

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:** Zhenhua Port Machinery Company in Shanghai, China**Report No:** NCR-000001**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 15-Jan-2007**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0001**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component:
Procedural	Procedural	Descriptor:	Radiographic Testing (RT)

Description of Non-Conformance:

- 1) American Bridge / Flour joint venture Quality Control Manager and onsite representatives allowed Zhenhua Port Machinery Company (ZPMC) to radiograph procedure qualification test plates HP2006136 - 25mm thick, HP2006117-2 - 60mm thick, HP2006116 - 60mm thick, ID HP2006128 - 75mm thick and HP2006133 - 75mm thick using film side IQI indicators in place of Source side IQI indicators.
- 2) American Bridge / Flour joint venture Quality Control Manager and onsite representatives allowed Zhenhua Port Machinery Company (ZPMC) to radiograph procedure qualification test plates HP2006117-2 - 60mm thick and HP2006116 - 60mm thick using Cobalt 60 for a radiographic source in place of Iridium 192.

Applicable reference:

- 1) AWS D1.5-2002 paragraph 6.10.7.1 states "Hole-type IQIs shall be placed on the source side with hole-type IQI parallel to the weld joint and holes at the outer edge of the area being radiographed".
- 2) AWS D1.5-2002 paragraph 6.10.6 states "Cobalt 60 shall be used as an RT source only when the steel being radiographed exceeds 75 mm [3 in.] in thickness.

Who discovered the problem: Joe Lanz Caltrans METS QA inspector**Name of individual from Contractor notified:** ABF Representative Craig Knops**Time and method of notification:** 15-Jan-2007 1100 hours, verbal.**Name of Caltrans Engineer notified:** Keith Devonport**Time and method of notification:** 22-Jan-2007 1600 hours, verbal.**QC Inspector's Name:** Huang Yu Hai, ZPMC Level II NDT technician**Was QC Inspector aware of the problem:** Yes No**Contractor's proposal to correct the problem:**

Contractor to radiograph test plates again properly and train all personnel in proper techniques.

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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Inspected By: McClary,David

Quality Assurance Inspector

Reviewed By: Lowry,Patrick

QA Reviewer



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge
333 Burma Road
Oakland CA 94607
Tel: 510-622-5158 Fax:

NON-CONFORMANCE REPORT TRANSMITTAL

To: American Bridge/Fluor Enterprises, a JV
375 BURMA ROAD
OAKLAND CA 95607

Date: 01-Feb-2007

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

Dear: Mr. Charles Kanapicki

Job Name: SAS Superstructure

Attention: Mr. Michael Flowers Project Executive

Document No: 05.03.06-000065

Subject: NCR No. ZPMC-0001

Reference Description: Radiographic Testing issue (IQI placement, source type, etc.)

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 - No Response Required.

Material Location:

Lift:

Remarks:

Originally Sent by State Letter 05.03.01-000123

Action Required and/or Action Taken:

Transmitted by: Keith Osantowski Sr. Engineer

Attachments: ZPMC-0001

cc:

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000065

Subject: NCR No. ZPMC-0001

Dated: 07-Dec-2007

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000005 **Rev:** 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC understands the requirement of AWS D1.5-02 sections 6.10.7.1 and 6.10.6.

American Bridge / Fluor (ABF) Quality Assurance Department is in receipt of State Letter 05.03.01-000123 dated February 1, 2007 providing ABF notification regarding Nonconformance Report (NCR) No.001.

This letter is issued to provide formal response addressing the proposed resolution to NCR 001 for Engineer's review and approval

1. ZPMC understands the requirement of AWS D1.5-02 section 6.10.7.1 to place IQI indicators on the source side of the procedure qualification plates. All test plates in question have been radiographed in accordance with AWS D1.5-02.

All additional procedure qualification test plates shall be radiographed in accordance with AWS D1.5-02 utilizing source side IQI indicators.

Training to the requirements of AWS D1.5-02 section 6.10.7.1 has been provided to the radiographic technicians.

2. ZPMC understands the requirement of AWS D1.5-02 section 6.10.6. The use of Cobalt 60 radiographic source in place of Iridium 192 is prohibited.

All additional procedure qualification test plates shall be radiographed in accordance with AWS D1.5-02.

Training to the requirements of AWS D1.5-02 section 6.10.7.1 has been provided to the radiographic technicians.

