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

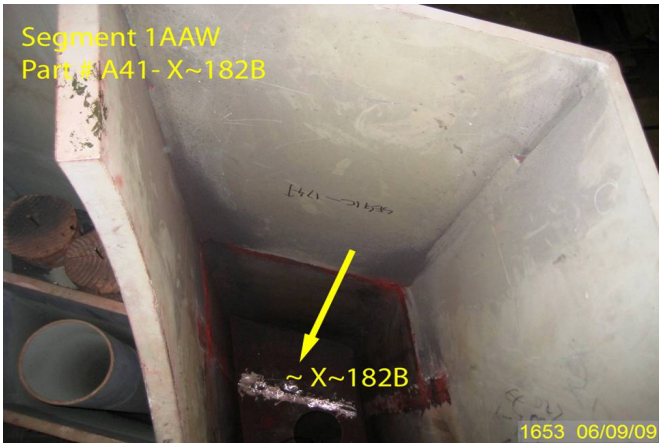
Type of problem:

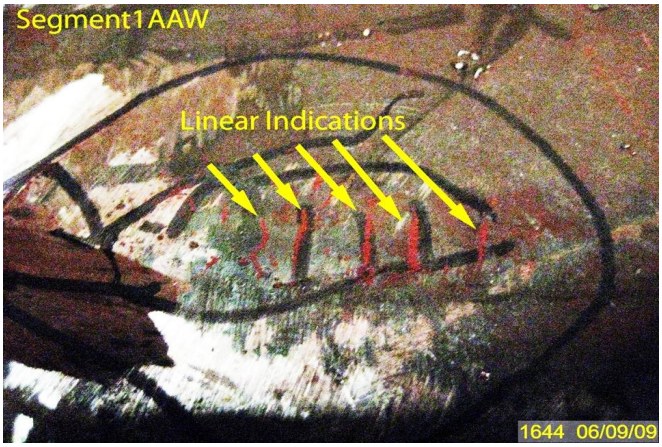
Welding	☐	**Concrete**	☐	**Other**	☑	
Welding	☐	**Curing**	☐	**Procedural**	☑	**Bridge No:** 34-0006
Joint fit-up	☐	**Coating**	☐	**Other**	☐	**Component:** OBG Segment 1AAW
Procedural	☐	**Procedural**	☐	**Description:**		

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."

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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.

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:**	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

AMERICAN BRIDGE/FLUOR ENTERPRISES, a JV

P.O. BOX 23223 Oakland, CA 94623

Phone (510) 419-0120 / Fax (510) 839-0666

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000271

Subject: NCR No. ZPMC-0281

Dated: **14-Aug-2009**

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

Job Name: SAS Superstructure

Document No.: **ABF-NPR-000289 Rev: 00**

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-000289R00;

Caltrans' comments:

Status: CLO

Date: 19-Aug-2009

The proposed resolution is acceptable. The welds in question have been accepted by VT and MT as shown in the attached documents. The Department concurs that Non-Conformance ZPMC-0281 is closed.

Submitted by: Wright, Doug

Date: 19-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 reparing

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.

加洲检验员对 1AAW 箱体内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 09.6.28 施工方:

Prepared by: Shen Xuejun 2009.6.19. 准备:

Reviewed by QCE: Zhaohuanjiao 6.19. 质量工程师批准:

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

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

Recommendation:

建议: 确认并出具报告返修.

Confirm and issue repair report.

Prepared by: Li Liming 09.6.28 准备

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: 作好检测前准备，加强过程控制
prepare for inspection and enhance controlling in process of test.

Approved by/批准: 6.18

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

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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-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

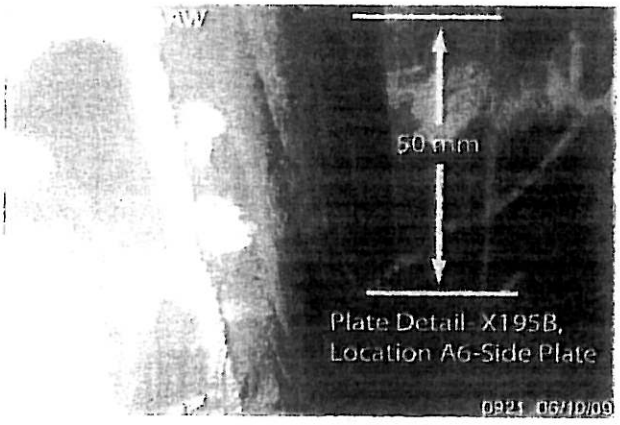
Type of problem:

