279,281,283,306)

The MT report with the crack after removing the stiffeners. (MT-11633)

B-CWR559

The final VT/MT/UT report after repairing

*Zhao Shuang Bao*

*2009.8.7*



# Nonconformance Report

## 不符合项报告

Project Name: S.F.O.B.B  
项目名称: 美国加州海湾大桥

NCR Number:  
NCR 编号: NCR-B-190  
(ZPMC-279, 281, 283)

Item: Missed MT Indication  
名称描述: MT 漏检

Item Number:  
件号:  
OBG 1AAW

Drawing:  
图号: 1AAW

Location: OBG 1AAW  
位置:

Date:  
日期: 2009-06-19

**Description of Nonconformance:**

NCR (ZPMC-279). During random verification magnetic particle testing (MT) of the internal components of OBG Segment 1AAW, Caltrans Quality Assurance (QA) Inspector discovered a linear indication approximately 50mm in length in the base metal where a weld had been removed on A6 side plate X195B. This area was previously tested and accepted by ZPMC Quality Control (QC) MT technicians.

NCR (ZPMC-281). CT's inspector discovered a total of five linear indications ranging from 5 to 15mm in length in the base metal where weld had been removed on plate X182B.

NCR (ZPMC-283). CT's inspector discovered a total of eleven linear indications ranging from 5 to 35mm in length in the base metal where weld had been removed on plate X199A.

加州检验员对 1AAW 箱体内部去除插板区域的母材上做 MT 复探时, 发现我们的 MT 检验员漏检, 而连续出三份 NCR。

漏检的位置分别为 A6 斜底板处的 X195B, 长约 50mm 的裂纹。

另外的位置是 X182B 上的 5 条长约 5 到 15mm 的裂纹, X199A 上的 11 条长约 5 到 35mm 的裂纹。

Work By: Li Liming  
施工方: 09.06.28

Prepared by: Shen Xuejun  
准备: 2009.6.19

Reviewed by QCE: Zhaoshuanghao  
质量工程师批准: 6.19

- Drawing Error     Material Defect     Fabrication Error     Other  
 图纸错误                      材料缺陷                      制作错误                      其他原因

Disposition:     Use as is     Repair     Reject  
处理措施:                      回用                      返修                      拒收

**Recommendation:**

建议: 确认并出具报告返修  
Confirm and issue repair report.

Prepared by: Li Liming  
准备: 09.06.28

Approved by QCA: \_\_\_\_\_  
质量经理批准

Reason for Nonconformance:

不符合原因:

A级缺陷未检出

Discover class A defect.

Prevention of Re-occurrence:

预防措施:

作好检验前准备, 加强过程控制.

prepare for inspection and enhance controlling in process of test.

Approved by/批准:

*Lili* 9.6.08

Technical Justification for Use-As-Is/Repair:

Attachment

Non-attachment

回用或返修的技术依据:

附件

无附件

Reviewed /批准: \_\_\_\_\_

Verification:

Acceptable

Unacceptable

确认:

可接受

不可接受

Verified by QCI/质检确认: \_\_\_\_\_

Reviewed by QCA/质检主任审核: \_\_\_\_\_

#R787-QCP-1300



**DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge**  
 666 Feng Bin Road Room 708, Changxing Island  
 Shanghai 201913 PR China  
 Tel: 021-56856666 ext 207061 Fax:

**NON-CONFORMANCE REPORT TRANSMITTAL**

**To:** AMERICAN BRIDGE/FLUOR, A JV  
 375 BURMA ROAD  
 OAKLAND CA 95607

**Date:** 14-Jun-2009

**Contract No:** 04-0120F4  
 04-SF-80-13.2 / 13.9

**Dear:** Mr. Charles Kanapicki

**Job Name:** SAS Superstructure

**Attention:** Mr. Thomas Nilsson Project/Fabrication Manager

**Document No:** 05.03.06-000269

**Subject:** NCR No. ZPMC-0279

**Reference Description:** Missed MT Indication by QC, Plate X195B, Segment 1AAW

The attached Non-Conformance Report describes an occurrence where the contractor did not comply with a requirement of the contract document as indicated below:

- Material or Workmanship not in conformance with contract documents.
- Quality Control (QC) not performed in conformance with contract documents.
- Recurring QC issue that constitutes a systematic problem in quality control.
- Non-Conformance Resolved.

**Material Location:** OBG **Lift:** 01

**Remarks:**

During random verification magnetic particle testing (MT) of the internal components of OBG Segment 1AAW, Caltrans Quality Assurance (QA) Inspector discovered a linear indication approximately 50mm in length in the base metal where a weld had been removed on A6 side plate X195B! This area was previously tested and accepted by ZPMC Quality Control (QC) MT technicians.

See NCR report No. ZPMC-279 for details.

**Action Required and/or Action Taken:**

Propose a resolution for the identified recurring non-conformance which constitutes a systematic problem in quality control with revised procedures to prevent future occurrences. A response for the resolution of this issue is expected within 14 days.

**Transmitted by:** Ching Chao

**Attachments:** ZPMC-0279

**cc:** Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Doug Coe, Jason Tom, Contract Files, Ching Chao  
**File:** 05.03.06

**DEPARTMENT OF TRANSPORTATION**  
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 Vallejo, CA 94592-1133  
 (707) 649-5453  
 (707) 649-5493

Contract #: 04-0120F4  
 Cty: SF/ALA Rte: 80 PM: 13.2/13.9  
 File #: 69.25B

**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT**

**Location:** Changxing Island, Shanghai, P.R. China

**Report No:** NCR-000305

**Prime Contractor:** American Bridge/Fluor Enterprises, a JV

**Date:** 10-Jun-2009

**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

**NCR #:** ZPMC-0279

**Type of problem:**

Welding  Concrete  Other

Welding  Curing  Procedural  **Bridge No:** 34-0006

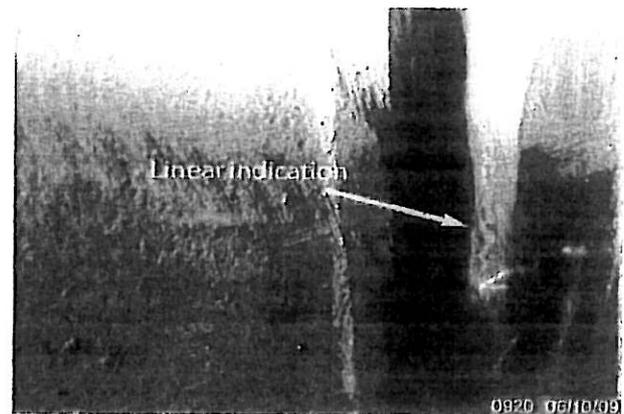
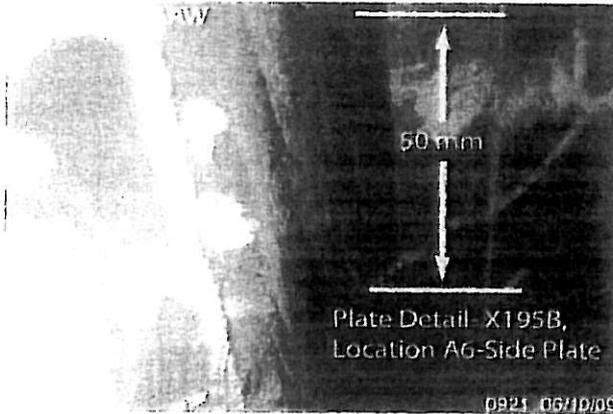
Joint fit-up  Coating  Other  **Component:** OBG Segment 1AAW

Procedural  Procedural  **Description:**

**Reference Description:** Missed MT Indication by QC, Plate X195B, Segment 1AAW

**Description of Non-Conformance:**

During random verification magnetic particle testing (MT) of the internal components of OBG Segment 1AAW, Caltrans Quality Assurance (QA) Inspector discovered a linear indication approximately 50mm in length in the base metal where a weld had been removed on A6 side plate X195B. This area was previously tested and accepted by ZPMC Quality Control (QC) MT technicians.



**Applicable reference:**

Special Provisions Section 8.3 – “Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents.”

AWS D1.5 (02) Section 6.26.2 – “Welds that are subject to MT in addition to visual inspection shall have no cracks.”

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 2 of 2 )

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**Who discovered the problem:** Gady Hari Pandu Ranga Rao

**Name of individual from Contractor notified:** Wang Wen Bin

**Time and method of notification:** 06/10/09, 9:00, Verbal

**Name of Caltrans Engineer notified:** Stanley Ku

**Time and method of notification:** 06/11/09, 18:00, Email

**QC Inspector's Name:** Li Zhi Jiang

**Was QC Inspector aware of the problem:**  Yes  No

**Contractor's proposal to correct the problem:**

**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 Skyler Guest, (86) 1500.042.2360, who represents the Office of Structural Materials for your project.

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**Inspected By:** Guest, Skyler

SMR

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**Reviewed By:** Wahbeh, Mazen

SMR



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge  
 666 Feng Bin Road Room 708, Changxing Island  
 Shanghai 201913 PR China  
 Tel: 021-56856666 ext 207061 Fax:

**NON-CONFORMANCE REPORT TRANSMITTAL**

**To:** AMERICAN BRIDGE/FLUOR, A JV  
 375 BURMA ROAD  
 OAKLAND CA 95607

**Date:** 14-Jun-2009

**Contract No:** 04-0120F4  
 04-SF-80-13.2 / 13.9

**Dear:** Mr. Charles Kanapicki  
**Job Name:** SAS Superstructure

**Attention:** Mr. Thomas Nilsson Project/Fabrication Manager  
**Document No:** 05.03.06-000271

**Subject:** NCR No. ZPMC-0281

**Reference Description:** Missed MT Indications by QC, Plate X182B, Segment 1AAW

The attached Non-Conformance Report describes an occurrence where the contractor did not comply with a requirement of the contract document as indicated below:

- Material or Workmanship not in conformance with contract documents.
- Quality Control (QC) not performed in conformance with contract documents.
- Recurring QC issue that constitutes a systematic problem in quality control.
- Non-Conformance Resolved.

