

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



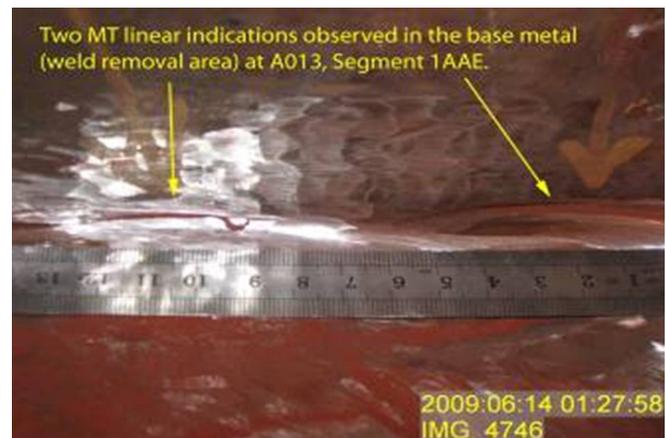
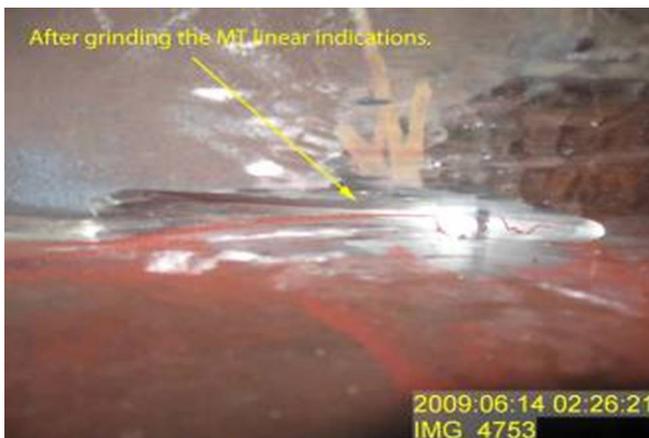
Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

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-000331**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 13-Jun-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0305**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 1AAE
<b>Procedural</b>	<b>Procedural</b>	<b>Description:</b>	

**Reference Description:** Missed MT Indications by QC, Plate X196S, Segment 1AAE**Description of Non-Conformance:**

During random verification magnetic particle testing (MT) of the internal components of OBG Segment 1AAE, Caltrans Quality Assurance (QA) Inspector discovered two (2) linear indications (35mm and 40mm in length) located in the base metal (weld removal area) of Plate X196S at location A013. This area had previously been tested and accepted by ZPMC NDT personnel.

**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:** Umesh Gaikwad  
**Name of individual from Contractor notified:** Cao Hai Zhou  
**Time and method of notification:** 0130 hours, 06/14/09, Verbal  
**Name of Caltrans Engineer notified:** Stanley Ku  
**Time and method of notification:** 0800 hours, 06/15/09, Verbal  
**QC Inspector's Name:** Chen Xi  
**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:** 05.03.06-000295

**Subject:** NCR No. ZPMC-0305

**Reference Description:** Missed MT Indications by QC, Plate X196S, Segment 1AAE

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 1AAE, Caltrans Quality Assurance (QA) Inspector discovered two (2) linear indications (35mm and 40mm in length) located in the base metal (weld removal area) of Plate X196S at location A013. This area had previously been tested and accepted by ZPMC NDT personnel. See attached NCR No. ZPMC-305 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-0305

**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:** 05.03.06-000295

**Subject:** NCR No. ZPMC-0305

**Dated:** 14-Aug-2009

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000287 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 this NCR.

ZPMC has provided response to NCR ZPMC-0305. 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 this NCR.

### Submitted by:

**Attachment(s):** ABF-NPR-000287R00;

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### Caltrans' comments:

**Status:** CLO

**Date:** 20-Aug-2009

The proposed resolution is acceptable. The welding inspectors have received additional training, and, the welds in question have been accepted by MT as shown in the attached documents. The Department concurs that Non-Conformance ZPMC-0305 is closed.

**Submitted by:** Wright, Doug

**Date:** 20-Aug-2009

**Attachment(s):**



No. B-440

## LETTER OF RESPONSE

**TO: American Bridge/Flour**

**DATE: 2009-8-7**

**REGARDING: NCR-000331 (ZPMC-305)**

With this letter of response, ZPMC requests closure for Caltrans **NCR-000331 (ZPMC-305)**.