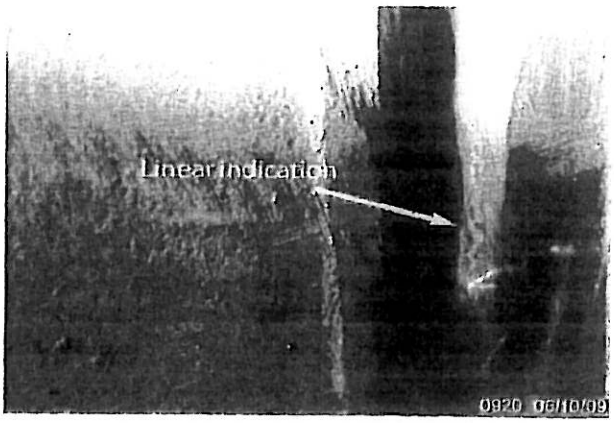
Welding	☐	**Concrete**	☐	**Other**	☑	
Welding	☐	**Curing**	☐	**Procedural**	☑	**Bridge No:** 34-0006
Joint fit-up	☐	**Coating**	☐	**Other**	☐	**Component:** OBG Segment 1AAW
Procedural	☐	**Procedural**	☐	**Description:**		

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."

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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.

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:**	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
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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-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

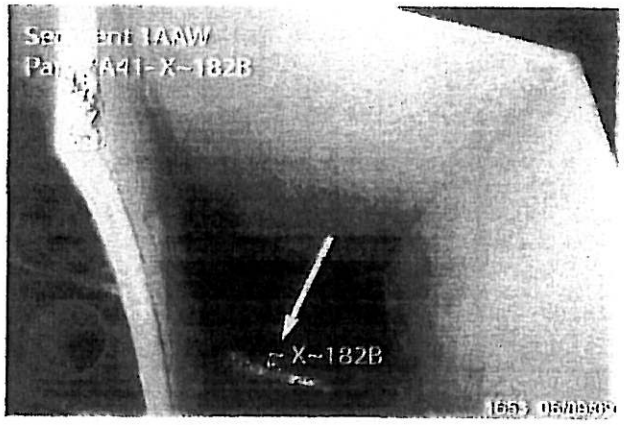
Type of problem:

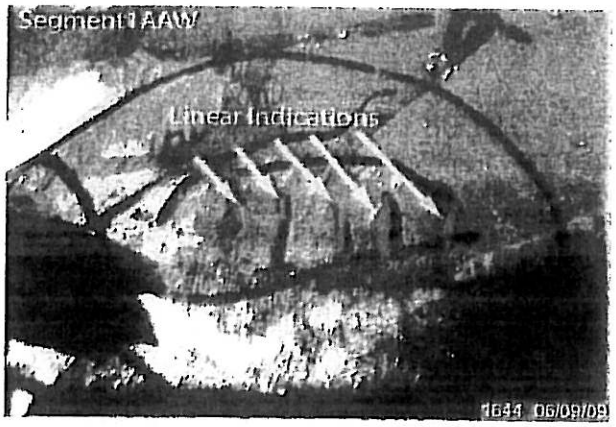
Welding	☐	**Concrete**	☐	**Other**	☑	
Welding	☐	**Curing**	☐	**Procedural**	☑	**Bridge No:** 34-0006
Joint fit-up	☐	**Coating**	☐	**Other**	☐	**Component:** OBG Segment 1AAW
Procedural	☐	**Procedural**	☐	**Description:**		

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."

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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.