**Material Location:** OBG

**Lift:** 01

**Remarks:**

During random verification magnetic particle testing (MT) of the internal components of OBG Segment 1AAW, Caltrans Quality Assurance (QA) Inspector discovered a total of five (5) linear indications ranging from 5 to 15mm in length in the base metal where weld had been removed on Plate X182B. These welds have been previously tested and accepted by ZPMC Quality Control (QC) MT technicians.

See NCR report No. ZPMC-281 for details.

**Action Required and/or Action Taken:**

Propose a resolution for the identified recurring non-conformance which constitutes a systematic problem in quality control with revised procedures to prevent future occurrences. A response for the resolution of this issue is expected within 14 days.

**Transmitted by:** Ching Chao

**Attachments:** ZPMC-0281

**cc:** Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Doug Coe, Jason Tom, Contract Files, Ching Chao

**File:** 05.03.06

**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 #: 04-0120F4  
 Cty: SF/ALA Rte: 80 PM: 13.2/13.9  
 File #: 69.25B

## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

**Location:** Changxing Island, Shanghai, P.R. China

**Report No:** NCR-000307

**Prime Contractor:** American Bridge/Fluor Enterprises, a JV

**Date:** 09-Jun-2009

**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

**NCR #:** ZPMC-0281

### Type of problem:

**Welding**  **Concrete**  **Other**

**Welding**  **Curing**  **Procedural**  **Bridge No:** 34-0006

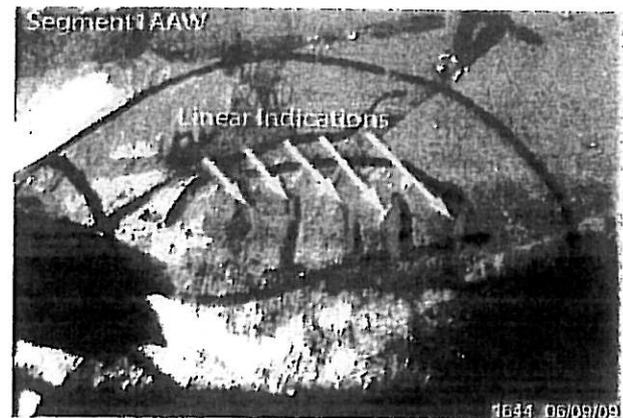
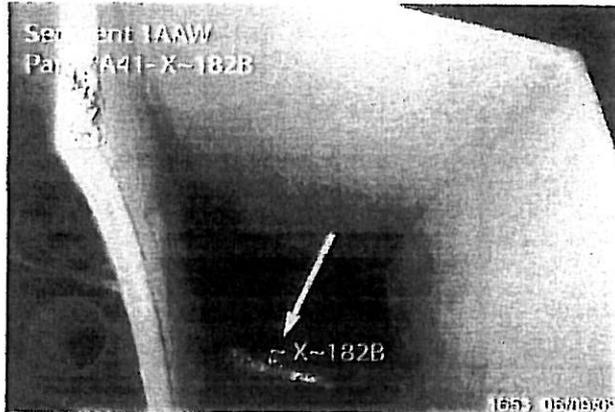
**Joint fit-up**  **Coating**  **Other**  **Component:** OBG Segment 1AAW

**Procedural**  **Procedural**  **Description:**

**Reference Description:** Missed MT Indications by QC, Plate X182B, Segment 1AAW

### Description of Non-Conformance:

During random verification magnetic particle testing (MT) of the internal components of OBG Segment 1AAW, Caltrans Quality Assurance (QA) Inspector discovered a total of five (5) linear indications ranging from 5 to 15mm in length in the base metal where weld had been removed on Plate X182B. These welds have been previously tested and accepted by ZPMC Quality Control (QC) MT technicians.



### Applicable reference:

Special Provisions Section 8.3 – “Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents.”

AWS D1.5 (02) Section 6.26.2 – “Welds that are subject to MT in addition to visual inspection shall have no cracks.”

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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**Who discovered the problem:** Hiranch Patel  
**Name of individual from Contractor notified:** Wang Wen Bin  
**Time and method of notification:** 17:00, 06/09/09, Verbal  
**Name of Caltrans Engineer notified:** Stanley Ku  
**Time and method of notification:** 14:00, 06-10-09, Verbal  
**QC Inspector's Name:** Li Zhi Jiang  
**Was QC Inspector aware of the problem:**  Yes  No  
**Contractor's proposal to correct the problem:**

**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 Skyler Guest, (86) 1500.042.2360, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Guest, Skyler	SMR
<b>Reviewed By:</b>	Wahbeh, Mazen	SMR

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DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge  
666 Feng Bin Road Room 708, Changxing Island  
Shanghai 201913 PR China  
Tel: 021-56856666 ext 207061 Fax:

## NON-CONFORMANCE REPORT TRANSMITTAL

**To:** AMERICAN BRIDGE/FLUOR, A JV  
375 BURMA ROAD  
OAKLAND CA 95607

**Date:** 14-Jun-2009

**Contract No:** 04-0120F4  
04-SF-80-13.2 / 13.9

**Dear:** Mr. Charles Kanapicki  
**Job Name:** SAS Superstructure

**Attention:** Mr. Thomas Nilsson Project/Fabrication Manager  
**Document No:** 05.03.06-000272

**Subject:** NCR No. ZPMC-0283

**Reference Description:** Missed MT Indications by QC, Plate X199A, Segment 1AAW

The attached Non-Conformance Report describes an occurrence where the contractor did not comply with a requirement of the contract document as indicated below:

- Material or Workmanship not in conformance with contract documents.
- Quality Control (QC) not performed in conformance with contract documents.
- Recurring QC issue that constitutes a systematic problem in quality control.
- Non-Conformance Resolved.

**Material Location:** OBG

**Lift:** 01

**Remarks:**

During random verification magnetic particle testing (MT) of the internal components of OBG Segment 1AAW, Caltrans Quality Assurance (QA) Inspector discovered a total of eleven (11) linear indications ranging from 5 to 35mm in length in the base metal where weld had been removed on Plate X199A. These welds have been previously tested and accepted by ZPMC Quality Control (QC) MT technicians.

See NCR report No. ZPMC-283 for details.

**Action Required and/or Action Taken:**

Propose a resolution for the identified recurring non-conformance which constitutes a systematic problem in quality control with revised procedures to prevent future occurrences. A response for the resolution of this issue is expected within 14 days.

**Transmitted by:** Ching Chao

**Attachments:** ZPMC-0283

**cc:** Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Doug Coe, Jason Tom, Contract Files, Ching Chao

**File:** 05.03.06

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Contract #: 04-0120F4  
 Cty: SF/ALA Rte: 80 PM: 13.2/13.9  
 File #: 69.25B

## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

**Location:** Changxing Island, Shanghai, P.R. China

**Report No:** NCR-000309

**Prime Contractor:** American Bridge/Fluor Enterprises, a JV

**Date:** 09-Jun-2009

**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

**NCR #:** ZPMC-0283

### Type of problem:

Welding  Concrete  Other

Welding  Curing  Procedural  Bridge No: 34-0006

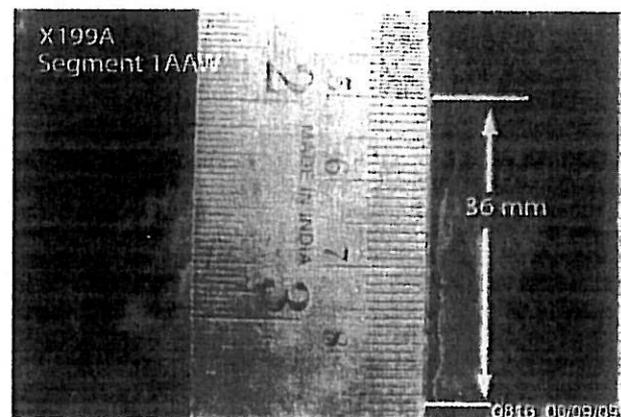
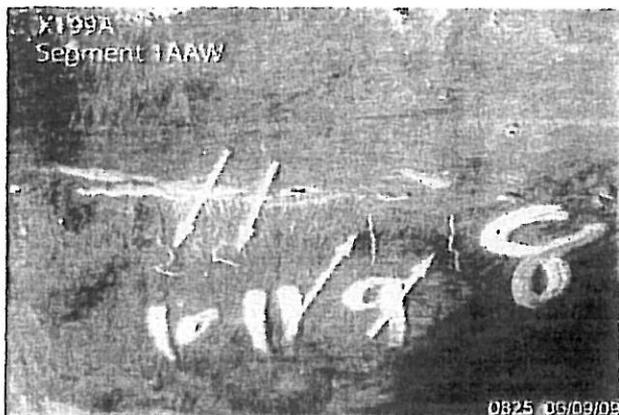
Joint fit-up  Coating  Other  Component: OBG Segment 1AAW

Procedural  Procedural  Description:

**Reference Description:** Missed MT Indications by QC, Plate X199A, Segment 1AAW

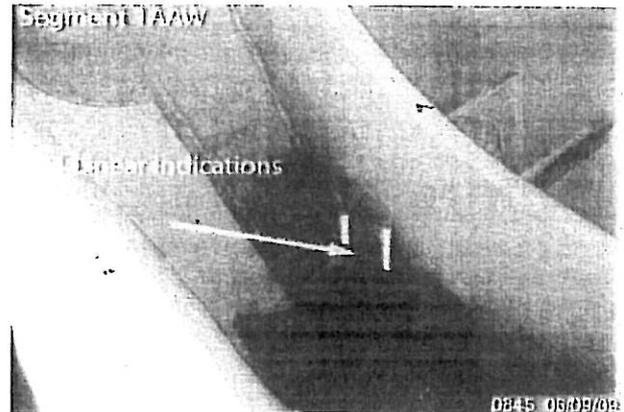
### Description of Non-Conformance:

During random verification magnetic particle testing (MT) of the internal components of OBG Segment 1AAW, Caltrans Quality Assurance (QA) Inspector discovered a total of eleven (11) linear indications ranging from 5 to 35mm in length in the base metal where weld had been removed on Plate X199A. These welds have been previously tested and accepted by ZPMC Quality Control (QC) MT technicians.



# QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



**Applicable reference:**

Special Provisions Section 8.3 – “Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents.”

AWS D1.5 (02) Section 6.26.2 – “Welds that are subject to MT in addition to visual inspection shall have no cracks.”

**Who discovered the problem:** Hiranch Patel

**Name of individual from Contractor notified:** Wang Wen Bin

**Time and method of notification:** 06/09/09, 9:00, Verbal

**Name of Caltrans Engineer notified:** Stanley Ku

**Time and method of notification:** 06/10/09, 14:00, Verbal

**QC Inspector's Name:** Li Zhi Jiang

**Was QC Inspector aware of the problem:**  Yes  No

**Contractor's proposal to correct the problem:**

**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 Skyler Guest, (86) 1500.042.2360, who represents the Office of Structural Materials for your project.

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**Inspected By:** Guest, Skyler

SMR

---

**Reviewed By:** Wahbeh, Mazen

SMR



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge  
666 Feng Bin Road Room 708, Changxing Island  
Shanghai 201913 PR China  
Tel: 021-56856666 ext 207061 Fax:

## NON-CONFORMANCE REPORT TRANSMITTAL

**To:** AMERICAN BRIDGE/FLUOR, A JV  
375 BURMA ROAD  
OAKLAND CA 95607

**Date:** 22-Jun-2009

**Contract No:** 04-0120F4  
04-SF-80-13.2 / 13.9

**Dear:** Mr. Charles Kanapicki

**Job Name:** SAS Superstructure

**Attention:** Mr. Thomas Nilsson Project/Fabrication Manager

**Document No:** 05.03.06-000296

**Subject:** NCR No. ZPMC-0306

**Reference Description:** Missed MT Indications by QC, Plate X181A, Segment 1AAW

The attached Non-Conformance Report describes an occurrence where the contractor did not comply with a requirement of the contract document as indicated below:

- Material or Workmanship not in conformance with contract documents.
- Quality Control (QC) not performed in conformance with contract documents.
- Recurring QC issue that constitutes a systematic problem in quality control.
- Non-Conformance Resolved.

**Material Location:** OBG

**Lift:** 01

### Remarks:

During random verification magnetic particle testing (MT) of the internal components of OBG Segment 1AAW, Caltrans Quality Assurance (QA) Inspector discovered a total of four (4) linear indications ranging from 5 to 12mm in length in the base metal (weld removal area) at location A13, plate X181A. These areas have been previously tested and accepted by ZPMC Quality Control (QC) MT technicians.

See attached NCR No. ZPMC-306 for details.

### Action Required and/or Action Taken:

Propose a resolution for the identified recurring non-conformance which constitutes a systematic problem on both materials/workmanship and quality control issues to remedy the defected work and with revised procedures to prevent future occurrences. A response for the resolution of this issue is expected within 14 days.

**Transmitted by:** Ching Chao

**Attachments:** ZPMC-0306

**cc:** Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Doug Coc, Jason Tom, Contract Files, Ching Chao  
**File:** 05.03.06

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

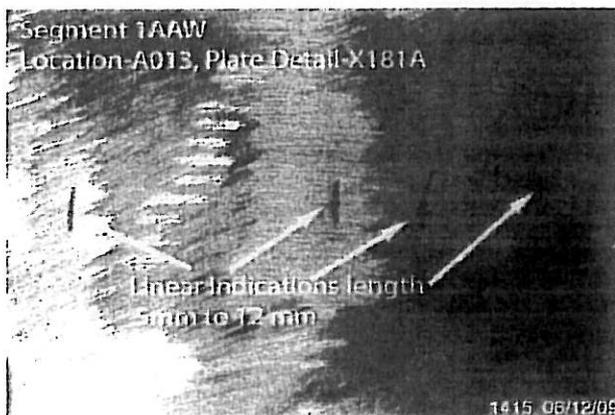
Office of Structural Materials

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 #: 69.25B**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT****Location:** Changxing Island, Shanghai, P.R. China**Report No:** NCR-000332**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 12-Jun-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0306**Type of problem:**Welding  Concrete  Other Welding  Curing  Procedural  **Bridge No:** 34-0006Joint fit-up  Coating  Other  **Component:** OBG Segment 1AAWProcedural  Procedural  Description:**Reference Description:** Missed MT Indications by QC, Plate X181A, Segment 1AAW**Description of Non-Conformance:**

During random verification magnetic particle testing (MT) of the internal components of OBG Segment 1AAW, Caltrans Quality Assurance (QA) Inspector discovered a total of four (4) linear indications ranging from 5 to 12mm in length in the base metal (weld removal area) at location A13, plate X181A. These areas have been previously tested and accepted by ZPMC Quality Control (QC) MT technicians.

**Applicable reference:**

Special Provisions Section 8.3 – “Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents.”

AWS D1.5 (02) Section 6.26.2 – “Welds that are subject to MT in addition to visual inspection shall have no cracks.”

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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**Who discovered the problem:** Hiranch Patel  
**Name of individual from Contractor notified:** Wang Wen Bin  
**Time and method of notification:** 1700 hours, 06/12/09, Verbal  
**Name of Caltrans Engineer notified:** Stanley Ku  
**Time and method of notification:** 800 hours, 06/15/09, Verbal  
**QC Inspector's Name:-** Li Zhi Jiang  
**Was QC Inspector aware of the problem:**  Yes  No  
**Contractor's proposal to correct the problem:**

**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 Skyler Guest, (86) 1500-042-2360, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Guest, Skyler	SMR
<b>Reviewed By:</b>	Wahbeh, Mazen	SMR

---



# REPORT OF MAGNETIC PARTICLE EXAMINATION

## 磁粉检测报告

REPORT NO. 报告编号 B787-MT-11633      DATE日期 2009.06.08      PAGE OF 页码 1/16      Revision No: 0

PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS	
DRAWING NO. 图号: SEG2/SEG1 1AAE /1AAW		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4	
REFERENCING CODE 参考规范编码 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 <sup>ST</sup> , 2009
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5395 5617 5620
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm
MATERIAL TO BE EXAMINED 检测材料	<input checked="" type="checkbox"/> WELDING 焊接件 <input type="checkbox"/> CASTING 铸件 <input type="checkbox"/> FORGING 锻造	Material & thickness 母材, 厚度	A709M-345T2-X 45mm
WELDING PROCESS 焊接方法	NA	TYPE OF JOINT 焊缝类型	NA

WELD I.D. 焊缝编号	DISCONTINUITY 不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
SEG2E-137				ACC.		removed stiff
SEG2D-130				ACC.		removed stiff
SEG2E-347	1	CRACK	680mm		REJ.	removed stiff
	2	CRACK	328mm		REJ.	removed stiff
	3	CRACK	170mm		REJ.	removed stiff
	4	CRACK	300mm		REJ.	removed stiff
SEG2E-429	1	CRACK	240mm		REJ.	removed stiff
	2	CRACK	361mm		REJ.	removed stiff
	3	CRACK	70mm		REJ.	removed stiff
	4	CRACK	450mm		REJ.	removed stiff
SEG2E-044				ACC.		removed stiff
SEG2E-227	1	CRACK	170mm		REJ.	removed stiff
	2	CRACK	220mm		REJ.	removed stiff

EXAMINED BY 主探 Chang Fang Jie <i>Chang Fang Jie</i> 09.06.08	REVIEWED BY 审核 Tan Chao Wei <i>Tan Chao Wei</i> 09.06.08
LEVEL - II SIGN 签名 / DATE 日期	LEVEL - II SIGN / DATE 日期
质量经理 / QCM <i>Wang Jianhua</i>	用户 CUSTOMER
签字 SIGN / 日期 DATE 6.8	签字 SIGN / 日期 DATE



# REPORT OF MAGNETIC PARTICLE EXAMINATION

## 磁粉检测报告

REPORT NO. 报告编号 B787-MT-11633      DATE日期 2009.06.08      PAGE OF 页码 2/16      Revision No: 0

PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS	
DRAWING NO. 图号: SEG2/SEG1 1AAE /1AAW		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4	
REFERENCING CODE 参考规范编码 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 <sup>ST</sup> , 2009
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5395 5617 5620
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm
MATERIAL TO BE EXAMINED 检测材料	<input checked="" type="checkbox"/> WELDING 焊接件 <input type="checkbox"/> CASTING 铸件 <input type="checkbox"/> FORGING 锻造	Material & thickness 母材, 厚度	A709M-345T2-X  45mm
WELDING PROCESS 焊接方法	NA	TYPE OF JOINT 焊缝类型	NA

WELD I.D. 焊缝编号	DISCONTINUITY 不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
	3	CRACK	130mm		REJ.	removed stiff
SEG2E-305				ACC.		removed stiff
SEG2E-387	1	CRACK	360mm		REJ.	removed stiff
	2	CRACK	280mm		REJ.	removed stiff
SEG2D-129				ACC.		removed stiff
SEG2D-116				ACC.		removed stiff
SEG2E-343				ACC.		removed stiff
SEG2E-425				ACC.		removed stiff
SEG2E-301				ACC.		removed stiff
SEG2E-383				ACC.		removed stiff
SEG2D-118				ACC.		removed stiff
SEG2D-101				ACC.		removed stiff
SEG2E-338	1	CRACK	10mm		REJ.	removed stiff

EXAMINED BY 主探 Chang fang jie <i>Chang Fang Jie</i> 2009.06.08	REVIEWED BY 审核 Tan Chao Wei <i>Tan Chao Wei</i> 2009.06.08
LEVEL - II SIGN 签名 / DATE 日期	LEVEL - II SIGN / DATE 日期
质量经理 / QCM <i>Lu Jianhua</i>	用户 CUSTOMER
签字 SIGN / 日期 DATE 6.8	签字 SIGN / 日期 DATE