ABF considers this NCR closed.

Submitted by: Flowers, Michael

Attachment(s): ABF-NPR-000005R00; ABF-NPR-000005-01

Caltrans' comments:

Status: Approved

Date: 24-Mar-2008

See State Letter 05.03.01-001406

Submitted by: Pursell, Gary

Date: 22-Feb-2008

Attachment(s): 05.03.01-001406; TC-20.1

14-Feb-2008

ABF-CAL-LTR-000443

Mr. Gary Pursell
Resident Engineer
California Department of Transportation
333 Burma Road,
Oakland, CA 94607, USA

PROJECT: San Francisco Oakland Bay SAS Bridge Superstructure
Caltrans Contract No. 04-0120F4
ABF Job No. 660110

SUBJECT: RESPONSE TO NCR-0001

Gentlemen:

American Bridge / Fluor Enterprises Inc. a Joint Venture (ABFJV) acknowledges receipt of the Department's Letter No.05.03.01-000123 dated February 1, 2007 forwarding the Department's Non-Compliance Report NCR-0001

The attached documents the response to the subject NCR and closure by the Engineer's China Fabrication Team. Based on the attached ABFJV is requesting written confirmation from the Engineer that this NCR is closed.

If you need any more information, please call Chuck Kanapicki at (510) 808-4609.

Sincerely,

AMERICAN BRIDGE/FLUOR ENTERPRISES, INC. A JOINT VENTURE


Michael Flowers
Project Director

File: 02.01, 02.28.4

Enclos: Response to NCR - 00001

DEPARTMENT OF TRANSPORTATION

CHINA FABRICATION TEAM
506 Shangcheng Rd., Pudong New District
Shanghai 200120, PRC



REVIEW OF CONTRACTOR'S TRANSMITTAL

To: Dave Williams, American Bridge – Fluor, a Joint Venture
Gary Pursell, Resident Engineer

Review Date: 12/20/2007

From: Joshua Ishibashi, Structural Materials Representative

Contract No.: 04-0120F4

Date/Time Submittal Received: 12/07/2007 1400

China Standard Time
(GMT+08:00)

Contractor's Transmittal #: TL-07-0722 Rev. # 0

<input checked="" type="checkbox"/> substantially complies with contract requirements and is approved			
<input type="checkbox"/> substantially complies with contract requirements and is approved as noted.			
<input type="checkbox"/> Lacks sufficient information and/or contains unacceptable items that must be corrected or prior to resubmital			
Verbal Notification		<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes
Date:		01/18/08	
Time:		1200	
Name of individual from Contractor Notified: <u>Steve Lawton</u>			
This submittal is a:	<input type="checkbox"/> Welding Report	<input type="checkbox"/> Critical Weld Repair	
	<input type="checkbox"/> Request for Information	<input type="checkbox"/> Heat Straightening Request	
	<input type="checkbox"/> Fabrication Procedures	<input checked="" type="checkbox"/> Other: <u>NCR Closure</u>	
Submitting Contractor: <u>ZPMC</u>			
ITEMS REVIEWED	COMPLIES		COMMENTS
1. ABF-SL-07-0238 NCR Resolution for ZPMC 0001	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Approved
2.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
3.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
4.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
5.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
6.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
7.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
8.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
9.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
10.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

Remarks: METS has completed the review of ABF-TL-07-0722. This NCR was closed in PMIV on 12/20/07. At the request of ABF China METS is generating a TC20 to document this closure. METS recommends the aforementioned NCR be closed.

Reviewer: Joshua Ishibashi

Date: 01/18/2008

Construction Concurrence: u Initial 1/18/08 Date

December 07, 2007

California Department of Transportation
666 Feng Bin Road, Room 708
Changxing Island, Shanghai China

Reply to: SL-ABF-07-0238

Attention: Gary Pursell

Reference: San Francisco Oakland Bay SAS Bridge Superstructure
Caltrans Contract No. 04-0120F4
ABF Job No. 660110

Subject: Nonconformance Report 001

Mr. Purcell:

American Bridge / Fluor (ABF) Quality Assurance Department is in receipt of State Letter 05.03.01-000123 dated February 1, 2007 providing ABF notification regarding Nonconformance Report (NCR) No.001.