Inspected By:	Guest,Skyler	SMR
Reviewed By:	Wahbeh,Mazen	SMR

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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

DEPARTMENT OF TRANSPORTATION
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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

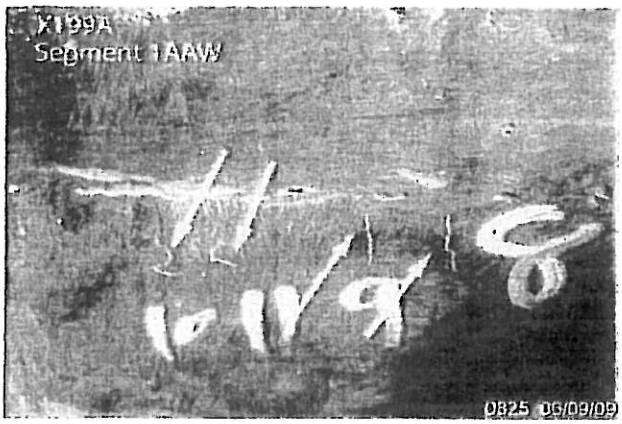
Type of problem:

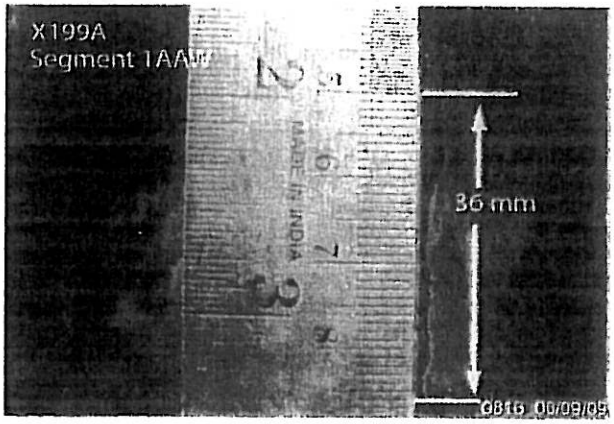
Welding	☐	**Concrete**	☐	**Other**	☑	
Welding	☐	**Curing**	☐	**Procedural**	☑	**Bridge No:** 34-0006
Joint fit-up	☐	**Coating**	☐	**Other**	☐	**Component:** OBG Segment 1AAW
Procedural	☐	**Procedural**	☐	**Description:**		

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

Description of Non-Conformance:

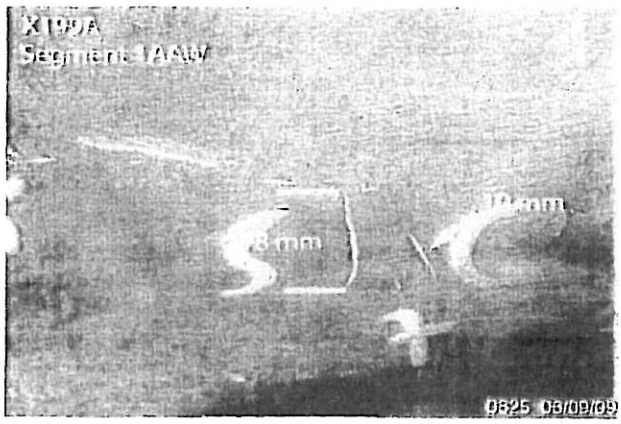
During random verification magnetic particle testing (MT) of the internal components of OBG Segment 1AAW, Caltrans Quality Assurance (QA) Inspector discovered a total of eleven (11) linear indications ranging from 5 to 35mm in length in the base metal where weld had been removed on Plate X199A. These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

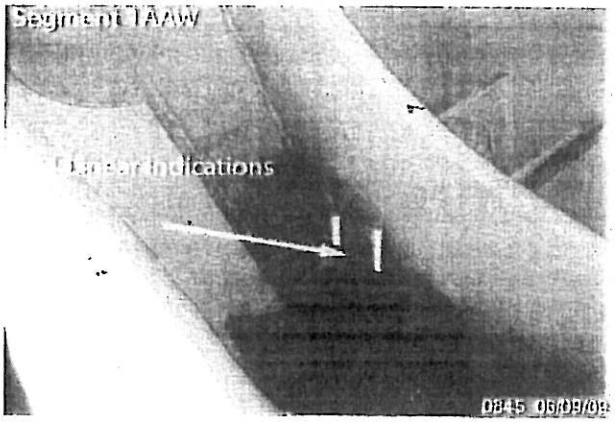




QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(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.