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.

For the description in the non-conformance report we make the clarify as here: First, please find the drawing SEG2D with the attachment. At location A13, we can't find the X196S which said in the NCR. But the plate X196H is here and we had done MT for accepted.

Second, at that time, after we found the cracks on base material, the CWR559 had been submitted 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-000331 (ZPMC-305)**

**ATTACHMENT:**

**NCR-000331 (ZPMC-305)**

**The drawing of 1AAE SEG2**

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

**B-CWR559**

**The final VT/MT/UT report after repairing**

**The final MT report of the X196H (MT-12568)**

*Zhao Shuangbao*  
*2009.8.7*



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:** 05.03.06-000295

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**Transmitted by:** Ching Chao

**Attachments:** ZPMC-0305

**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-000331

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 13-Jun-2009

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

NCR #: ZPMC-0305

### Type of problem:

Welding  Concrete  Other Welding  Curing  Procedural 

Bridge No: 34-0006

Joint fit-up  Coating  Other 

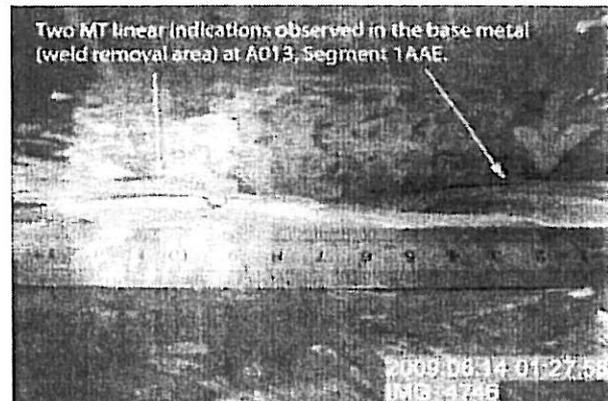
Component: OBG Segment 1AAE

Procedural  Procedural  Description:

Reference Description: Missed MT Indications by QC, Plate X196S, Segment 1AAE

### Description of Non-Conformance:

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

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**Was QC Inspector aware of the problem:**  Yes  No  
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<b>Inspected By:</b>	Guest, Skyler	SMR
<b>Reviewed By:</b>	Wahbeh, Mazen	SMR

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REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-12568		DATE日期 2009.07.08		PAGE OF页码 1/1	Revision No: 0	
PROJECT NO. 工程编号: ZP06-787			CONTRACTOR: 用户: CALTRANS			
DRAWING NO. 图号: SEG2 SEG1 OBG 1AAE			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	mm			
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			
X196H				ACC.		BASE MATERIAL
X193A/B				ACC.		BASE MATERIAL
X194A/C				ACC.		BASE MATERIAL
X185A				ACC.		BASE MATERIAL
X193B				ACC.		BASE MATERIAL
X182B				ACC.		BASE MATERIAL
X188B				ACC.		BASE MATERIAL
BLANK						
EXAMINED BY 主探 Ding Achen <i>Ding Achen</i>			REVIEWED BY 审核 <i>Sun Jiongchang</i>			
LEVEL - II SIGN 签名 / DATE 日期 <i>7.7.08</i>			LEVEL-II SIGN / DATE 日期 <i>7.7.08</i>			
质量经理 / QCM <i>Luyiambona</i>			用户 CUSTOMER			
签字 SIGN / 日期 DATE <i>7.8</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 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>Liang's Embana</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		
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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 Fangjie</i> 09.06.08	REVIEWED BY 审核 Tan Chau Wei 09.06.08
LEVEL - II SIGN 签名 / DATE日期	LEVEL-II SIGN / DATE日期
质量经理 / QCM <i>[Signature]</i>	用户CUSTOMER
签字 SIGN / 日期 DATE <i>[Signature]</i>	签字 SIGN / 日期 DATE



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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	
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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	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 Fangjie Chang Fangjie 09.06.08	REVIEWED BY 审核 Tan Chaw Wei Tan Chaw Wei 09.06.08
LEVEL - II SIGN 签名 / DATE日期 质量经理 / QCM 09.06.08	LEVEL-II SIGN / DATE日期 用户CUSTOMER 签字 SIGN / 日期 DATE



