

PSC
Precision
Surveillance
Corporation

**THIRTIETH YEAR SURVEILLANCE
OF THE POST-TENSIONING SYSTEM AT THE
THREE MILE ISLAND
UNIT 1 CONTAINMENT BUILDING
2004**

VOLUME II OF III

SECTION 4

A1/A459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: V32 TENDON END/BUTTRESS NO.: SHOP/TOP SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 8-31-04

Q.C.
Signoff

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO XPO8-31-04

(7.5) Temp. of Concrete 70 F. Thermometer No. SM-2 Recalib. Date 8-2-05

Ambient Temp. 72 F. Thermometer No. PK42 Recalib. Date 8-2-05 XPO8-31-04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap 5 Gal. XPO8-31-04

(8.7.2) Grease to be Reused YES (8.7.2) Grease in Cap Protected N/A XPO8-31-04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%

XPO8-31-04

(8.9) Unusual Conditions: NONE

XPO8-31-04

(8.10.1) Grease Color: Match Color BROWN Comment HATCHES SAMPLE

(8.10.2) No Match Color Comment

XPO8-31-04

(9.6) Amount of Grease Removed 1/4 Gal. - Will this be scrapped? YES NO XPO8-31-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal ANCHORAGE ASSEMBLY XPO8-31-04

FILLER DATA (Continue SQ 6.0)

COATED W/ GREASE + COVERED W/ PLASTIC 8-31-04

(10.2) Method of Tendon Protection COATED W/ GREASE + CAP INSTALLED XPO8-7-04

(10.3) Amount of Grease Lost 0 Gal. - Will this be scrapped? N/A YES NO XPO8-7-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) 5 + (9.6) 1/4 + SQ 7.0 (6.1) 1/2 + (10.3) 0 =

TOTAL GREASE LOSS 5 3/4 Gal. Post to DS 12.1. XPO8-7-04

QC Review B.D. Carter Level II Date 1-26-05

A2/A459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: V32 TENDON END/BUTTRESS NO.: FIELD/BOTTOM SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 9-2-04

Q.C.
Signoff

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO 2009-2-04

(7.5) Temp. of Concrete 80 F. Thermometer No. SM-2 Recalib. Date 8-2-05

Ambient Temp. 82 F. Thermometer No. PK42 Recalib. Date 8-2-05 2009-2-04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap 10 Gal. 2009-2-04

(8.7.2) Grease to be Reused YES NO (8.7.2) Grease in Cap Protected N/A 2009-2-04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%

2009-2-04

(8.9) Unusual Conditions: NONE

2009-2-04

(8.10.1) Grease Color: Match Color Comment

(8.10.2) No Match Color LT. BROWN Comment DOES NOT MATCH SAMPLE 2009-2-04

(9.6) Amount of Grease Removed 14 Gal. - Will this be scrapped? YES NO 2009-2-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal GREASE CAP 2009-2-04

FILLER DATA (Continue SQ 6.0)

(10.2) Method of Tendon Protection COATED W/ GREASE & CAP INSTALLED 2009-2-04

(10.3) Amount of Grease Lost 20 Gal. - Will this be scrapped? YES NO 2009-2-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) 10 + (9.6) 14 + SQ 7.0 (6.1) 1/2 + (10.3) 20 =

TOTAL GREASE LOSS 30 1/2 Gal. Post to DS 12.1 2009-2-04

QC Review Biv D. Carter Level II Date 1-26-05

A3/A459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: V53 TENDON END/BUTTRESS NO.: SHOP/TOP SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 8-31-04

Q.C.
Signoff

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO XP08-31-04

(7.5) Temp. of Concrete 70 F. Thermometer No. SM-2 Recalib. Date 8-2-05

Ambient Temp. 74 F. Thermometer No. PK42 Recalib. Date 8-2-05 XP08-31-04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap 5 Gal. XP08-31-04

(8.7.2) Grease to be Reused YES (8.7.2) Grease in Cap Protected N/A XP08-31-04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Anchorage	----- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%

XP08-31-04

(8.9) Unusual Conditions: NONE

XP08-31-04

(8.10.1) Grease Color: Match _____ Color _____ Comment _____

(8.10.2) No Match Color DARK BROWN Comment DOES NOT MATCH SAMPLE XP08-31-04

(9.6) Amount of Grease Removed 1/4 Gal. - Will this be scrapped? YES NO XP08-31-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal ANCHORAGE ASSEMBLY XP08-31-04

FILLER DATA (Continue SQ 6.0)

(10.2) Method of Tendon Protection COATED w/GREASE & COVERED w/PLASTIC XP08-31-04
COATED w/GREASE & CAP INSTALLED XP09-7-04 XP08-7-04