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 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-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

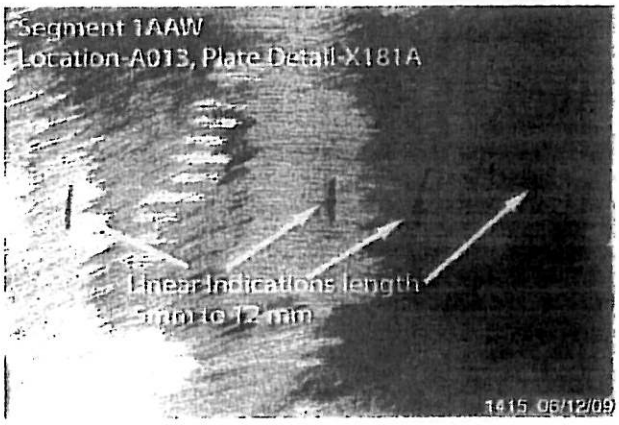
Type of problem:

Welding	☐	**Concrete**	☐	**Other**	☑	
Welding	☐	**Curing**	☐	**Procedural**	☑	**Bridge No:** 34-0006
Joint fit-up	☐	**Coating**	☐	**Other**	☐	**Component:** OBG Segment 1AAW
Procedural	☐	**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."

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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.

Inspected By:	Guest,Skyler	SMR
Reviewed By:	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. 28ST ,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-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 Chang Fang Jie LEVEL - II SIGN 签名 / DATE日期 09.06.08	REVIEWED BY 审核 Tan Chaowei LEVEL-II SIGN / DATE日期 09.06.08
质量经理 / QCM Liu Jianhua 签字 SIGN / 日期 DATE 6.8	用户CUSTOMER 签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

ZPMC

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. 28ST ,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	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	REVIEWED BY 审核
Chang fang jie Chang Fang Jie 09.06.08	Tan Chao Wei 09.06.08
LEVEL - II SIGN 签名 / DATE日期	LEVEL-II SIGN / DATE日期
质量经理 / QCM	用户CUSTOMER
Cui Jianhua	
签字 SIGN / 日期 DATE 6.8	签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

ZPMC

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. 28ST ,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-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 Chang Fangjie LEVEL - II SIGN 签名 / DATE日期 09.06.08	REVIEWED BY 审核 Tan Chaowei LEVEL-II SIGN / DATE日期 09.06.08
质量经理 / QCM Cui Jianhua 签字 SIGN / 日期 DATE 09.6.8	用户CUSTOMER 签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

ZPMC

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. 28ST ,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			
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 Chang Fang jie'e LEVEL - II SIGN 签名 / DATE日期 09.06.08	REVIEWED BY 审核 Tan Chaowei LEVEL-II SIGN / DATE日期 09.06.08
质量经理 / QCM [signature] 签字 SIGN / 日期 DATE 09.06.08	用户CUSTOMER 签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

ZPMC

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. 28ST ,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-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 Chang Fang Jie LEVEL - II SIGN 签名 / DATE日期 09.06.08	REVIEWED BY 审核 Tan Chaowei LEVEL-II SIGN / DATE日期 09.0608
质量经理 / QCM 签字 SIGN / 日期 DATE 09.6.8	用户CUSTOMER 签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

ZPMC

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. 28ST ,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 Chang Fang Jie 09.06.08 LEVEL - II SIGN 签名 / DATE日期	REVIEWED BY 审核 Tan Chao Wei 09.06.08 LEVEL-II SIGN / DATE日期
质量经理 / QCM Qu Tianbing 签字 SIGN / 日期 DATE 09.06.08	用户CUSTOMER 签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

ZPMC

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. 28ST ,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 LEVEL - II SIGN 签名 / DATE日期 09.06.08	REVIEWED BY 审核 Tan Chao Wei LEVEL-II SIGN / DATE日期 09.06.08
质量经理 / QCM Cai Yanhua 签字 SIGN / 日期 DATE 09.06.08	用户CUSTOMER 签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

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. 28ST ,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			
	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 Chang Fang Jie LEVEL - II SIGN 签名 / DATE日期 09.06.08	REVIEWED BY 审核 Tan chao Wei LEVEL-II SIGN / DATE日期 09.06.08
质量经理 / QCM 签字 SIGN / 日期 DATE 09.06.08	用户CUSTOMER 签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

ZPMC

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	ACCEPTANCE STANDARD 接受标准	PROCEDURE NO. 程序编号	CALIBRATION DUE DATE 仪器校正有效期
AWS D1.5-2002	AWS D1.5-2002	ZPQC-MT-01	Dec. 28ST ,2009
EQUIPMENT 设备	MANUFACTURER 制造商	MODEL NO. 样式编号	SERIAL NO. 连续编号
MT YOKE	PARKER	B310S	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			
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 Chang fang jie 09.06.08 LEVEL - II SIGN 签名 / DATE日期	REVIEWED BY 审核 Tan chaowei 09.06.08 LEVEL-II SIGN / DATE日期
质量经理 / QCM Cui Yanbing 签字 SIGN / 日期 DATE 09.06.08	用户CUSTOMER 签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