# REPORT OF MAGNETIC PARTICLE EXAMINATION

## 磁粉检测报告

REPORT NO. 报告编号 B787-MT-11633      DATE日期 2009.06.08      PAGE OF页码 3/16      Revision No: 0

PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS	
DRAWING NO. 图号: SEG2/SEG1 1AAE /1AAW		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4	
REFERENCING CODE 参考规范编码 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 <sup>ST</sup> , 2009
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5395 5617 5620
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm
MATERIAL TO BE EXAMINED 检测材料	<input checked="" type="checkbox"/> WELDING 焊接件 <input type="checkbox"/> CASTING 铸件 <input type="checkbox"/> FORGING 锻造	Material & thickness 母材,厚度	A709M-345T2-X 45mm
WELDING PROCESS 焊接方法	NA	TYPE OF JOINT 焊缝类型	NA

WELD I.D. 焊缝编号	DISCONTINUITY不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
SEG2E-420	1	CRACK	210mm		REJ.	removed stiff
	2	CRACK	265mm		REJ.	removed stiff
SEG2E-296	1	CRACK	85mm		REJ.	removed stiff
	2	CRACK	30mm		REJ.	removed stiff
	3	CRACK	70mm		REJ.	removed stiff
	4	CRACK	150mm		REJ.	removed stiff
	5	CRACK	60mm		REJ.	removed stiff
SEG2E-378				ACC.		removed stiff
SEG2D-103				ACC.		removed stiff
SEG2D-002				ACC.		removed stiff
SEG2E-083				ACC.		removed stiff
SEG2E-124				ACC.		removed stiff
SEG2F-043				ACC.		removed stiff

EXAMINED BY主探 Chang fang jie <i>Chang Fangjie</i>	REVIEWED BY 审核 Tan Chau Wei <i>Tan Chau Wei</i>
LEVEL - II SIGN 签名 / DATE日期 <i>09.06.08</i>	LEVEL-II SIGN / DATE日期 <i>09.06.08</i>
质量经理 / QCM <i>Cyriambra</i>	用户CUSTOMER
签字 SIGN / 日期 DATE <i>09.6.8</i>	签字 SIGN / 日期 DATE



# REPORT OF MAGNETIC PARTICLE EXAMINATION

## 磁粉检测报告

REPORT NO. 报告编号 B787-MT-11633      DATE日期 2009.06.08      PAGE OF 页码 4/16      Revision No: 0

PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS	
DRAWING NO. 图号: SEG2/SEG1 1AAE /1AAW		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4	
REFERENCING CODE 参考规范编码 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 <sup>ST</sup> , 2009
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5395 5617 5620
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm
MATERIAL TO BE EXAMINED 检测材料	<input checked="" type="checkbox"/> WELDING 焊接件 <input type="checkbox"/> CASTING 铸件 <input type="checkbox"/> FORGING 锻造	Material & thickness 母材, 厚度	A709M-345T2-X 45mm
WELDING PROCESS 焊接方法	NA	TYPE OF JOINT 焊缝类型	NA

WELD I.D. 焊缝编号	DISCONTINUITY 不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
SEG2F-044				ACC.		removed stiff
SEG2E-334				ACC.		removed stiff
SEG2F-022				ACC.		removed stiff
SEG2D-004				ACC.		removed stiff
SEG2F-023				ACC.		removed stiff
SEG2F-024				ACC.		removed stiff
SEG2F-025				ACC.		removed stiff
SEG2F-026				ACC.		removed stiff
SEG2D-088				ACC.		removed stiff
SEG2F-027				ACC.		removed stiff
SEG2D-090				ACC.		removed stiff
SEG2E-416				ACC.		removed stiff
SEG2C-041				ACC.		removed stiff

EXAMINED BY 主探 Chang fang jie <i>Chang Fang jie's</i> 09.06.08	REVIEWED BY 审核 Tan Chau wei 09.06.08
LEVEL - II SIGN 签名 / DATE 日期 质量经理 / QCM <i>[Signature]</i>	LEVEL-II SIGN / DATE 日期 用户 CUSTOMER
签字 SIGN / 日期 DATE 09.06.08	签字 SIGN / 日期 DATE



# REPORT OF MAGNETIC PARTICLE EXAMINATION

## 磁粉检测报告

REPORT NO. 报告编号 B787-MT-11633      DATE日期 2009.06.08      PAGE OF页码 5/16      Revision No: 0

PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS	
DRAWING NO. 图号: SEG2/SEG1 1AAE /1AAW		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4	
REFERENCING CODE 参考规范编码 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 <sup>ST</sup> , 2009
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5395 5617 5620
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm
MATERIAL TO BE EXAMINED 检测材料	<input checked="" type="checkbox"/> WELDING 焊接件 <input type="checkbox"/> CASTING 铸件 <input type="checkbox"/> FORGING 锻造	Material & thickness 母材, 厚度	A709M-345T2-X  45mm
WELDING PROCESS 焊接方法	NA	TYPE OF JOINT 焊缝类型	NA

WELD I.D. 焊缝编号	DISCONTINUITY不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
SEG2E-151				ACC.		removed stiff
SEG2E-241				ACC.		removed stiff
SEG2E-109				ACC.		removed stiff
SEG2E-190				ACC.		removed stiff
SEG2C-046				ACC.		removed stiff
SEG2E-240				ACC.		removed stiff
SEG2C-045				ACC.		removed stiff
SEG2E-150				ACC.		removed stiff
SEG2E-361				ACC.		removed stiff
SEG2C-130				ACC.		removed stiff
SEG2E-319				ACC.		removed stiff
SEG2E-355	1	CRACK	20mm		REJ.	removed stiff
	2	CRACK	18mm		REJ.	removed stiff

EXAMINED BY主探 Chang fang jie <i>Chang Fang Jie</i>	REVIEWED BY 审核 <i>Tan Chau wei</i>
LEVEL - II SIGN 签名 / DATE日期 <i>09.06.08</i>	LEVEL-II SIGN / DATE日期 <i>09.06.08</i>
质量经理 / QCM <i>Lu...</i>	用户CUSTOMER
签字 SIGN / 日期 DATE <i>09.6.8</i>	签字 SIGN / 日期 DATE



# REPORT OF MAGNETIC PARTICLE EXAMINATION

## 磁粉检测报告

REPORT NO. 报告编号 B787-MT-11633      DATE日期 2009.06.08      PAGE OF页码 6/16      Revision No: 0

PROJECT NO. 工程编号: ZP06-787      CONTRACTOR: 用户: CALTRANS

DRAWING NO. 图号: SEG2/SEG1 1AAE /1AAW      CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4

REFERENCING CODE 参考规范编码 AWS D1.5-2002      ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002      PROCEDURE NO. 程序编号 ZPQC-MT-01      CALIBRATION DUE DATE 仪器校正有效期 Dec. 28<sup>ST</sup>, 2009

EQUIPMENT 设备 MT YOKE      MANUFACTURER 制造商 PARKER      MODEL NO. 样式编号 B310S      SERIAL NO. 连续编号 5395 5617 5620

MAGNETIZING METHOD 磁化方法 Continuous magnetic yoke 磁轭式连续法      CURRENT 电流 AC

PARTICLE TYPE 磁粉类型 Dry magnet powder 干磁粉      YOKE SPACING 磁轭间距 70~150mm

MATERIAL TO BE EXAMINED 检测材料  WELDING 焊接件  CASTING 铸件  FORGING 锻造      Material & thickness 母材,厚度 A709M-345T2-X 45mm

WELDING PROCESS 焊接方法 NA      TYPE OF JOINT 焊缝类型 NA

WELD I.D. 焊缝编号	DISCONTINUITY不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
	3	CRACK	240mm		REJ.	removed stiff
	4	CRACK	250mm		REJ.	removed stiff
	5	CRACK	470mm		REJ.	removed stiff
SEG2C-148	1	CRACK	20mm		REJ.	removed stiff
SEG2E-313				ACC.		removed stiff
SEG2C-004				ACC.		removed stiff
SEG2F-001				ACC.		removed stiff
SEG2F-002				ACC.		removed stiff
SEG2F-003				ACC.		removed stiff
SEG2F-004				ACC.		removed stiff
SEG2F-005				ACC.		removed stiff
SEG2C-002				ACC.		removed stiff
SEG2E-214				ACC.		removed stiff

EXAMINED BY主探 Chang fang jie <i>Chang Fangjie</i> 09.06.08 LEVEL - II SIGN 签名 / DATE日期 质量经理 / QCM <i>Lujiambina</i> 签字 SIGN / 日期 DATE 09.06.08	REVIEWED BY 审核 Jan chao wei <i>Jan chao wei</i> 09.06.08 LEVEL-II SIGN / DATE日期 用户CUSTOMER 签字 SIGN / 日期 DATE
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# REPORT OF MAGNETIC PARTICLE EXAMINATION

## 磁粉检测报告

REPORT NO. 报告编号 B787-MT-11633      DATE日期 2009.06.08      PAGE OF页码 7/16      Revision No: 0

PROJECT NO. 工程编号: ZP06-787      CONTRACTOR: 用户: CALTRANS

DRAWING NO. 图号: SEG2/SEG1 1AAE /1AAW      CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4

REFERENCING CODE 参考规范编码 AWS D1.5-2002      ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002      PROCEDURE NO. 程序编号 ZPQC-MT-01      CALIBRATION DUE DATE 仪器校正有效期 Dec. 28<sup>ST</sup>, 2009

EQUIPMENT 设备 MT YOKE      MANUFACTURER 制造商 PARKER      MODEL NO. 样式编号 B310S      SERIAL NO. 连续编号 5395 5617 5620

MAGNETIZING METHOD 磁化方法 Continuous magnetic yoke 磁轭式连续法      CURRENT 电流 AC

PARTICLE TYPE 磁粉类型 Dry magnet powder 干磁粉      YOKE SPACING 磁轭间距 70~150mm

MATERIAL TO BE EXAMINED 检测材料  WELDING 焊接件  CASTING 铸件  FORGING 锻造      Material & thickness 母材,厚度 A709M-345T2-X 45mm