(10.3) Amount of Grease Lost 0 Gal. - Will this be scrapped? N/A YES NO XP08-7-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) 5 + (9.6) 1/4 + SQ 7.0 (6.1) 1/2 + (10.3) 0 =

TOTAL GREASE LOSS 5 3/4 Gal. Post to DS 12.1 XP08-7-04

QC Review Bindy Cato Level II Date 1-26-05

A4/AH59

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: V53 TENDON END/BUTTRESS NO.: FIELD/BOTTOM SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 9-2-04

Q.C.
Signoff

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO 2009-2-04

(7.5) Temp. of Concrete 82 F. Thermometer No. SM-2 Recalib. Date 8-2-05

Ambient Temp. 84 F. Thermometer No. PK42 Recalib. Date 8-2-05 2009-2-04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap 9 Gal. 2009-2-04

(8.7.2) Grease to be Reused YES (8.7.2) Grease in Cap Protected NH 2009-2-04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%

2009-2-04

(8.9) Unusual Conditions: NONE

2009-2-04

(8.10.1) Grease Color: Match _____ Color _____ Comment _____

(8.10.2) No Match Color Dark Brown Comment DO NOT MATCH SAMPLE 2009-2-04

(9.6) Amount of Grease Removed 1/4 Gal. - Will this be scrapped? YES NO 2009-2-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified Yes

(6.1) Location of Sample Removal GREASE CAP 2009-1-04

FILLER DATA (Continue SQ 6.0)

(10.2) Method of Tendon Protection COATED W/GREASE & CAP INSTALLED 2009-2-04

(10.3) Amount of Grease Lost 60 Gal. - Will this be scrapped? YES NO 2009-2-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) 9 + (9.6) 1/4 + SQ 7.0 (6.1) 6 + (10.3) 60 =

TOTAL GREASE LOSS 69 3/4 Gal. Post to DS 12.1 2009-2-04

QC Review Bill D. Cato Level II Date 1-26-05

A5/A459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: V66 TENDON END/BUTTRESS NO.: SNOP/TOP SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 8-31-04

Q.C.
Signoff

(7.4) Dry Ice Used on Grease Cap no, Dry Ice Used Around Anchorage no XDP-31-04

(7.5) Temp. of Concrete 70 F. Thermometer No. SM-2 Recalib. Date 8-2-05

Ambient Temp. 72 F. Thermometer No. PK42 Recalib. Date 8-2-05 XDP-31-04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap 5 1/2 Gal. XDP-31-04

(8.7.2) Grease to be Reused YES NO (8.7.2) Grease in Cap Protected N/A XDP-31-04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%

XDP-31-04

(8.9) Unusual Conditions: NONE

XDP-31-04

(8.10.1) Grease Color: Match _____ Color _____ Comment _____

(8.10.2) No Match Color DARK BROWN Comment DOES NOT MATCH SAMPLE XDP-31-04

(9.6) Amount of Grease Removed 1/4 Gal. - Will this be scrapped? YES NO XDP-31-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal ANCHORAGE ASSEMBLY XDP-31-04

FILLER DATA (Continue SQ 6.0)

COATED w/GREASE + COVERED w/PLASTIC 8-31-04

(10.2) Method of Tendon Protection COATED w/GREASE + CAP INSTALLED XDP-3-04

(10.3) Amount of Grease Lost 0 Gal. - Will this be scrapped? N/A YES NO XDP-3-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) 5 1/2 + (9.6) 1/4 + SQ 7.0 (6.1) 1/2 + (10.3) 0 =

TOTAL GREASE LOSS 6 1/4 Gal. Post to DS 12.1 XDP-3-04

QC Review Bir & Cat Level II Date 1-26-05

AG/P4159

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: V66 TENDON END/BUTTRESS NO.: FIELD/BOTTOM SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 9-2-04

Q.C.
Signoff

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO X09-2-04

(7.5) Temp. of Concrete 82 F. Thermometer No. SM-2 Recalib. Date 8-2-05

Ambient Temp. 84 F. Thermometer No. PK42 Recalib. Date 8-2-05 X09-2-04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap 8 Gal. X09-2-04

(8.7.2) Grease to be Reused YES (8.7.2) Grease in Cap Protected N/A X09-2-04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	Uncoated	<input type="checkbox"/>	‡
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	Uncoated	<input type="checkbox"/>	‡
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	Uncoated	<input type="checkbox"/>	‡
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	Uncoated	<input type="checkbox"/>	‡
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	Uncoated	<input type="checkbox"/>	‡