ZPMC

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	ACCEPTANCE STANDARD 接受标准	PROCEDURE NO. 程序编号	CALIBRATION DUE DATE 仪器校正有效期
AWS D1.5-2002	AWS D1.5-2002	ZPQC-MT-01	Dec. 28ST ,2009
EQUIPMENT 设备	MANUFACTURER 制造商	MODEL NO. 样式编号	SERIAL NO. 连续编号
MT YOKE	PARKER	B310S	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			
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 Chang Fang jie 09.06.08 LEVEL - II SIGN 签名 / DATE日期	REVIEWED BY 审核 TanChaoWei 09.06.09 LEVEL-II SIGN / DATE日期
质量经理 / QCM 签字 SIGN / 日期 DATE 09.06.08	用户CUSTOMER 签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

ZPMC

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. 28ST ,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			
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 Chang Fang jie 09.06.08 LEVEL - II SIGN 签名 / DATE日期	REVIEWED BY 审核 Tan Chao Wei 9.06.08 LEVEL-II SIGN / DATE日期
质量经理 / QCM 签字 SIGN / 日期 DATE 09.06.08	用户CUSTOMER 签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

ZPMC

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	ACCEPTANCE STANDARD 接受标准	PROCEDURE NO. 程序编号	CALIBRATION DUE DATE 仪器校正有效期
AWS D1.5-2002	AWS D1.5-2002	ZPQC-MT-01	Dec. 28ST ,2009
EQUIPMENT 设备	MANUFACTURER 制造商	MODEL NO. 样式编号	SERIAL NO. 连续编号
MT YOKE	PARKER	B310S	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			
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	REVIEWED BY 审核
Chang fang jie Chang Fang jie	Tan Chao Wei
LEVEL - II SIGN 签名 / DATE日期 09.06.08	LEVEL-II SIGN / DATE日期 09.06.08
质量经理 / QCM	用户CUSTOMER
签字 SIGN / 日期 DATE 09.06.08	签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

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. 28ST ,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			
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 Chang fang jie LEVEL - II SIGN 签名 / DATE日期 09.06.08	REVIEWED BY 审核 Tan Chao Wei LEVEL-II SIGN / DATE日期 09.06.08
质量经理 / QCM Cui Lianhua 签字 SIGN / 日期 DATE 09.06.08	用户CUSTOMER 签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

ZPMC

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. 28ST ,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			
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 Chang fang jie 09.06.08 LEVEL - II SIGN 签名 / DATE日期	REVIEWED BY 审核 Tan Chao Wei 09.06.08 LEVEL-II SIGN / DATE日期
质量经理 / QCM 签字 SIGN / 日期 DATE 09.06.08	用户CUSTOMER 签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

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. 28ST ,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			
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 Chang fang jie 09.06.08 LEVEL - II SIGN 签名 / DATE日期	REVIEWED BY 审核 Tan Chao Wei 09.06.08 LEVEL-II SIGN / DATE日期
质量经理 / QCM 签字 SIGN / 日期 DATE 09.06.08	用户CUSTOMER 签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

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	ACCEPTANCE STANDARD 接受标准	PROCEDURE NO. 程序编号	CALIBRATION DUE DATE 仪器校正有效期
AWS D1.5-2002	AWS D1.5-2002	ZPQC-MT-01	Dec. 28ST ,2009

EQUIPMENT 设备	MANUFACTURER 制造商	MODEL NO. 样式编号	SERIAL NO. 连续编号
MT YOKE	PARKER	B310S	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			
	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 Chow Fang Jie 09.06.08 LEVEL - II SIGN 签名 / DATE日期	REVIEWED BY 审核 Tan Chao Wei 09.06.08 LEVEL-II SIGN / DATE日期
质量经理 / QCM 签字 SIGN / 日期 DATE 09.06.08	用户CUSTOMER 签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

ZPMC	关键焊缝返修报告 Critical Welding Repair Report (CWR)	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				