This letter is issued to provide formal response addressing the proposed resolution to NCR 001 for Engineer's review and approval

1. ZPMC understands the requirement of AWS D1.5-02 section 6.10.7.1 to place IQI indicators on the source side of the procedure qualification plates. All test plates in question have been radiographed in accordance with AWS D1.5-02.

All additional procedure qualification test plates shall be radiographed in accordance with AWS D1.5-02 utilizing source side IQI indicators.

Training to the requirements of AWS D1.5-02 section 6.10.7.1 has been provided to the radiographic technicians.

2. ZPMC understands the requirement of AWS D1.5-02 section 6.10.6. The use of Cobalt 60 radiographic source in place of Iridium 192 is prohibited.

All additional procedure qualification test plates shall be radiographed in accordance with AWS D1.5-02.

Training to the requirements of AWS D1.5-02 section 6.10.7.1 has been provided to the radiographic technicians.

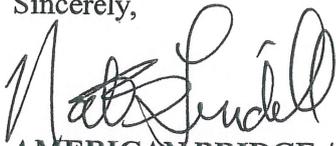
ABF considers this NCR closed.

This document is: APPROVED
State of California
DEPARTMENT OF TRANSPORTATION
Pursuant Section 5-1.02 of the
Standard Specifications
Initial *W* Date: *1/18/08*

AMERICAN BRIDGE / FLUOR JV
Page 2

If you have any questions or need additional information, please contact this office

Sincerely,



AMERICAN BRIDGE / FLUOR JV
Nate S. Lindell
Quality Assurance Manager

cc: file

This document is: APPROVED
State of California
DEPARTMENT OF TRANSPORTATION
Pursuant Section 5-1.02 of the
Standard Specifications
Initial *u* Date: *1/18/08*



LETTER OF RESPONSE

DATE: 2007.11.26

To: AB/F Steve Lawton

From: ZPMC

Subject: Response to NCR-dmcclary-000

Mr. Lawton:

ZPMC understands the requirement of AWS D1.5-02 section 6.10.7.1 to place IQI indications on the source side of the procedure qualification plates. All test plates in question have been radiographed in accordance with AWS D1.5-02.

All additional procedure qualification test plates shall be radiographed in accordance with AWS D1.5-02 utilizing source side IQI indications.

Training to the requirements of AWS D1.5-02 section 6.10.7.1 has been provided to the radiographic source the requirement of AWS D1.5-02 section 6.10.6. The use of Cobalt 60 radiographic source in place of Iridium 192 is prohibited.

All additional procedure qualification test plates shall be radiographed in accordance with AWS D1.5-02.

Training to the requirement of AWS D1.5-02 section 6.10.7.1 has been provided to the radiographic technicians.

Sincerely

Lu Jianhua

Lu Jianhua

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bav Area Branch
690 Walnut Ave., St. 150

Vallejo
(707) 649-5453
(707) 649-5493

CA 94592-1133

Contract #: 04-0120F4
Cty: SF/AL Rte 80 PM: 13.9/14.3.0.0/1.6
File #: 69.25B

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

Location: Zhenhua Port Machinery Company in Shanghai, **Report No:** NCR-dmccalary-000
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 15-Jan-2007
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) **NCR Num:** ZPMC-001

Type of problem:

Welding: **Concrete:** **Other:**
Welding: **Curing:** **Procedural:** **Bridge No.:** 34-0006
Joint fit-up: **Coating:** **Other:** **Component:**
Procedural: **Procedural:** **Radiographic Testing (RT)**

Description of Non-Conformance:

- 1) American Bridge / Flour joint venture Quality Control Manager and onsite representatives allowed Zhenhua Port Machinery Company (ZPMC) to radiograph procedure qualification test plates HP2006136 - 25mm thick, HP2006117-2 - 60mm thick, HP2006116 - 60mm thick, ID HP2006128 - 75mm thick and HP2006133 - 75mm thick using film side IQI indicators in place of Source side IQI indicators.
- 2) American Bridge / Flour joint venture Quality Control Manager and onsite representatives allowed Zhenhua Port Machinery Company (ZPMC) to radiograph procedure qualification test plates HP2006117-2 - 60mm thick and HP2006116 - 60mm thick using Cobalt 60 for a radiographic source in place of Iridium 192.