X09-2-04

(8.9) Unusual Conditions: _____
_____ X09-2-04

(8.10.1) Grease Color: Match _____ Color _____ Comment _____

(8.10.2) No Match Color DRK. BROWN Comment DOES NOT MATCH SAMPLE X09-2-04

(9.6) Amount of Grease Removed 1/2 Gal. - Will this be scrapped? YES NO X09-2-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified Yes

(6.1) Location of Sample Removal GREASE CAP X09-2-04

FILLER DATA (Continue SQ 6.0)

(10.2) Method of Tendon Protection COATED W/GREASE & CAP INSTALLED X09-2-04

(10.3) Amount of Grease Lost 70 Gal. - Will this be scrapped? YES NO X09-2-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) 8 + (9.6) 1/2 + SQ 7.0 (6.1) 1/2 + (10.3) 70 =

TOTAL GREASE LOSS 79 Gal. Post to DS 12.1 X09-2-04

QC Review Bib D. Cato Level II Date 1-26-05

A7/A459

PERFORMED PER TOPICAL REPORT
(T.R.) No. 136

PSC PROCEDURE SQ 6.0
GREASE CAP REMOVAL
DATA SHEET 6.0
JULY 23, 2004
PAGE 1 OF 1
REVISION 0

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: V86 TENDON END/BUTTRESS NO.: FIELD/BOTTOM SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 11-23-04

Q.C.
Signoff

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO cf. 11-23-04

(7.5) Temp. of Concrete 78 F. Thermometer No. SM-2 Recalib. Date 8-2-05

Ambient Temp. 76 F. Thermometer No. PK42 Recalib. Date 8-2-05 cf. 11-23-04

(8.7) Amount of Grease Lost N/A Gal. (8.7.1) Amount of Grease in Cap N/A Gal. cf. 11-23-04

(8.7.2) Grease to be Reused YES N/A NO (8.7.2) Grease in Cap Protected N/A cf. 11-23-04

(8.8) GREASE COATING

Grease Cap	- Complete	<u> </u>	Partial	<u> </u>	Uncoated	<u> </u>	%
Buttonheads	- Complete	<u> A </u>	Partial	<u> </u>	Uncoated	<u> </u>	%
Anchorage	- Complete	<u> N </u>	Partial	<u> </u>	Uncoated	<u> </u>	%
Shims	- Complete	<u> </u>	Partial	<u> </u>	Uncoated	<u> </u>	%
Bearing Plate	- Complete	<u> </u>	Partial	<u> </u>	Uncoated	<u> </u>	%

cf. 11-23-04

(8.9) Unusual Conditions: N/A

cf. 11-23-04

(8.10.1) Grease Color: Match Color Comment

(8.10.2) No Match ✓ Color DARKER BROWN Comment SLIGHTLY DARKER THAN NEW SAMPLE cf. 11-23-04

(9.6) Amount of Grease Removed N/A Gal. - Will this be scrapped? YES N/A NO cf. 11-23-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal DRAIN PUMP USING Y-DEVICE cf. 11-23-04

FILLER DATA (Continue SQ 6.0)

(10.2) Method of Tendon Protection N/A cf. 11-23-04

(10.3) Amount of Grease Lost N/A Gal. - Will this be scrapped? YES N/A NO cf. 11-23-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) N/A + (8.7.1) N/A + (9.6) N/A + SQ 7.0 (6.1) .50 + (10.3) N/A =

TOTAL GREASE LOSS .50 Gal. Post to DS 12.1 cf. 11-23-04

QC Review Paul P. O'Brien Level II Date 1-26-05

AB/A459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: V137 TENDON END/BUTTRESS NO.: SHOP/TOP SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 11-11-04

Q.C.
Signoff

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO 11-11-04

(7.5) Temp. of Concrete 50 F. Thermometer No. SM-2 Recalib. Date 8-2-05
Ambient Temp. 60 F. Thermometer No. PK42 Recalib. Date 8-2-05 11-11-04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap .50 Gal. 11-11-04

(8.7.2) Grease to be Reused YES (NO) (8.7.2) Grease in Cap Protected N/A 11-11-04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%

11-11-04

(8.9) Unusual Conditions: NONE 11-11-04

(8.10.1) Grease Color: Match Color BROWN Comment NONE

(8.10.2) No Match Color Comment 11-11-04

(9.6) Amount of Grease Removed 4.5 Gal. - Will this be scrapped? (YES) NO 11-11-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal ANCHORAGE 11-11-04

FILLER DATA (Continue SQ 6.0)