WELDING PROCESS 焊接方法 NA      TYPE OF JOINT 焊缝类型 NA

WELD I.D. 焊缝编号	DISCONTINUITY不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
SEG2E-255				ACC.		removed stiff
SEG2F-045				ACC.		removed stiff
SEG2F-046				ACC.		removed stiff
SEG2C-086				ACC.		removed stiff
SEG2E-333				ACC.		removed stiff
SEG2E-369				ACC.		removed stiff
SEG2E-451				ACC.		removed stiff
SEG2C-104				ACC.		removed stiff
SEG2E-327	1	CRACK	30mm		REJ.	removed stiff
	2	CRACK	1550mm		REJ.	removed stiff
SEG2E-409	1	CRACK	110mm		REJ.	removed stiff
	2	CRACK	85mm		REJ.	removed stiff
	3	CRACK	75mm		REJ.	removed stiff

EXAMINED BY主探 Chang fang jie *Chang fang jie* 07.06.08      REVIEWED BY 审核 Tan Chao Wen *Tan Chao Wen* 07.06.08

LEVEL-II SIGN 签名 / DATE日期      LEVEL-II SIGN / DATE日期

质量经理 / QCM C. J. ...      用户CUSTOMER

签字 SIGN / 日期 DATE 07.06.08      签字 SIGN / 日期 DATE



# REPORT OF MAGNETIC PARTICLE EXAMINATION

## 磁粉检测报告

REPORT NO. 报告编号 B787-MT-11633      DATE日期 2009.06.08      PAGE OF 页码 8/16      Revision No: 0

PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS	
DRAWING NO. 图号: SEG2/SEG1 1AAE /1AAW		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4	
REFERENCING CODE 参考规范编码 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 <sup>ST</sup> , 2009
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5395 5617 5620
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm
MATERIAL TO BE EXAMINED 检测材料	<input checked="" type="checkbox"/> WELDING 焊接件 <input type="checkbox"/> CASTING 铸件 <input type="checkbox"/> FORGING 锻造	Material & thickness 母材, 厚度	A709M-345T2-X 45mm
WELDING PROCESS 焊接方法	NA	TYPE OF JOINT 焊缝类型	NA

WELD I.D. 焊缝编号	DISCONTINUITY 不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
	4	CRACK	90mm		REJ.	removed stiff
	5	CRACK	50mm		REJ.	removed stiff
	6	CRACK	90mm		REJ.	removed stiff
	7	CRACK	230mm		REJ.	removed stiff
SEG2C-106				ACC.		removed stiff
SEG2E-365				ACC.		removed stiff
SEG2C-116				ACC.		removed stiff
SEG2E-323				ACC.		removed stiff
SEG2E-111				ACC.		removed stiff
SEG2E-152				ACC.		removed stiff
SEG2C-149				ACC.		removed stiff
SEG2E-192				ACC.		removed stiff
SEG2E-242				ACC.		removed stiff

EXAMINED BY 主探 Chang fang jie <i>Chang Fang Jie</i> LEVEL - II SIGN 签名 / DATE日期 09.06.08	REVIEWED BY 审核 <i>Tan chao wei</i> LEVEL-II SIGN / DATE日期 09.06.08
质量经理 / QCM <i>Lu jianhua</i>	用户 CUSTOMER
签字 SIGN / 日期 DATE 09.06.08	签字 SIGN / 日期 DATE



# REPORT OF MAGNETIC PARTICLE EXAMINATION

## 磁粉检测报告

REPORT NO. 报告编号 B787-MT-11633      DATE日期 2009.06.08      PAGE OF页码 9/16      Revision No: 0

PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS	
DRAWING NO. 图号: SEG2/SEG1 1AAE /1AAW		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4	
REFERENCING CODE 参考规范编码 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 <sup>ST</sup> , 2009
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5395 5617 5620
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm
MATERIAL TO BE EXAMINED 检测材料	<input checked="" type="checkbox"/> WELDING 焊接件 <input type="checkbox"/> CASTING 铸件 <input type="checkbox"/> FORGING 锻造	Material & thickness 母材,厚度	A709M-345T2-X 45mm
WELDING PROCESS 焊接方法	NA	TYPE OF JOINT 焊缝类型	NA

WELD I.D. 焊缝编号	DISCONTINUITY不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
SEG2C-150				ACC.		removed stiff
SEG2E-362				ACC.		removed stiff
SEG2E-444				ACC.		removed stiff
SEG2C-127				ACC.		removed stiff
SEG2E-320				ACC.		removed stiff
SEG2C-126				ACC.		removed stiff
SEG2E-402				ACC.		removed stiff
SEG1E-334				ACC.		removed stiff
SEG1F-003				ACC.		removed stiff
SEG1F-004				ACC.		removed stiff
SEG1F-005				ACC.		removed stiff
SEG1D-086				ACC.		removed stiff
SEG1F-006				ACC.		removed stiff

EXAMINED BY主探 Chang fang jie <i>Chang Fang Jie</i>	REVIEWED BY 审核 <i>Tan Chao Wei</i>
LEVEL - II SIGN 签名 / DATE日期 <i>09.06.08</i>	LEVEL-II SIGN / DATE日期 <i>09.06.08</i>
质量经理 / QCM <i>Lu Yanhua</i>	用户CUSTOMER
签字 SIGN / 日期 DATE <i>09.06.08</i>	签字 SIGN / 日期 DATE



# REPORT OF MAGNETIC PARTICLE EXAMINATION

## 磁粉检测报告

REPORT NO. 报告编号 B787-MT-11633		DATE日期 2009.06.08	PAGE OF页码 10/16	Revision No: 0
PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS		
DRAWING NO. 图号: SEG2/SEG1 1AAE /1AAW		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4		
REFERENCING CODE 参考规范编码 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 <sup>ST</sup> , 2009	
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5395 5617 5620	
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC	
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm	
MATERIAL TO BE EXAMINED 检测材料	<input checked="" type="checkbox"/> WELDING 焊接件 <input type="checkbox"/> CASTING 铸件 <input type="checkbox"/> FORGING 锻造	Material & thickness 母材,厚度	A709M-345T2-X 45mm	
WELDING PROCESS 焊接方法	NA	TYPE OF JOINT 焊缝类型	NA	

WELD I.D. 焊缝编号	DISCONTINUITY 不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
SEG1D-088				ACC.		removed stiff
SEG1E-416				ACC.		removed stiff
SEG1E-096				ACC.		removed stiff
SEG1E-137	1	CRACK	100 mm		REJ.	removed stiff
SEG1D-150				ACC.		removed stiff
SEG1D-128				ACC.		removed stiff
SEG1E-347	1	CRACK	1180mm		REJ.	removed stiff
SEG1E-429				ACC.		removed stiff
SEG1D-151				ACC.		removed stiff
SEG1E-177				ACC.		removed stiff
SEG1E-227				ACC.		removed stiff
SEG1E-305	1	CRACK	50mm		REJ.	removed stiff
	2	CRACK	30mm		REJ.	removed stiff

EXAMINED BY 主探 Chang fang jie <i>Chang Fang Jie</i> LEVEL - II SIGN 签名 / DATE日期 <i>09.06.08</i> 质量经理 / QCM <i>[Signature]</i> 签字 SIGN / 日期 DATE <i>09.06.08</i>	REVIEWED BY 审核 <i>Tan Chaw Wei</i> LEVEL-II SIGN / DATE日期 <i>09.06.08</i> 用户 CUSTOMER 签字 SIGN / 日期 DATE
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REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-11633		DATE日期 2009.06.08	PAGE OF页码 11/16	Revision No: 0
PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS		
DRAWING NO. 图号: SEG2/SEG1 1AAE /1AAW		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4		
REFERENCING CODE 参考规范编码 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 <sup>ST</sup> , 2009	
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5395 5617 5620	
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC	
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm	
MATERIAL TO BE EXAMINED 检测材料	<input checked="" type="checkbox"/> WELDING 焊接件 <input type="checkbox"/> CASTING 铸件 <input type="checkbox"/> FORGING 锻造	Material & thickness 母材,厚度	A709M-345T2-X 45mm	
WELDING PROCESS 焊接方法	NA	TYPE OF JOINT 焊缝类型	NA	

WELD I.D. 焊缝编号	DISCONTINUITY不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
SEG1E-387				ACC.		removed stiff
SEG1D-127	1	CRACK	20 mm		REJ.	removed stiff
SEG1E-340				ACC.		removed stiff
SEG1E-299				ACC.		removed stiff
SEG1D-108				ACC.		removed stiff
SEG1E-341				ACC.		removed stiff
SEG1E-422				ACC.		removed stiff
SEG1E-298				ACC.		removed stiff
SEG1D-105				ACC.		removed stiff
SEG1E-380				ACC.		removed stiff
SEG1D-107				ACC.		removed stiff
SEG1E-337				ACC.		removed stiff
SEG1D-096				ACC.		removed stiff

EXAMINED BY主探 Chang fang jie <i>Chang Fang jie</i> LEVEL - II SIGN 签名 / DATE日期 <i>09.06.08</i>	REVIEWED BY 审核 <i>Tan Chao Wei</i> LEVEL-II SIGN / DATE日期 <i>09.06.08</i>
质量经理 / QCM <i>Cui Yanhua</i>	用户CUSTOMER
签字 SIGN / 日期 DATE <i>09.06.08</i>	签字 SIGN / 日期 DATE



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-11633		DATE日期 2009.06.08	PAGE OF页码 12/16	Revision No: 0
PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS		
DRAWING NO. 图号: SEG2/SEG1 1AAE /1AAW		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4		
REFERENCING CODE 参考规范编码 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 <sup>ST</sup> , 2009	
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5395 5617 5620	
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC	
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm	
MATERIAL TO BE EXAMINED 检测材料	<input checked="" type="checkbox"/> WELDING 焊接件 <input type="checkbox"/> CASTING 铸件 <input type="checkbox"/> FORGING 锻造	Material & thickness 母材, 厚度	A709M-345T2-X 45mm	
WELDING PROCESS 焊接方法	NA	TYPE OF JOINT 焊缝类型	NA	