Applicable reference:

- 1) AWS D1.5-2002 paragraph 6.10.7.1 states "Hole-type IQIs shall be placed on the source side with hole-type IQI parallel to the weld joint and holes at the outer edge of the area being radiographed".
- 2) AWS D1.5-2002 paragraph 6.10.6 states "Cobalt 60 shall be used as an RT source only when the steel being radiographed exceeds 75 mm [3 in.] in thickness.

Who discovered the problem: Joe Lanz Caltrans METS QA inspector
Name of individual from Contractor notified: ABF Representative Craig Knops
Time and method of notification: 1-15-2007 1100 hours, verbal.
Name of Caltrans Engineer notified: Keith Devonport
Time and method of notification: 221600JAN07; Verbal
QC Inspector's Name: Huang Yu Hai, ZPMC Level II NDT technician
Was QC Inspector aware of the problem: No
Contractor's proposal to correct the problem:
Contractor to radiograph test plates again properly and train all personnel in proper techniques.

Comments:

This report is for the purpose of determining general 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 Mazen Wahbeh, (818) 292-0659 who represents the Office of Structural Materials for your project.

Hardcopy Routing Instructions:

1. Resident Engineer

2. Inspecting Branch Contract File

3. Responsible Branch Contract File (with supporting documentation)

This document is: **APPROVED**
State of California
DEPARTMENT OF TRANSPORTATION
Pursuant Section 5-1.02 of the
Standard Specifications
Initial u Date: 1/18/08

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued, Page 2 of 2)

Inspected By: McClary, David

Quality Assurance Inspector

Reviewed By: Lowry, Patrick

QA Reviewer

This document is: APPROVED
State of California
DEPARTMENT OF TRANSPORTATION
Pursuant Section 5-1.02 of the
Standard Specifications
Initial *✓* Date: *1/12/08*

TL-15, Nonconformance Report 6/13/06.

Page 2 of 2

Hardcopy Routing Instructions:

1. Resident Engineer

2. Inspecting Branch Contract File

3. Responsible Branch Contract File (with supporting documentation)



Flex your power
Be energy efficient!

February 1, 2007

Contract No. 04-0120F4
04-SF-80-13.2 / 13.9
Self-Anchored Suspension Bridge
Letter No. 05.03.01-000123
CAL-ABF-LTR - 000123

Michael Flowers
Project Executive
American Bridge/Fluor Enterprises, a JV
375 Burma Road
Oakland, CA 94607

Dear Michael Flowers,

Non Conformance Report - ZPMC

This is to provide formal notification to American Bridge/Fluor Enterprises (ABF) regarding the issuance of a non-conformance report (NCR) at the Zhenhua Port Machinery Company, Ltd.(ZPMC) facility in Shanghai, China. Verbal notification of these NCRs was provided to ABF representative Craig Knops on January 15, 2007.

During routine quality assurance inspection by Department representatives, the following non-conformances were documented and reported:

1. Procedure qualification test plates were radiographed using film side IQI indicators in place of source side IQI indicators in violation of AWS D1.5-2002 section 6.10.7.1. Test plates HP2006136-25mm thickness, HP2006117-2 - 60mm thickness, HP2006116 - 60mm thickness, HP2006128 - 75mm thickness, and HP2006133 - 75mm thickness were affected.
2. Procedure qualification test plates were radiographed using a Cobalt 60 radiographic source in place of an Iridium 192 radiographic source in violation of AWS D1.5-2002 section 6.10.6. Test plates HP2006117-2 - 60mm thickness and HP2006116 - 60mm thickness were affected.

Department representatives on-site were informed by ABF's representative that the proposed method of resolution was to radiograph the plates again utilizing the proper procedures and that all personnel will be trained in the proper techniques. This shall be confirmed formally by ABF.