WRAPPED IN PLASTIC & GREASE CAP PLACED ON TOP 11-11-04

(10.2) Method of Tendon Protection CAP REPLACED ON 11-19-04 11-19-04 11-19-04

(10.3) Amount of Grease Lost 0 Gal. - Will this be scrapped? YES N/A NO 11-19-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) .50 + (9.6) 4.5 + SQ 7.0 (6.1) .50 + (10.3) 0 =

TOTAL GREASE LOSS 5.50 Gal. Post to DS 12.1 11-19-04

QC Review [Signature] Level II Date 1-26-05

A9/A459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: V137 TENDON END/BUTTRESS NO.: FIELD/BOTTOM SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 11-19-04

Q.C.
Signoff

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO cf. 11-19-04

(7.5) Temp. of Concrete 70 F. Thermometer No. SM-2 Recalib. Date 8-2-05

Ambient Temp. 70 F. Thermometer No. PK42 Recalib. Date 8-2-05 cf. 11-19-04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap 2.5 Gal. cf. 11-19-04

(8.7.2) Grease to be Reused YES (NO) (8.7.2) Grease in Cap Protected N/A cf. 11-19-04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%

cf. 11-19-04

(8.9) Unusual Conditions: NONE

cf. 11-19-04

(8.10.1) Grease Color: Match Color Comment

(8.10.2) No Match Color DARK BROWN Comment DARKER THAN NEW SAMPLE

cf. 11-19-04

(9.6) Amount of Grease Removed .25 Gal. - Will this be scrapped? (YES) NO cf. 11-19-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal GREASE CAP cf. 11-19-04

FILLER DATA (Continue SQ 6.0)

(10.2) Method of Tendon Protection GREASE CAP REPLACED ON 11-19-04 cf. 11-19-04

(10.3) Amount of Grease Lost 32.5 Gal. - Will this be scrapped? (YES) NO cf. 11-24-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) 12.5 + (9.6) .25 + SQ 7.0 (6.1) .50 + (10.3) 32.5 =

TOTAL GREASE LOSS 45.75 Gal. Post to DS 12.1

cf. 11-24-04

(10.3) 1 GAL. 11-4-04, (10.3) 3 GAL. 11-16-04, (10.3) 3 GAL. 11-16-04, (10.3) 2S GAL. 11-17-04, (10.3) .5 GAL. 11-18-04

QC Review [Signature] Level II Date 1-26-05

A10/A459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: V140 TENDON END/BUTTRESS NO.: Shor/Top SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 8-31-04

Q.C. Signoff

(7.4) Dry Ice Used on Grease Cap in, Dry Ice Used Around Anchorage no 8/31/04

(7.5) Temp. of Concrete 70 F. Thermometer No. 5M-2 Recalib. Date 8-2-05

Ambient Temp. 72 F. Thermometer No. PK42 Recalib. Date 8-2-05 8/31/04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap 5 1/2 Gal. 8/31/04

(8.7.2) Grease to be Reused YES NO (8.7.2) Grease in Cap Protected N/A 8/31/04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%

8/31/04

(8.9) Unusual Conditions: none

8/31/04

(8.10.1) Grease Color: Match Color Comment

(8.10.2) No Match Color Dark Brown Comment Does not match sample 8/31/04

(9.6) Amount of Grease Removed 1/4 Gal. - Will this be scrapped? YES NO 8/31/04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal ANCHORAGE ASSEMBLY 8/31/04

FILLER DATA (Continue SQ 6.0)

Coated w/grease + covered w/plastic 8/31/04, 9/9/04

(10.2) Method of Tendon Protection Coated w/grease + cap installed 8/9/04

(10.3) Amount of Grease Lost 0 Gal. - Will this be scrapped? N/A YES NO 8/9/04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) 5 1/2 + (9.6) 1/4 + SQ 7.0 (6.1) 1/2 + (10.3) 0 =

TOTAL GREASE LOSS 6 1/4 Gal. Post to DS 12.1 8/9/04

QC Review B. V. C. Cate Level II Date 1-26-05

A11/A459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: V140 TENDON END/BUTTRESS NO.: FIELD/BOTTOM SURVEILLANCE YEAR: 30TH

Q.C.
Signoff

FILLER DATA

Date Removal Started 9-2-04

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO 2009-2-04

(7.5) Temp. of Concrete 80 F. Thermometer No. SM-2 Recalib. Date 8-2-05

Ambient Temp. 82 F. Thermometer No. PK42 Recalib. Date 8-2-05 2009-2-04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap 10 Gal. 2009-2-04

(8.7.2) Grease to be Reused YES (8.7.2) Grease in Cap Protected N/A 2009-2-04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%