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

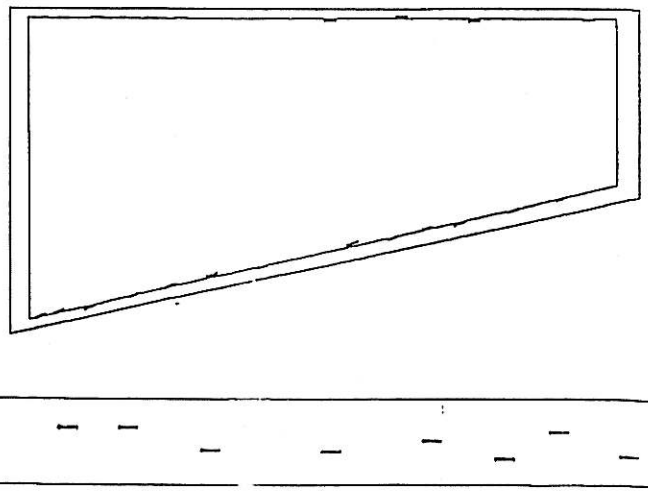
We found sixty-four cracks in material after removed stiffener.

Please see the detail date from MT report!

检验员（Inspector）：Chang Fang Jie　　日期（Date）：2009.06.08

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 [illegible] Date: 6/30/09

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割除，割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): Ellen Pingchen 日期 (Date): 09.06.28

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℃ or what's required in the approved WPS, whichever is higher.
7. The preheat area shall be a minimum of 150mm in all directions around the repair area.
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 posthent if required by the WPS.
- QC CWI shall be present to witness the operation
- the repair work shall be performed as [illegible]

- Eric Tseng 2009.6.29

☐ APPROVED
☑ APPROVED AS NOTED
☐ 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
for RM 6/30/9
Structure Representative 日期: Date

工艺: 审核:
Technical Engineer: Nia Tiefang Approved By: [illegible] for dwenbin Date: 09.06.28

#R787-QCP-900

关键焊缝返修报告
Critical Welding Repair Report (CWR)

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				

纠正措施:

Corrective Action to Prevent Re-occurrence:

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，筋板割除后，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。

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.

车间负责人 (Foreman): Chen Pingchen 日期 (Date): 09.06.28

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:	Xin Tiefeng 09.06.28
返修（碳刨）前预热温度 Preheat Temperature Before Gouging:	80℃	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:	190℃
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:	3G
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: 缓热 1h 300℃

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:		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
Initial [illegible] Date: 6/30/9

备注： Remark:

B-VT 35343

ZPMC

周数	92#
日期	2009.08.03

Visual Weld Inspection Report
焊缝目视检查报告

Girder/梁:	OBG Floor Beam		
Tower/塔:	NA		
Caltrans Contract No. 加州合同编号	04-0120F4	Quality Control Representative: 质检代表:	Xujun
Project No.: 项目名称	San Francisco Oakland Bay Bridge 美国海湾大桥	C W I: 检验员:	chenxi 07072021
Project No.: 项目编号:	ZP06-787	Quality Assurance Manager ~Approval 质量控制经理:	[illegible]

Weld No. 焊缝编号	Welder I.D.# 焊工识别号	Location 位置	Welding consumables 焊接材料	Undercut 咬边	Porosity 气孔	Over lap 焊瘤	Crater 弧坑	Arc strike 电弧擦伤	Spatters 飞溅	Crack 裂纹	Accept or Reject 接受或拒收	Repair 返修	Accept or Reject after repair 返修后接受或拒收
SEG1	045268	3G	TL508	√	√	√	√	√	√	√	ACC	NA	NA
SEG2	045268	3G	TL508	√	√	√	√	√	√	√	ACC	NA	NA

☐ After root weld ☐ After cover pass

☑ After CWR or WRR No.:B-CWR559 ☐ After HSR No.: ☐ Others

#R787-QCP-603

" √ " is no defects. " X " is defects. "NA" is not applicable.