WELD I.D. 焊缝编号	DISCONTINUITY 不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
SEG1E-295				ACC.		removed stiff
SEG1F-045				ACC.		removed stiff
SEG1F-046				ACC.		removed stiff
SEG1E-148				ACC.		removed stiff
SEG1E-238				ACC.		removed stiff
SEG1C-058				ACC.		removed stiff
SEG1E-353				ACC.		removed stiff
SEG1E-311				ACC.		removed stiff
SEG1D-146				ACC.		removed stiff
SEG1E-024				ACC.		removed stiff
SEG1E-164				ACC.		removed stiff
SEG1F-022				ACC.		removed stiff
SEG1F-023				ACC.		removed stiff

EXAMINED BY 主探 Chang fang jie <i>Chang Fangjie</i>	REVIEWED BY 审核 <i>Tan Char Mei</i>
LEVEL - II SIGN 签名 / DATE日期 <i>09.06.08</i>	LEVEL-II SIGN / DATE日期 <i>09.06.08</i>
质量经理 / QCM <i>Wang Jianhua</i>	用户 CUSTOMER
签字 SIGN / 日期 DATE <i>09.06.08</i>	签字 SIGN / 日期 DATE



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-11633      DATE日期 2009.06.08      PAGE OF页码 13/16      Revision No: 0

PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS	
DRAWING NO. 图号: SEG2/SEG1 1AAE /1AAW		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4	
REFERENCING CODE 参考规范编码 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 <sup>ST</sup> , 2009
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5395 5617 5620
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm
MATERIAL TO BE EXAMINED 检测材料	<input checked="" type="checkbox"/> WELDING 焊接件 <input type="checkbox"/> CASTING 铸件 <input type="checkbox"/> FORGING 锻造	Material & thickness 母材,厚度	A709M-345T2-X 45mm
WELDING PROCESS 焊接方法	NA	TYPE OF JOINT 焊缝类型	NA

WELD I.D. 焊缝编号	DISCONTINUITY不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
SEG1F-024				ACC.		removed stiff
SEG1F-025				ACC.		removed stiff
SEG1F-026				ACC.		removed stiff
SEG1F-027				ACC.		removed stiff
SEG1C-001				ACC.		removed stiff
SEG1E-214				ACC.		removed stiff
SEG1E-255				ACC.		removed stiff
SEG1F-043				ACC.		removed stiff
SEG1F-044				ACC.		removed stiff
SEG1C-088				ACC.		removed stiff
SEG1E-333				ACC.		removed stiff
SEG1E-415				ACC.		removed stiff
SEG1C-090				ACC.		removed stiff

EXAMINED BY主探 Chang fang jie <i>Changfangjie</i> LEVEL - II SIGN 签名 / DATE日期 09.06.08	REVIEWED BY 审核 Tan Chao Wei <i>TanChaoWei</i> LEVEL-II SIGN / DATE日期 09.06.08
质量经理 / QCM <i>Lujiambua</i>	用户 CUSTOMER
签字 SIGN / 日期 DATE 09.06.08	签字 SIGN / 日期 DATE



# REPORT OF MAGNETIC PARTICLE EXAMINATION

## 磁粉检测报告

REPORT NO. 报告编号 B787-MT-11633		DATE日期 2009.06.08	PAGE OF页码 14/16	Revision No: 0
PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS		
DRAWING NO. 图号: SEG2/SEG1 1AAE /1AAW		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4		
REFERENCING CODE 参考规范编码 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 <sup>ST</sup> , 2009	
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5395 5617 5620	
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC	
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm	
MATERIAL TO BE EXAMINED 检测材料	<input checked="" type="checkbox"/> WELDING 焊接件 <input type="checkbox"/> CASTING 铸件 <input type="checkbox"/> FORGING 锻造	Material & thickness 母材,厚度	A709M-345T2-X 45mm	
WELDING PROCESS 焊接方法	NA	TYPE OF JOINT 焊缝类型	NA	

WELD I.D. 焊缝编号	DISCONTINUITY不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
SEG1C-095				ACC.		removed stiff
SEG1E-245				ACC.		removed stiff
SEG1C-026				ACC.		removed stiff
SEG1E-373				ACC.		removed stiff
SEG1E-045				ACC.		removed stiff
SEG1E-413				ACC.		removed stiff
SEG1C-097				ACC.		removed stiff
SEG1E-111	1	CRACK	670mm		REJ.	removed stiff
	2	CRACK	160mm		REJ.	removed stiff
SEG1E-152	1	CRACK	20mm		REJ.	removed stiff
	2	CRACK	20mm		REJ.	removed stiff
	3	CRACK	340mm		REJ.	removed stiff
SEG1E-362				ACC.		removed stiff

EXAMINED BY主探 Chang fang jie <i>Chang fang jie</i> 09.06.08	REVIEWED BY 审核 <i>Tan Chaw wei</i> 09.06.08
LEVEL - II SIGN 签名 / DATE日期	LEVEL-II SIGN / DATE日期
质量经理 / QCM <i>Lu Jianhua</i>	用户CUSTOMER
签字 SIGN / 日期 DATE 09.06.08	签字 SIGN / 日期 DATE



# REPORT OF MAGNETIC PARTICLE EXAMINATION

## 磁粉检测报告

REPORT NO. 报告编号 B787-MT-11633      DATE日期 2009.06.08      PAGE OF页码 15/16      Revision No: 0

PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS	
DRAWING NO. 图号: SEG2/SEG1 1AAE /1AAW		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4	
REFERENCING CODE 参考规范编码 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 <sup>ST</sup> , 2009
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5395 5617 5620
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm
MATERIAL TO BE EXAMINED 检测材料	<input checked="" type="checkbox"/> WELDING 焊接件 <input type="checkbox"/> CASTING 铸件 <input type="checkbox"/> FORGING 锻造	Material & thickness 母材, 厚度	A709M-345T2-X 45mm
WELDING PROCESS 焊接方法	NA	TYPE OF JOINT 焊缝类型	NA

WELD I.D. 焊缝编号	DISCONTINUITY 不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
SEG1E-444	1	CRACK	150mm		REJ.	removed stiff
	2	CRACK	100mm		REJ.	removed stiff
	3	CRACK	50mm		REJ.	removed stiff
	4	CRACK	330mm		REJ.	removed stiff
	5	CRACK	160mm		REJ.	removed stiff
SEG1C-015				ACC.		removed stiff
SEG1E-192	1	CRACK	30mm		REJ.	removed stiff
SEG1E-242	1	CRACK	50mm		REJ.	removed stiff
SEG1C-050				ACC.		removed stiff
SEG1C-128	1	CRACK	20mm		REJ.	removed stiff
SEG1E-320	1	CRACK	30mm		REJ.	removed stiff
	2	CRACK	30mm		REJ.	removed stiff
	3	CRACK	120mm		REJ.	removed stiff

EXAMINED BY 主探 Chang fang jie <i>Chang fang jie</i> 09.06.08	REVIEWED BY 审核 Tan Chaw wei <i>Tan Chaw wei</i> 09.06.08
LEVEL - II SIGN 签名 / DATE日期 质量经理 / QCM <i>(Signature)</i>	用户 CUSTOMER
签字 SIGN / 日期 DATE 09.06.08	签字 SIGN / 日期 DATE



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

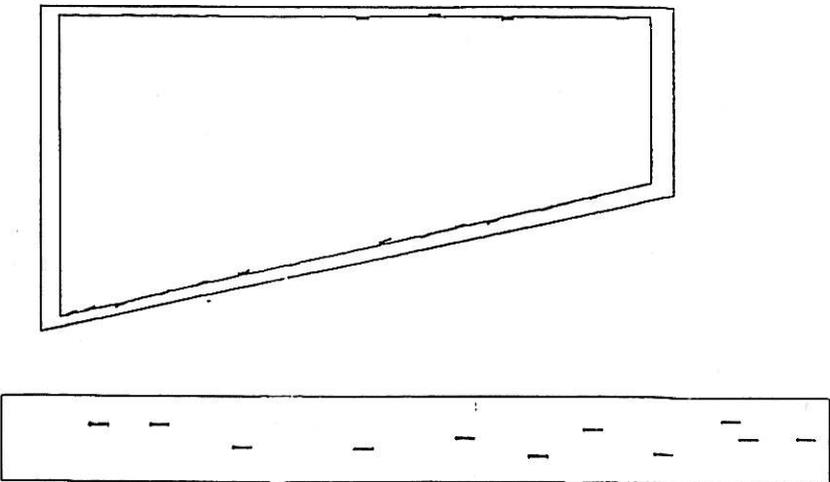
REPORT NO. 报告编号 B787-MT-11633      DATE日期 2009.06.08      PAGE OF页码 16/16      Revision No: 0

PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS	
DRAWING NO. 图号: SEG2/SEG1 1AAE /1AAW		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4	
REFERENCING CODE 参考规范编码 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 <sup>ST</sup> , 2009
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5395 5617 5620
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm
MATERIAL TO BE EXAMINED 检测材料	<input checked="" type="checkbox"/> WELDING 焊接件 <input type="checkbox"/> CASTING 铸件 <input type="checkbox"/> FORGING 锻造	Material & thickness 母材, 厚度	A709M-345T2-X 45mm
WELDING PROCESS 焊接方法	NA	TYPE OF JOINT 焊缝类型	NA

WELD I.D. 焊缝编号	DISCONTINUITY 不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
	4	CRACK	40mm		REJ.	removed stiff
	5	CRACK	20mm		REJ.	removed stiff
	6	CRACK	200mm		REJ.	removed stiff
SEG1C-130				ACC.		removed stiff
SEG1E-402	1	CRACK	60mm		REJ.	removed stiff
	2	CRACK	40mm		REJ.	removed stiff
	3	CRACK	80mm		REJ.	removed stiff
	4	CRACK	70mm		REJ.	removed stiff

BLANK


EXAMINED BY 主探 Chang fang jie <i>Chang fang jie</i>	REVIEWED BY 审核 <i>Tan Chao Wei</i>
LEVEL - II SIGN 签名 / DATE 日期 <i>09.06.08</i>	LEVEL-II SIGN / DATE 日期 <i>09.06.08</i>
质量经理 / QCM <i>Wang...</i>	用户 CUSTOMER
签字 SIGN / 日期 DATE <i>09.06.08</i>	签字 SIGN / 日期 DATE

		关键焊缝返修报告 Critical Welding Repair Report (CWR)			版本 Rev. No.:
					<b>1</b>
项目名称 Project Name:	美国海湾大桥 SFOBB	部件图号 Drawing No.:	SEG1/SEG2	报告编号 Report No.:	B-CWR559
合同号 Contract No.:	04-0120F4	部件名称 Item Name:	1AAW 1AAE	NDT 报告编号 NDT Report No.:	B787-MT-11633
项目编号 Project No.:	ZP06-787				
焊缝缺陷描述: Description of Welding Discontinuity: 筋板割除后母材上发现有64处裂纹。具体见报告 We found sixty-four cracks in material after removed stiffener. Please see the detail data from MT report!					
检验员 (Inspector): <u>Chay Fang Jie</u>				日期 (Date): <u>2009.06.08</u>	
焊缝返修位置示意图: Draft of Welding Discontinuity:					
					
Please see the detail data from MT report!					