2009-2-04

(8.9) Unusual Conditions: NONE

2009-2-04

(8.10.1) Grease Color: Match Color Comment

(8.10.2) No Match Color DARK BROWN Comment YES WITH HIGH SAMPLE 2009-2-04

(9.6) Amount of Grease Removed 1/4 Gal. - Will this be scrapped? YES NO 2009-2-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal GREASE CAP 2009-2-04

FILLER DATA (Continue SQ 6.0)

(10.2) Method of Tendon Protection COATED W/ GREASE CAP TEMP. INSTALLED 2009-2-04
COATED W/ GREASE CAP INSTALLED. 2009-10-04
52GM. 2009-2-04, 15 GAL. 9-9-04

(10.3) Amount of Grease Lost 67 Gal. - Will this be scrapped? YES NO 2009-10-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) 10 + (9.6) 1/4 + SQ 7.0 (6.1) 1/2 + (10.3) 67 =

TOTAL GREASE LOSS 77 3/4 Gal. Post to DS 12.1 2009-10-04

QC Review Bill & Ceb Level II Date 1-26-05

A12/A459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: V141 TENDON END/BUTTRESS NO.: SHOP/TOP SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 11-11-04

Q.C.
Signoff

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO 2/11-11-04

(7.5) Temp. of Concrete 50 F. Thermometer No. SM-2 Recalib. Date 8-2-05

Ambient Temp. 55 F. Thermometer No. PK42 Recalib. Date 8-2-05 2/11-11-04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap .25 Gal. 2/11-11-04

(8.7.2) Grease to be Reused YES (8.7.2) Grease in Cap Protected N/A 2/11-11-04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%

2/11-11-04

(8.9) Unusual Conditions: NONE

2/11-11-04

(8.10.1) Grease Color: Match Color BROWN Comment NONE

(8.10.2) No Match Color Comment

2/11-11-04

(9.6) Amount of Grease Removed 4.5 Gal. - Will this be scrapped? YES NO

2/11-11-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal ANCHORAGE 2/11-11-04

FILLER DATA (Continue SQ 6.0)

WRAPPED IN PLASTIC ! GREASE CAP PLACED ON TOP 2/11-11-04

(10.2) Method of Tendon Protection GREASE CAP REPLACED ON 11-19-04 2/11-19-04

(10.3) Amount of Grease Lost 0 Gal. - Will this be scrapped? YES / NO 2/11-19-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) .25 + (9.6) 4.5 + SQ 7.0 (6.1) .50 + (10.3) 0 =

TOTAL GREASE LOSS 5.25 Gal. Post to DS 12.1 2/11-19-04

QC Review [Signature] Level II Date 1-26-05

A13/A459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: V141 TENDON END/BUTTRESS NO.: FIELD/BOTTOM SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 11-17-04

Q.C.
Signoff

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO cf. 11-17-04

(7.5) Temp. of Concrete 70 F. Thermometer No. SM-2 Recalib. Date 8-2-05

Ambient Temp. 70 F. Thermometer No. PK42 Recalib. Date 8-2-05 cf. 11-17-04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap 10.0 Gal. cf. 11-17-04

(8.7.2) Grease to be Reused YES (NO) (8.7.2) Grease in Cap Protected N/A cf. 11-17-04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	Uncoated	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	Uncoated	%
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	Uncoated	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	Uncoated	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	Uncoated	%

cf. 11-17-04

(8.9) Unusual Conditions: NONE

cf. 11-17-04

(8.10.1) Grease Color: Match Color Comment

(8.10.2) No Match Color DARK BROWN Comment DARKER THAN NEW SAMPLE

cf. 11-17-04

(9.6) Amount of Grease Removed .25 Gal. - Will this be scrapped? YES NO cf. 11-17-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal GREASE CAP

cf. 11-17-04

FILLER DATA (Continue SQ 6.0)

(10.2) Method of Tendon Protection GREASE CAP REPLACED ON 11-19-04 cf. 11-19-04

(10.3) Amount of Grease Lost 44 Gal. - Will this be scrapped? YES NO cf. 11-23-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) 10.0 + (9.6) .25 + SQ 7.0 (6.1) .50 + (10.3) 44 =

TOTAL GREASE LOSS 54.75 Gal. Post to DS 12.1

cf. 11-23-04

(10.3) 3 GAL. 11-4-04, (10.3) 7 GAL. 11-12-04, (10.3) 4 GAL. 11-16-04, (10.3) 25 GAL. 11-17-04
(10.3) 5 GAL. 11-18-04, (10.3) 11-19-04