ZPMC

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. 28ST ,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	SMAW	TYPE OF JOINT 焊缝类型	NA

WELD I.D. 焊缝编号	DISCONTINUITY不连续性 INDICATION 指示	TYPE 类型	LENGTH IN mm 长度	ACCEPT 接受	REJECT 拒收	REMARKS 备注
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主探 Chang fang jie Chang Fang jie LEVEL - II SIGN 签名 / DATE日期 09.08.03	REVIEWED BY 审核 Sun Gongcheng LEVEL-II SIGN / DATE日期 09.08.03
质量经理 / QCM [signature] 签字 SIGN / 日期 DATE 09.08.03	用户CUSTOMER 签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

ZPMC

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. 28ST ,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	SMAW	TYPE OF JOINT 焊缝类型	NA

WELD I.D. 焊缝编号	DISCONTINUITY不连续性 INDICATION 指示	TYPE 类型	LENGTH IN mm 长度	ACCEPT 接受	REJECT 拒收	REMARKS 备注
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 Chang Fang jie LEVEL - II SIGN 签名 / DATE日期 09.08.03	REVIEWED BY 审核 Sun Gong cheng LEVEL-II SIGN / DATE日期 09.08.03
质量经理 / QCM [signature] 签字 SIGN / 日期 DATE 08.03	用户CUSTOMER 签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

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. 28ST ,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	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 Cheng Fangjie LEVEL - II SIGN 签名 / DATE日期 09.08.03	REVIEWED BY 审核 Sun Gongchang LEVEL-II SIGN / DATE日期 09.08.03
质量经理 / QCM 签字 SIGN / 日期 DATE 08.03	用户CUSTOMER 签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

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. 28ST ,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	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						
BLANK						

EXAMINED BY主探 Chang fang jie Chang Fangjie LEVEL - II SIGN 签名 / DATE日期 08.08.03	REVIEWED BY 审核 Sun Gang cheng LEVEL-II SIGN / DATE日期 08.08.03
质量经理 / QCM 签字 SIGN / 日期 DATE 08.08.3	用户CUSTOMER 签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

REPORT OF ULTRASONIC EXAMINATION
UT探伤报告

ZPMC

REPORT NO. 报告编号 B787-UT-7302	DATE 2009.06.26	PAGE 1 OF 3			Revision No: 0
PROJECT NO. :工程编号 ZP06-787			CONTRACTOR : CALTRANS		
ITEMS NAME: 部件名称 OBG PLATE PANEL SPLICE	DRAWING NO.: 图号 SEG1		CALTRANS CONTRACT NO.: 04-0120F4 加州工程编号		
REFERENCING CODE 参考规范 AWS D1.5-2002	ACCEPTANCE STANDARD接受标准 AWS D1.5-2002(Table 6.3)		PROCEDURE NO. 程序编号 ZPQC-UT-01		
WELDING PROCESS 焊接方法 NA	JOINT TYPE 焊缝类型 NA		CALIBRATION DUE DATE 仪器校正有效期 Dec. 28ST ,2009		
EQUIPMENT 设备 UT SCOPE	MANUFACTURER 制造商 PANAMETRICS	MODEL NO. 样式编号 EPOCH-4B	SERIAL NO. 序列编号 071565311, 061488510, 061495811, 070152011,		
CALIBRATION BLOCK 试块 AWS IIW BLOCK TYPE Ⅱ	COUPLANT 耦合剂 C.M.C	MATERIAL/THICKNESS 材料厚度 A709M-345T2/F2-X 38/45/22/28mm			

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
Changchao	0°	2.5MHz	20mm	Reference Level 参考灵敏度		20dB	

Base metal inspected per AWS D1.5-2002 Section 6.19.5 0° UT OK.

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 Indication Level a	Reference Level b	Attenuation Factor c	Indication Rating d	DISCONTINUITY 不连续性 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	Discontinuity Evaluation 缺陷估计	Remark 备注
X183A-1		0				20								ACC.	100%
X184A-1		0				20								ACC.	100%
X180A		0				20								ACC.	100%
X181A		0				20								ACC.	100%
X179B		0				20								ACC.	100%
X179A		0				20								ACC.	100%
PL1465B		0				20								ACC.	100%

EXAMINED BY主探 [signature] 2009.06.26 LEVEL - II SIGN / DATE	REVIEWED BY 审核 [signature] 04.06.26 LEVEL - II SIGN / DATE
质量经理 / QCM [signature] 签字 SIGN / 日期 DATE 6.26	用户CUSTOMER 签字 SIGN / 日期 DATE

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Pursuant to Section 5-1.02 of the
Standard Specifications
Initial [initials] Date: 6/30/9