## REPORT OF MAGNETIC PARTICLE EXAMINATION

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DATE日期 2009.06.08

PAGE OF页码 4/16

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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>	REVIEWED BY 审核 <i>Tan Chauwei</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 Jianhua</i>	用户CUSTOMER
签字 SIGN / 日期 DATE <i>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 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 Chao wei</i>			
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 <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 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	<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	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> LEVEL - II SIGN 签名 / DATE日期 09.06.08	REVIEWED BY 审核 Tan chao wei <i>Tan Chao Wei</i> LEVEL-II SIGN / DATE日期 09.06.08
质量经理 / QCM <i>[Signature]</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 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	<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-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 <i>Chang Fang Jie</i> LEVEL-II SIGN 签名 / DATE日期 <i>07.06.08</i>	REVIEWED BY 审核 Tan Chao Wei <i>Tan Chao Wei</i> LEVEL-II SIGN / DATE日期 <i>07.06.08</i>
质量经理 / QCM <i>Long Hanhua</i> 签字 SIGN / 日期 DATE <i>6.8</i>	用户 CUSTOMER 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> 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>[Signature]</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 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 Tan chao wei <i>Tan chao wei</i>
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 <i>Wang Hanhua</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 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>	REVIEWED BY 审核 Tan Chaw Wei <i>Tan Chaw Wei</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>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 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主操 Chang fang jie <i>Changfangjie</i> LEVEL - II SIGN 签名 / DATE日期 <i>09.06.08</i>	REVIEWED BY 审核 Tan Chao Wei <i>TanChaoWei</i> LEVEL-II SIGN / DATE日期 <i>09.06.08</i>
质量经理 / QCM <i>Cyhanhina</i>	用户CUSTOMER
签字 SIGN / 日期 DATE <i>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 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 Tan Chao Mei <i>Tan Chao 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>Cui Shanhua</i>	用户 CUSTOMER
签字 SIGN / 日期 DATE <i>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 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 <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>C. Zhang</i>	用户CUSTOMER
签字 SIGN / 日期 DATE <i>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 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 Fangjie</i> LEVEL - II SIGN 签名 / DATE日期 09.06.08	REVIEWED BY 审核 <i>Tan Chau Wei</i> LEVEL-II SIGN / DATE日期 09.06.08
质量经理 / QCM <i>[Signature]</i> 签字 SIGN / 日期 DATE 6-8.	用户CUSTOMER _____ 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> LEVEL - II SIGN 签名 / DATE日期 <i>09.06.08</i>	REVIEWED BY 审核 <i>Tan Chan wei</i> LEVEL-II SIGN / DATE日期 <i>09.06.08</i>
质量经理 / QCM <i>Lu yirahua</i>	用户 CUSTOMER
签字 SIGN / 日期 DATE <i>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 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>Chow Fong 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 Jianhua</i>	用户CUSTOMER
签字 SIGN / 日期 DATE <i>6-8</i>	签字 SIGN / 日期 DATE



# 关键焊缝返修报告

版本  
Rev. No.:

## Critical Welding Repair Report (CWR)

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.:	E787-MT-11633
项目编号 Project No.:	ZP06-787				

### 焊接缺陷描述:

#### 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.

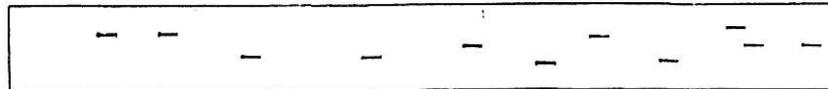
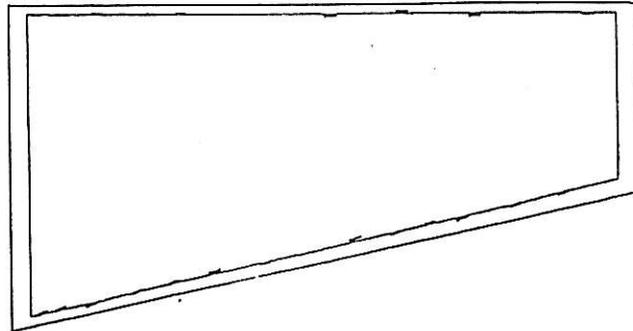
Please see the detail data from MT report!