QC Review [Signature] Level II Date 1-26-05

A14/A459

PERFORMED PER TOPICAL REPORT
(T.R.) No. 136

PSC PROCEDURE SQ 6.0
GREASE CAP REMOVAL
DATA SHEET 6.0
JULY 23, 2004
PAGE 1 OF 1
REVISION 0

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: V164 TENDON END/BUTTRESS NO.: FIELD/BOTTOM SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 11-23-04

Q.C.
Signoff

- (7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage. NO ✓ 11-23-04
- (7.5) Temp. of Concrete 78 F. Thermometer No. SM-2 Recalib. Date 8-2-05
- Ambient Temp. 78 F. Thermometer No. PK42 Recalib. Date 8-2-05 ✓ 11-23-04
- (8.7) Amount of Grease Lost N/A Gal. (8.7.1) Amount of Grease in Cap N/A Gal. ✓ 11-23-04
- (8.7.2) Grease to be Reused YES N/A NO (8.7.2) Grease in Cap Protected N/A ✓ 11-23-04

(8.8) GREASE COATING

Grease Cap	- Complete	_____	Partial	_____	Uncoated	_____	%
Buttonheads	- Complete	_____	Partial	_____	Uncoated	_____	%
Anchorage	- Complete	<u>N</u>	Partial	_____	Uncoated	_____	%
Shims	- Complete	<u>A</u>	Partial	_____	Uncoated	_____	%
Bearing Plate	- Complete	_____	Partial	_____	Uncoated	_____	%

✓ 11-23-04

(8.9) Unusual Conditions: N/A

✓ 11-23-04

(8.10.1) Grease Color: Match _____ Color _____ Comment _____

(8.10.2) No Match Color DARKER BROWN Comment SLIGHTLY DARKER THAN NEW SAMPLE ✓ 11-23-04

(9.6) Amount of Grease Removed N/A Gal. - Will this be scrapped? YES N/A NO ✓ 11-23-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal DRAIN PLUG USING Y-DEVICE ✓ 11-23-04

FILLER DATA (Continue SQ 6.0)

(10.2) Method of Tendon Protection N/A ✓ 11-23-04

(10.3) Amount of Grease Lost N/A Gal. - Will this be scrapped? YES N/A NO ✓ 11-23-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) N/A + (8.7.1) N/A + (9.6) N/A + SQ 7.0 (6.1) .50 + (10.3) N/A =

TOTAL GREASE LOSS .50 Gal. Post to DS 12.1 ✓ 11-23-04

QC Review Paul P. O'Neil Level II Date 1-26-05

A15/A459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: H13-11 TENDON END/BUTTRESS NO.: SHOP / BUTT #1 SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 11-4-04

Q.C.
 Signoff

- (7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO ✓ 11-4-04
- (7.5) Temp. of Concrete 75 F. Thermometer No. SM-2 Recalib. Date 8-2-05
- Ambient Temp. 80 F. Thermometer No. PK42 Recalib. Date 8-2-05 ✓ 11-4-04
- (8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap 7.0 Gal. ✓ 11-4-04
- (8.7.2) Grease to be Reused YES NO (8.7.2) Grease in Cap Protected N/A ✓ 11-4-04

(8.8) GREASE COATING

Grease Cap	- Complete	<u>✓</u>	Partial	_____	Uncoated	_____	%
Buttonheads	- Complete	<u>✓</u>	Partial	_____	Uncoated	_____	%
Anchorage	- Complete	<u>✓</u>	Partial	_____	Uncoated	_____	%
Shims	- Complete	<u>✓</u>	Partial	_____	Uncoated	_____	%
Bearing Plate	- Complete	<u>✓</u>	Partial	_____	Uncoated	_____	%

✓ 11-4-04

(8.9) Unusual Conditions: NONE

✓ 11-4-04

(8.10.1) Grease Color: Match _____ Color _____ Comment _____

(8.10.2) No Match ✓ Color DARK BROWN Comment _____

✓ 11-4-04

(9.6) Amount of Grease Removed .25 Gal. - Will this be scrapped? YES NO

✓ 11-4-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal GREASE CAP

✓ 11-4-04

FILLER DATA (Continue SQ 6.0)

COATED w/ GREASE & CAP REINSTALLED ✓ 11-4-04

(10.2) Method of Tendon Protection GREASE CAP REPLACED ON 11-20-04 ✓ 11-20-04

✓ 11-20-04

(10.3) Amount of Grease Lost 0 Gal. - Will this be scrapped? YES N/A NO

✓ 11-20-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) 7.0 + (9.6) .25 + SQ 7.0 (6.1) .50 + (10.3) 0 =