Sincerely,

GARY PURSELL
Resident Engineer

cc: R. Morrow, B. Boal, K. Devonport, W. Collins
file: 05.03.01, 09.03

RECEIVED

FEB 03 2007 7PM

AMERICAN BRIDGE/FLUOR

02.02

15.04

State of California
DEPARTMENT OF TRANSPORTATION
Pursuant Section 5-1.02 of the
Standard Specifications
Initial *ue* Date: 1/18/08

DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge Program

333 Burma Rd.
Oakland, CA 94607
(510) 622-5660, (510) 286-0550 fax



*Flex your power
Be energy efficient!*

February 22, 2008

Contract No. 04-0120F4
04-SF-80-13.2 / 13.9
Self-Anchored Suspension Bridge
Letter No. 05.03.01-001406

Michael Flowers
Project Executive
American Bridge/Fluor Enterprises, a JV
375 Burma Road
Oakland, CA 94607

Dear Michael Flowers,

Response to NCRs 1, 5, 7, 8, 9, 10, 11, 12 & 13

This letter is issued as a response to ABF-CAL-LTR-000443, 444, 445, dated February 14, 2008, and ABF-CAL-LTR-000446, dated February 15, 2008, requesting written confirmation from the Engineer that the referenced Non-Conformance Reports (NCRs) at Zhenhua Port Machinery Company, Ltd (ZPMC) have been closed. The Department considers the following ZPMC NCRs closed:

NCR No.	State Letter No.	ABF Document No.	Description
1	05.03.01-000123	ABF-CAL-LTR-000443	Radiographic Testing issues (IQI placement, source type, etc.)
5	05.03.01-000757	ABF-CAL-LTR-000444	Repairs to longitudinal stiffener welds greater than 10% in length on the 77m Mock-up
7	05.03.01-000757	ABF-CAL-LTR-000444	QC not following the approved UT procedure on 114m Mock-up
8	05.03.01-000757	ABF-CAL-LTR-000444	Repairs to skin plate welds greater than 10% in length on the 114m Mock-up
9	05.03.01-000795	ABF-CAL-LTR-000445	Third time repairs to Skin B sub-assemblies on the 114m Mock-up without Engineer approval
10	05.03.01-000795	ABF-CAL-LTR-000445	Repairs to longitudinal stiffener welds greater than 10% in length on the 114m Mock-up
11	05.03.01-000795	ABF-CAL-LTR-000446	Failure to document fit-up of longitudinal stiffener on Mock-up
12	05.03.01-000795	ABF-CAL-LTR-000446	Repairs to skin plate welds greater than 10% in length on the 114m Mock-up
13	05.03.01-000795	ABF-CAL-LTR-000446	Welding electrode used on 89m Strut Sub-Assembly not in compliance

American Bridge/Fluor Enterprises, a JV
February 22, 2008
Page 2 of 2

Please contact us if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Gary Purcell".

GARY PURSELL
Resident Engineer

cc: Rick Morrow
Brian Boal
Gary Lai
Mark Woods

file: 05.03.01

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:** Zhenhua Port Machinery Company in Shanghai, China**Report No:** NCS-000007**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 20-Dec-2007**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0001**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component:
Procedural	Procedural	Descriptor:	

Date the Non-Conformance Report was written: 15-Jan-2007**Description of Non-Conformance:**

1) American Bridge / Fluor joint venture Quality Control Manager and onsite representatives allowed Zhenhua Port Machinery Company (ZPMC) to radiograph procedure qualification test plates HP2006136 - 25mm thick, HP2006117-2 - 60mm thick, HP2006116 - 60mm thick, ID HP2006128 - 75mm thick and HP2006133 - 75mm thick using film side IQI indicators in place of Source side IQI indicators.

2) American Bridge / Fluor joint venture Quality Control Manager and onsite representatives allowed Zhenhua Port Machinery Company (ZPMC) to radiograph procedure qualification test plates HP2006117-2 - 60mm thick and HP2006116 - 60mm thick using Cobalt 60 for a radiographic source in place of Iridium 192.

Contractor's proposal to correct the problem:

Contractor to radiograph test plates again properly and train all personnel in proper techniques.

Corrective action taken:

1. ZPMC understands the requirement of AWS D1.5-02 section 6.10.7.1 to place IQI indicators on the source side of the procedure qualification plates. All test plates in question have been radiographed in accordance with AWS D1.5-02.

All additional procedure qualification test plates shall be radiographed in accordance with AWS D1.5-02 utilizing source side IQI indicators.

Training to the requirements of AWS D1.5-02 section 6.10.7.1 has been provided to the radiographic technicians.

2. ZPMC understands the requirement of AWS D1.5-02 section 6.10.6. The use of Cobalt 60 radiographic source in place of Iridium 192 is prohibited.

All additional procedure qualification test plates shall be radiographed in accordance with AWS D1.5-02.