This document is APPROVED  
 State of California  
 DEPARTMENT OF TRANSPORTATION  
 Pursuant to Section 5-1.02 of the  
 Standard Specifications  
 Initial CF Date 6/30/9

产生原因:

Cause:

原筋板可能是十字对筋板, 由于间隙超标处的筋板需剔除, 剔除后也许有应力释放产生裂纹。

Original stiffener was cross stiffener, and stiffeners removed for the gap exceeded technology requirement, which stress released and caused crack.

车间负责人 (Foreman): *Ethen Pingchen* 日期 (Date): *07.06.28*

处理意见

Disposition :

- 1. 采用打磨的方式去除裂纹;
- 2. 准备一个正确的接头型式, 具体参照相应的返修WPS;
- 3. 返修区域打磨光滑, 开始和结束的接头交错布置;
- 4. 焊接前, VT和MT检测确认返修区域没有裂纹;
- 5. 根据批准的返修焊接工艺规程
- 6. 预热温度应不小于100℃,
- 7. 预热范围在修补区域周围不应小于150mm;
- 8. 将修补区域打磨与母材或相邻焊缝平齐;
- 9. 对修补区域做VT,UT,MT检测。

- 1. Remove the crack by means of grinding.
- 2. Prepare excavation according to the approved repair WPS.
- 3. Grind the area to a smooth and shiny finish, with tapered ends, to ensure staggered starts and stops.
- 4. Verify with VT and MT repair areas are crack free before welding.
- 5. Preheat and weld according to the approved repair WPS.
- 6. Preheat prior to welding to a minimum temperature of 100°C or what's required in the
- 7. The preheat area shall be a minimum of 150mm in all directions around the repair area. *approved*
- 8. Grind the repaired area flush with base metal or the adjacent weld.
- 9. Perform VT, UT and MT of the repair areas. *per the contract requirement*

- Perform postheat if required by the WPS.
- QC CWI shall be present to witness the operation
- the repair work shall be performed as

*WPS  
whichever  
is higher.*

*- Griztsan  
2007.6.29*

<input type="checkbox"/>	APPROVED
<input checked="" type="checkbox"/>	APPROVED AS NOTED
<input type="checkbox"/>	RETURNED FOR CORRECTION
Pursuant to Section 5-1.02 of the Standard Specifications State of California	
DEPARTMENT OF TRANSPORTATION	
Division of Engineering Services	
Office of Structure Construction	
<i>OK for RM</i>	<i>6/30/07</i>
Structure Representative	Date

工艺: *Nia Tiefay* 审核: *[Signature]* Approved By:

*for darenbin*

		<h2 style="margin: 0;">关键焊缝返修报告</h2> <h3 style="margin: 0;">Critical Welding Repair Report (CWR)</h3>			版本 Rev. No.:
					1
项目名称 Project Name:	美国海湾大桥 SFOBB	部件图号 Drawing No.:	SEG1/SEG2	报告编号 Report No.:	B-CWR559
合同号 Contract No.:	04-0120F4	部件名称 Item Name:	1AAW 1AAE	NDT 报告编号 NDT Report No.:	B787-MT-11633
项目编号 Project No.:	ZP06-787				
<p>纠正措施:</p> <p>Corrective Action to Prevent Re-occurrence:</p> <p>严格按照相应的返修WPS进行返修, 加强对每一道工序的控制, 筋板剔除后, 有裂纹处打磨去除, 并进行MT检测, 确认无裂纹后进行修补, 打磨光滑, 进行MT检测无裂纹后重新安装筋板。</p> <p>Perform repair according to WPS, and enhance controlling every weld pass, grind the cracks after removing stiffeners and perform MT to ensure all the repair area free of cracks, and grind smoothly before assembly stiffeners.</p> <p style="text-align: right;">车间负责人 (Foreman): <u>Chen Pingchen</u>      日期 (Date): <u>07.06.28</u></p>					
参照的WPS编号 Repair WPS No.:	WPS-FCAW-345-1 G(1F)-Repair-1 WPS-FCAW-345-2 G(2F)-Repair-1 WPS-FCAW-345-3 G(3F)-Repair WPS-SMAW-345-4 G(4F)-Repair		工艺员 Technologist:	<u>Nin Trefenig</u>  <u>07.06.28</u>	
返修(碳刨)前预热温度 Preheat Temperature Before Gouging:	802		返修的缺陷 Description of Discontinuity:	Crack	
焊前处理检查 Inspection Before Welding:	Acc		焊前预热温度 Preheat Temperature Before Welding:	1902	
最大碳刨深度 Max. Depth of Gouge:	3mm		碳刨总长 Total Length of Gouge:	11300 mm	
焊工 Welder:	045268	焊接类型 Welding Type:	SMAW	焊接位置 Position:	36
焊接电流 Current:	150	焊接电压 Voltage:	25	焊接速度 Speed:	113
返修后检查 Inspection After Repair: <u>热处理 1h 3002</u>					
外观检查 VT Result:	Acc	检验员 Inspector:	chenxi	日期 Date:	2009.08.03
NDT复检 NDT Result:	Acc	探伤员 NDT Person:	<u>Henry Jung</u>	日期 Date:	2009.8.3
见证: Witness/Review:			This document is APPROVED State of California DEPARTMENT OF TRANSPORTATION Pursuant to Section 5-1.02 of the Standard Specifications		
备注: Remark:			Initial <u>047</u> Date: <u>6/20/9</u>		

#R787-QCP-900





# REPORT OF MAGNETIC PARTICLE EXAMINATION

## 磁粉检测报告

REPORT NO. 报告编号 B787-MT-11633R1      DATE日期 2009.08.03      PAGE OF页码 1/4      Revision No: 0

PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS	
DRAWING NO. 图号: SEG2/SEG1 1AAE /1AAW		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4	
REFERENCING CODE 参考规范编码 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 <sup>ST</sup> , 2009
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5395 5617 5620
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm
MATERIAL TO BE EXAMINED 检测材料	<input checked="" type="checkbox"/> WELDING 焊接件 <input type="checkbox"/> CASTING 铸件 <input type="checkbox"/> FORGING 锻造	Material & thickness 母材, 厚度	A709M-345T2-X 45mm
WELDING PROCESS 焊接方法	SMAW	TYPE OF JOINT 焊缝类型	NA

WELD I.D. 焊缝编号	DISCONTINUITY不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
SEG2E-347	1R1			ACC.		
	2R1			ACC.		
	3R1			ACC.		
	4R1			ACC.		
SEG2E-429	1R1			ACC.		
	2R1			ACC.		
	3R1			ACC.		
	4R1			ACC.		
SEG2E-227	1R1			ACC.		
	2R1			ACC.		
	3R1			ACC.		
SEG2E-387	1R1			ACC.		
	2R1			ACC.		
SEG2E-338	1R1			ACC.		
SEG2E-420	1R1			ACC.		
	2R1			ACC.		

EXAMINED BY主操 Chang fang jie <i>Chang Fangjie</i>	REVIEWED BY 审核 <i>San Guoqiang</i>
LEVEL-II SIGN 签名 / DATE日期 <i>cf. 08.03</i>	LEVEL-II SIGN / DATE日期 <i>cf. 08.03</i>
质量经理 / QCM <i>Long...</i>	用户CUSTOMER
签字 SIGN / 日期 DATE <i>09.08.03</i>	签字 SIGN / 日期 DATE



# REPORT OF MAGNETIC PARTICLE EXAMINATION

## 磁粉检测报告

REPORT NO. 报告编号 B787-MT-11633R1      DATE日期 2009.08.03      PAGE OF页码 2/4      Revision No: 0

PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS	
DRAWING NO. 图号: SEG2/SEG1 1AAE /1AAW		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4	
REFERENCING CODE 参考规范编码 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 <sup>ST</sup> , 2009
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PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm
MATERIAL TO BE EXAMINED 检测材料	<input checked="" type="checkbox"/> WELDING 焊接件 <input type="checkbox"/> CASTING 铸件 <input type="checkbox"/> FORGING 锻造	Material & thickness 母材, 厚度	A709M-345T2-X 45mm
WELDING PROCESS 焊接方法	SMAW	TYPE OF JOINT 焊缝类型	NA

WELD I.D. 焊缝编号	DISCONTINUITY不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
SEG2E-296	1R1			ACC.		
	2R1			ACC.		
	3R1			ACC.		
	4R1			ACC.		
	5R1			ACC.		
SEG2E-355	1R1			ACC.		
	2R1			ACC.		
	3R1			ACC.		
	4R1			ACC.		
	5R1			ACC.		
SEG2C-148	1R1			ACC.		
SEG2E-327	1R1			ACC.		
	2R1			ACC.		
SEG2E-409	1R1			ACC.		
	2R1			ACC.		
	3R1			ACC.		
	4R1			ACC.		