TOTAL GREASE LOSS 7.75 Gal. Post to DS 12.1

✓ 11-20-04

QC Review [Signature] Level II Date 1-26-05

A10/A459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: H13-11 TENDON END/BUTTRESS NO.: FIELD/ BUTT. #3 SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 11-12-04

Q.C. Signoff

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO ✓ 11-12-04

(7.5) Temp. of Concrete 70 F. Thermometer No. SM-2 Recalib. Date 8-2-05

Ambient Temp. 70 F. Thermometer No. PK42 Recalib. Date 8-2-05 ✓ 11-12-04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap 6.5 Gal. ✓ 11-12-04

(8.7.2) Grease to be Reused YES (8.7.2) Grease in Cap Protected N/A ✓ 11-12-04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%

✓ 11-12-04

(8.9) Unusual Conditions: NONE

✓ 11-12-04

(8.10.1) Grease Color: Match _____ Color _____ Comment _____

(8.10.2) No Match Color DARK BROWN Comment DARKER THAN NEW SAMPLE ✓ 11-12-04

(9.6) Amount of Grease Removed .25 Gal. - Will this be scrapped? YES NO ✓ 11-12-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal GREASE CAP ✓ 11-12-04

FILLER DATA (Continue SQ 6.0)

COATED w/ GREASE & WRAPPED w/ PLASTIC ✓ 11-12-04

(10.2) Method of Tendon Protection GREASE CAP REPLACED ON 11-22-04 ✓ 11-22-04

(10.3) Amount of Grease Lost 0 Gal. - Will this be scrapped? YES N/A NO ✓ 11-22-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) 6.5 + (9.6) .25 + SQ 7.0 (6.1) .50 + (10.3) 0 =

TOTAL GREASE LOSS 7.25 Gal. Post to DS 12.1 ✓ 11-22-04

QC Review David P. O'Brien Level II Date 1-26-05

A17/A459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO. #35-49 TENDON END/BUTTRESS NO.: SHOT/BUTT.5 SURVEILLANCE YEAR: 30TH

Q.C.
 Signoff

FILLER DATA

Date Removal Started 9-16-04

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO 9/16/04

(7.5) Temp. of Concrete 76 F. Thermometer No. SM-2 Recalib. Date 8-2-05

Ambient Temp. 72 F. Thermometer No. PK42 Recalib. Date 8-2-05 9/16/04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap 6 Gal. 9/16/04

(8.7.2) Grease to be Reused YES (8.7.2) Grease in Cap Protected N/A 9/16/04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%

9/16/04

(8.9) Unusual Conditions: NONE

9/16/04

(8.10.1) Grease Color: Match _____ Color _____ Comment _____

(8.10.2) No Match Color DARK BROWN Comment DOES NOT MATCH SAMPLE 9/16/04

(9.6) Amount of Grease Removed 1/4 Gal. - Will this be scrapped? YES NO 9/16/04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal ANCHORAGE ASSEMBLY 9/16/04

FILLER DATA (Continue SQ 6.0)

(10.2) Method of Tendon Protection COATED W/ GREASE & CAP INSTALLED 9/16/04

(10.3) Amount of Grease Lost 0 Gal. - Will this be scrapped? YES NO 9/16/04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) 6 + (9.6) 1/4 + SQ 7.0 (6.1) 1/2 + (10.3) 0 =

TOTAL GREASE LOSS 6 3/4 Gal. Post to DS 12.1 9/16/04

QC Review Bios. Cota Level II Date 1-26-05

A10/A459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: H35-19 TENDON END/BUTTRESS NO.: Field/Butt. SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 9-15-04

Q.C.
 Signoff

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO 9/15/04

(7.5) Temp. of Concrete 79 F. Thermometer No. SM-2 Recalib. Date 8-2-05
 Ambient Temp. 74 F. Thermometer No. PK42 Recalib. Date 8-2-05 9/15/04

(8.7) Amount of Grease Lost 1 Gal. (8.7.1) Amount of Grease in Cap 4 Gal. 9/15/04

(8.7.2) Grease to be Reused YES NO (8.7.2) Grease in Cap Protected N/A 9/15/04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%

9/15/04

(8.9) Unusual Conditions: NONE

9/15/04

(8.10.1) Grease Color: Match Color Comment

(8.10.2) No Match Color DARK BROWN Comment DOES NOT MATCH SAMPLE 9/15/04

(9.6) Amount of Grease Removed 1/4 Gal. - Will this be scrapped? YES NO 9/15/04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal GREASE CAP 9/15/04

FILLER DATA (Continue SQ 6.0)