(FORM# ZPQC-UT01)

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	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY 不连续位置(mm)						
					a	b	c	d	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%
PL1476A		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 检探 2009.06.26
LEVEL - II SIGN / DATE

REVIEWED BY 审核 06.26
LEVEL - II SIGN / DATE

质量经理 / QCM
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REPORT OF ULTRASONIC EXAMINATION
UT探伤报告

REPORT NO. 报告编号 B787-UT-7302 DATE 2009.06.26 PAGE 3 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	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY 不连续位置(mm)						
					a	b	c	d	Length 长度	Sound Path 声程	Depth from Surface 距表面深度	From'X 距X	From'Y 距Y		
PL1460B		0				20								ACC.	100%
PL1472A		0				20								ACC.	100%
BLANK															

EXAMINED BY主探
LEVEL - II SIGN / DATE 7-9.06.26

REVIEWED BY 审核
LEVEL - II SIGN / DATE 06.26.28

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REPORT OF ULTRASONIC EXAMINATION
UT探伤报告

REPORT NO. 报告编号 B787-UT-7301	DATE 2009.06.26	PAGE 1 OF 3	Revision No: 0

PROJECT NO. :工程编号 ZP06-787		CONTRACTOR : CALTRANS
ITEMS NAME: 部件名称 OBG PLATE PANEL SPLICE	DRAWING NO.: 图号 SEG2	CALTRANS CONTRACT NO.: 04-0120F4 加州工程编号

REFERENCING CODE 参考规范	ACCEPTANCE STANDARD接受标准	PROCEDURE NO. 程序编号
AWS D1.5-2002	AWS D1.5-2002(Table 6.3)	ZPQC-UT-01
WELDING PROCESS 焊接方法	JOINT TYPE 焊缝类型	CALIBRATION DUE DATE仪器校正有效期
NA	NA	Dec. 28ST ,2009

EQUIPMENT 设备	MANUFACTURER 制造商	MODEL NO. 样式编号	SERIAL NO. 序列编号
UT SCOPE	PANAMETRICS	EPOCH-4B	071565311, 061488510, 061495811, 070152011,
CALIBRATION BLOCK 试块	COUPLANT 耦合剂	MATERIAL/THICKNESS 材料厚度	
AWS IIW BLOCK TYPE II	C.M.C	A709M-345T2/F2-X	22/45/20/18/28/38mm

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
Changchao	0°	2.5MHz	20mm	Reference Level 参考灵敏度		20dB	

Base metal inspected per AWS D1.5-2002 Section 6.19.5 0° UT OK.

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	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY 不连续位置(mm)						
					a	b	c	d	Length 长度	Sound Path 声程	Depth from Surface 距表面深度	From X 距X	From Y 距Y		
PL1472D		0				20								ACC.	100%
X193B		0				20								ACC.	100%
X196J		0				20								ACC.	100%
X196L		0				20								ACC.	100%
X197A		0				20								ACC.	100%
X198B		0				20								ACC.	100%
X199B		0				20								ACC.	100%

EXAMINED BY主探
LEVEL - II SIGN / DATE 2009.06.26

REVIEWED BY 审核
LEVEL - II SIGN / DATE 06.26

质量经理 / QCM
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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	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY 不连续位置(mm)						
					a	b	c	d	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
LEVEL - II SIGN / DATE 2009.06.26

REVIEWED BY 审核
LEVEL - II SIGN / DATE 09.06.26

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REPORT OF ULTRASONIC EXAMINATION
UT探伤报告

REPORT NO. 报告编号 B787-UT-7301 DATE 2009.06.26 PAGE 3 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	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY 不连续位置(mm)						
					a	b	c	d	Length 长度	Sound Path 声程	Depth from Surface 距表面深度	From'X 距X	From'Y 距Y		
X190A-2		0				20								ACC.	100%
X188B		0				20								ACC.	100%
BLANK															

EXAMINED BY主探 2009.06.26
LEVEL - II SIGN / DATE

REVIEWED BY 审核 06.26.09
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(FORM# ZPQC-UT01)

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 #: xx.25A

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

Location: Changxing Island, Shanghai, P.R. China **Report No:** NCS-000246
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:**
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:**
Procedural	☐	**Procedural**	☐	**Descripton:**		

Date the Non-Conformance Report was written: 09-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 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.

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 Caltrans 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