检验员 (Inspector): Chay Fey 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: Chay 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): *Ethen Pinychen* 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.*

*- Eric Tsang  
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>Qth</i>	for <i>RM</i>
Structure Representative	Date: <i>6/30/07</i>

工艺:

Technical Engineer: *Niu Tiefang* 审核: *[Signature]* Approved By:

*for chuanbin*



# 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): *07.06.28*

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:	<i>Nin Trefen</i> <i>07.06.28</i>
返修(碳刨)前预热温度 Preheat Temperature Before Gouging:	<i>802</i>	返修的缺陷 Description of Discontinuity:	<i>Crack</i>
焊前处理检查 Inspection Before Welding:	<i>Acc</i>	焊前预热温度 Preheat Temperature Before Welding:	<i>190°C</i>
最大碳刨深度 Max. Depth of Gouge:	<i>3mm</i>	碳刨总长 Total Length of Gouge:	<i>11300 mm</i>
焊工 Welder:	<i>045208</i>	焊接类型 Welding Type:	<i>SMAW</i>
焊接电流 Current:	<i>150</i>	焊接电压 Voltage:	<i>25</i>
		焊接位置 Position:	<i>36</i>
		焊接速度 Speed:	<i>113</i>
返修后检查 Inspection After Repair:	<i>复检 1h 300°C</i>		
外观检查 VT Result:	<i>Acc</i>	检验员 Inspector:	<i>chenxi</i>
NDT复检 NDT Result:	<i>Acc</i>	探伤员 NDT Person:	<i>houyijun</i>
见证: Witness/Review:		日期 Date:	<i>2009.08.03</i>
备注: Remark:		日期 Date:	<i>2009.8.3</i>

This document is APPROVED  
State of California  
DEPARTMENT OF TRANSPORTATION  
Pursuant to Section 5-1.02 of the  
Standard Specifications

Initial *DT* Date: *6/30/9*





# 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主探 Chang fang jie <i>Chang Fangjie</i>	REVIEWED BY 审核 <i>Sun Guangcheng</i>					
LEVEL-II SIGN 签名 / DATE日期 <i>mp. 08.03</i>	LEVEL-II SIGN / DATE日期 <i>08.03</i>					
质量经理 / QCM <i>Liang...</i>	用户CUSTOMER					
签字 SIGN / 日期 DATE <i>8-3</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
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-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> LEVEL-II SIGN 签名 / DATE日期 <i>08.03</i>	REVIEWED BY 审核 <i>Sim Gang cheng</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>8.3</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			
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			
	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>Chang Fangjie</i>			REVIEWED BY 审核 <i>Sun Guojun</i>			
LEVEL - II SIGN 签名 / DATE 日期 09.08.03			LEVEL-II SIGN / DATE 日期 09.08.03			
质量经理 / QCM <i>Wang</i>			用户 CUSTOMER			
签字 SIGN / 日期 DATE 8.3			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			
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			
	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 <i>Chang Fangjie</i>				REVIEWED BY 审核 <i>Sun Gong 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>8-3</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	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
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* 06.28  
 LEVEL - II SIGN / DATE

质量经理 / QCM  
*(Signature)*  
 签字 SIGN / 日期 DATE 6.26

用户CUSTOMER  
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 State of California  
 DEPARTMENT OF TRANSPORTATION  
 Pursuant to Section 5-1.02 of the  
 Standard Specifications  
 Initial *SL* 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 1 OF 3      Revision No: 0

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

ITEMS NAME: OBG PLATE PANEL      DRAWING NO.: SEG2      CALTRANS CONTRACT NO.: 04-0120F4  
 部件名称 SPLICE      图号      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. 28<sup>ST</sup>, 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 (次级)	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
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 <i>Xueliang</i> 2009.06.26 LEVEL - II SIGN / DATE	REVIEWED BY 审核 <i>Tang Xing</i> 06.26 LEVEL - II SIGN / DATE
------------------------------------------------------------------------	--------------------------------------------------------------------

质量经理 / QCM <i>Wang Lina</i> 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 <i>Q</i> Date: 6/20/09 签字 SIGN / 日期 DATE
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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
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  
 DEPARTMENT OF TRANSPORTATION  
 State of California  
 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



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 #: xx.25A**QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION****Location:** Changxing Island, Shanghai, P.R. China**Report No:** NCS-000277**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 25-Aug-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0305**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:** 13-Jun-2009**Description of Non-Conformance:**

During random verification magnetic particle testing (MT) of the internal components of OBG Segment 1AAE, Caltrans Quality Assurance (QA) Inspector discovered two (2) linear indications (35mm and 40mm in length) located in the base metal (weld removal area) of Plate X196S at location A013. This area had previously been tested and accepted by ZPMC NDT personnel.

**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 6-30-2009. 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**