EXAMINED BY主探 Chang fang jie <i>Chang Fangjie</i>	REVIEWED BY 审核 <i>Sim Gang cheng</i>
LEVEL - II SIGN 签名 / DATE日期 <i>09.08.03</i>	LEVEL-II SIGN / DATE日期 <i>09.08.03</i>
质量经理 / QCM <i>(Signature)</i>	用户CUSTOMER
签字 SIGN / 日期 DATE <i>08.03</i>	签字 SIGN / 日期 DATE



# REPORT OF MAGNETIC PARTICLE EXAMINATION

## 磁粉检测报告

REPORT NO. 报告编号 B787-MT-11633R1      DATE日期: 2009.08.03      PAGE OF页码 3/4      Revision No: 0

PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS	
DRAWING NO. 图号: SEG2/SEG1 1AAE /1AAW		CALTRANS CONTRACT NO.: 加州工程编号: 04-0120F4	
REFERENCING CODE 参考规范编码 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 <sup>ST</sup> , 2009
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MATERIAL TO BE EXAMINED 检测材料	<input checked="" type="checkbox"/> WELDING 焊接件 <input type="checkbox"/> CASTING 铸件 <input type="checkbox"/> FORGING 锻造	Material & thickness 母材, 厚度	A709M-345T2-X 45mm
WELDING PROCESS 焊接方法	SMAW	TYPE OF JOINT 焊缝类型	NA

WELD I.D. 焊缝编号	DISCONTINUITY 不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
	5R1			ACC.		
	6R1			ACC.		
	7R1			ACC.		
SEG1E-137	1R1			ACC.		
SEG1E-347	1R1			ACC.		
SEG1E-305	1R1			ACC.		
	2R1			ACC.		
SEG1D-127	1R1			ACC.		
SEG1E-111	1R1			ACC.		
	2R1			ACC.		
SEG1E-152	1R1			ACC.		
	2R1			ACC.		
	3R1			ACC.		
SEG1E-444	1R1			ACC.		
	2R1			ACC.		
	3R1			ACC.		
	4R1			ACC.		

EXAMINED BY 主探 Chang fang jie <i>Cheng Fangjie</i>	REVIEWED BY 审核 <i>Sun Guojun</i>
LEVEL - II SIGN 签名 / DATE日期 <i>09.08.03</i>	LEVEL-II SIGN / DATE日期 <i>09.08.03</i>
质量经理 / QCM <i>Wang Jinhua</i>	用户 CUSTOMER
签字 SIGN / 日期 DATE <i>08.03</i>	签字 SIGN / 日期 DATE



# REPORT OF MAGNETIC PARTICLE EXAMINATION

## 磁粉检测报告

REPORT NO. 报告编号 B787-MT-11633R1      DATE日期 2009.08.03      PAGE OF页码 4/4      Revision No: 0

PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS	
DRAWING NO. 图号: SEG2/SEG1 1AAE /1AAW		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4	
REFERENCING CODE 参考规范编码 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 <sup>ST</sup> , 2009
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PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm
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WELDING PROCESS 焊接方法	SMAW	TYPE OF JOINT 焊缝类型	NA

WELD I.D. 焊缝编号	DISCONTINUITY 不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
	5R1			ACC.		
SEG1E-192	1R1			ACC.		
SEG1E-242	1R1			ACC.		
SEG1C-128	1R1			ACC.		
SEG1E-320	1R1			ACC.		
	2R1			ACC.		
	3R1			ACC.		
	4R1			ACC.		
	5R1			ACC.		
	6R1			ACC.		
SEG1E-402	1R1			ACC.		
	2R1			ACC.		
	3R1			ACC.		
	4R1			ACC.		

AFTER B-CWR559

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EXAMINED BY 主探 Chang fang jie <i>Chang Fangjie</i>	REVIEWED BY 审核 <i>Sun Guoyang</i>
LEVEL - II SIGN 签名 / DATE日期 <i>08.03</i>	LEVEL-II SIGN / DATE日期 <i>08.03</i>
质量经理 / QCM <i>[Signature]</i>	用户 CUSTOMER
签字 SIGN / 日期 DATE <i>08.03</i>	签字 SIGN / 日期 DATE





# REPORT OF ULTRASONIC EXAMINATION

## UT探伤报告

REPORT NO. 报告编号 B787-UT-7302

DATE 2009.06.26

PAGE 2 OF 3

Revision No: 0

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO. 指示号	PROBE ANGLE 探伤角度	FROM FACE 检测面	LEG (次数)	DECIBELS分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注
					Indication Level a	Reference Level b	Attenuation Factor c	Indication Rating d	LOCATION OF DISCONTINUITY 不连续位置(mm)						
									Length 长度	Sound Path 声程	Depth from Surface 距表面深度	From X 距X	From Y 距Y		
PL1465A		0				20								ACC.	100%
X194C		0				20								ACC.	100%
PL1478A		0				20								ACC.	100%
X196B		0				20								ACC.	100%
X196A		0				20								ACC.	100%
X194B		0				20								ACC.	100%
X194A		0				20								ACC.	100%
PL1465C		0				20								ACC.	100%
X193A		0				20								ACC.	100%
X182B		0				20								ACC.	100%
X183A-2		0				20								ACC.	100%
X184A-2		0				20								ACC.	100%
X193B		0				20								ACC.	100%
X194D		0				20								ACC.	100%
PL1460A		0				20								ACC.	100%
PL872A		0				20								ACC.	100%
X304A		0				20								ACC.	100%
X300A		0				20								ACC.	100%
PL862A		0				20								ACC.	100%
X300B		0				20								ACC.	100%
X305B		0				20								ACC.	100%
PL876A		0				20								ACC.	100%
PL862B		0				20								ACC.	100%

EXAMINED BY 主探  
*Xuehan* 2009.06.26  
 LEVEL - II SIGN / DATE

REVIEWED BY 审核  
*Tang* 2009.06.26  
 LEVEL - II SIGN / DATE

质量经理 / QCM  
*Liu*  
 签字 SIGN / 日期 DATE 6.26

用户 CUSTOMER  
 This document is the property of the State of California. DEPARTMENT OF TRANSPORTATION Pursuant to Section 5-1.02 of the Standard Specifications Initial *267* Date: 6/26/09







# REPORT OF ULTRASONIC EXAMINATION

## UT探伤报告

REPORT NO. 报告编号 B787-UT-7301      DATE 2009.06.26      PAGE 2 OF 3      Revision No: 0

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注
					Indication Level a	Reference Level b	Attenuation Factor c	Indication Rating d	LOCATION OF DISCONTINUITY 不连续位置(mm)						
									Length 长度	Sound Path 声程	Depth from Surface 距表面深度	From X 距X	From Y 距Y		
X305A		0				20								ACC.	100%
X303A		0				20								ACC.	100%
X301A		0				20								ACC.	100%
X300A		0				20								ACC.	100%
X300B		0				20								ACC.	100%
X196G		0				20								ACC.	100%
X304B		0				20								ACC.	100%
X196E		0				20								ACC.	100%
X196C		0				20								ACC.	100%
X193A		0				20								ACC.	100%
PL1472C		0				20								ACC.	100%
PL1460D		0				20								ACC.	100%
PL1465D		0				20								ACC.	100%
PL1474A		0				20								ACC.	100%
PL892A		0				20								ACC.	100%
PL897A		0				20								ACC.	100%
X185A		0				20								ACC.	100%
X185B		0				20								ACC.	100%
X186A-1		0				20								ACC.	100%
X187A-2		0				20								ACC.	100%
X196A-2		0				20								ACC.	100%
X187A-2		0				20								ACC.	100%
X189A-2		0				20								ACC.	100%

EXAMINED BY 主探  
*[Signature]*  
LEVEL - II SIGN / DATE 2009.06.26

REVIEWED BY 审核  
*[Signature]*  
LEVEL - II SIGN / DATE 2009.06.26

质量经理 / QCM  
*[Signature]*  
签字 SIGN / 日期 DATE 6.26

用户 CUSTOMER  
This document is APPROVED  
State of California  
DEPARTMENT OF TRANSPORTATION  
Pursuant to Section 5-1.02 of the  
Standard Specifications  
Initial *[Signature]* Date: 6/24/09



**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: xx.25A**QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION****Location:** Changxing Island, Shanghai, P.R. China**Report No:** NCS-000276**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 25-Aug-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0306**Type of problem:**

<b>Welding</b>	<b>Concrete</b>	<b>Other</b>	
<b>Welding</b>	<b>Curing</b>	<b>Procedural</b>	<b>Bridge No:</b> 34-0006
<b>Joint fit-up</b>	<b>Coating</b>	<b>Other</b>	<b>Component:</b>
<b>Procedural</b>	<b>Procedural</b>	<b>Description:</b>	

**Date the Non-Conformance Report was written:** 12-Jun-2009**Description of Non-Conformance:**

During random verification magnetic particle testing (MT) of the internal components of OBG Segment 1AAW, Caltrans Quality Assurance (QA) Inspector discovered a total of four (4) linear indications ranging from 5 to 12mm in length in the base metal (weld removal area) at location A13, plate X181A. These areas have been previously tested and accepted by ZPMC Quality Control (QC) MT technicians.

**Contractor's proposal to correct the problem:**

Contractor has acknowledged that this item must be addressed, and the item was added to the Master Punchlist

**Corrective action taken:**

Work was completed and item was cleared on Master Punchlist by ABF on 6-24-09. Submittal of documentation by Contractor being tracked on Documentation Punchlist.

**Did corrective action require Engineer's approval?** Yes No**If so, name of Engineer providing approval:** **Date:****Is Engineer's approval attached?** Yes No**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 Jim Simonis, who represents the Office of Structural Materials for your project.

**Inspected By:** Simonis, Jim **Quality Assurance Inspector****Reviewed By:** Wahbeh, Mazen **QA Reviewer**