(10.2) Method of Tendon Protection Coated with Grease & Cap Installed 9/15/04

(10.3) Amount of Grease Lost 0 Gal. - Will this be scrapped? N/A YES NO 9/15/04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 1 + (8.7.1) 4 + (9.6) 1/4 + SQ 7.0 (6.1) 1/2 + (10.3) 0 =

TOTAL GREASE LOSS 5 3/4 Gal. Post to DS 12.1

9/15/04

QC Review Bil & Gte Level II Date 1-26-05

A19/A459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: H46-25 TENDON END/BUTTRESS NO.: SHOP / BUTT. 6 SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 11-5-04

Q.C.
 Signoff

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO 11-5-04

(7.5) Temp. of Concrete 60 F. Thermometer No. SM-2 Recalib. Date 8-2-05
 Ambient Temp. 50 F. Thermometer No. PK42 Recalib. Date 8-2-05 11-5-04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap 7 Gal. 11-5-04

(8.7.2) Grease to be Reused YES NO (8.7.2) Grease in Cap Protected N/A 11-5-04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%

11-5-04

(8.9) Unusual Conditions: NONE 11-5-04

(8.10.1) Grease Color: Match Color BROWN Comment NONE

(8.10.2) No Match Color _____ Comment _____ 11-5-04

(9.6) Amount of Grease Removed .50 Gal. - Will this be scrapped? YES NO 11-5-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal ANCHORAGE & CAP 11-5-04

FILLER DATA (Continue SQ 6.0)

(10.2) Method of Tendon Protection COATED w/ GREASE & CAP REINSTALLED. 11-5-04
GREASE CAP REPLACED ON 11-10-04 11-10-04 11-10-04

(10.3) Amount of Grease Lost 0 Gal. - Will this be scrapped? YES N/A NO 11-9-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) 7 + (9.6) 1/2 + SQ 7.0 (6.1) 2 + (10.3) 8.0 =

TOTAL GREASE LOSS 8.0 Gal. Post to DS 12.1 11-9-04

QC Review David P. O'Brien Level II Date 1-20-05

A20/A459

PROJECT: TMI UNIT 1 DATE: 11-5-04

TENDON NO.: 146-25 TENDON END/BUTTRESS NO.: SHOP / BUTT. 6 SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes No ¹¹⁻⁵⁻⁰⁴ Quantity N/A Sample Taken Yes ^{N/A} NO
Comments NONE

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes No ¹¹⁻⁵⁻⁰⁴ Quantity N/A Sample Taken Yes ^{N/A} NO
Comments NONE

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes No ¹¹⁻⁵⁻⁰⁴ Quantity N/A Sample Taken Yes ^{N/A} NO
Comments NONE

(9.10) DURING DETENSIONING

(9.10.1) Water Detected Yes No ¹¹⁻⁵⁻⁰⁴ Quantity N/A Sample Taken Yes ^{N/A} NO
Comments NONE

(11.) OWNER/AGENT NOTIFIED Yes ^{N/A} No Date N/A

CONDITION: OBSERVABLE N/A SIGNIFICANT N/A

(12.1) SAMPLES ADEQUATELY IDENTIFIED Yes ^{N/A} NO

(12.2) SAMPLES STORED AT N/A

QC Signoff [Signature] Level II Date 11-10-04

Review [Signature] Level II Date 1-27-05

A21/A459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: H46.25 TENDON END/BUTTRESS NO.: FIELD/BUTT. 4 SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 11-8-04

Q.C.
Signoff

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO cf. 11-8-04

(7.5) Temp. of Concrete 45 F. Thermometer No. SM-2 Recalib. Date 8-2-05

Ambient Temp. 45 F. Thermometer No. PK42 Recalib. Date 8-2-05 cf. 11-8-04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap 7.5 Gal. cf. 11-8-04

(8.7.2) Grease to be Reused YES NO (8.7.2) Grease in Cap Protected N/A cf. 11-8-04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%

cf. 11-8-04

(8.9) Unusual Conditions: NONE cf. 11-8-04

(8.10.1) Grease Color: Match Color BROWN Comment NONE

(8.10.2) No Match Color Comment cf. 11-8-04

(9.6) Amount of Grease Removed .25 Gal. - Will this be scrapped? YES NO cf. 11-8-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal ANCHORAGE & GREASE CAP cf. 11-8-04

FILLER DATA (Continue SQ 6.0)

COATED w/ GREASE & CAP REPLACED. cf. 11-8-04

(10.2) Method of Tendon Protection GREASE CAP REPLACED ON 11-10-04 cf. 11-10-04

(10.3) Amount of Grease Lost 0 Gal. - Will this be scrapped? YES N/A NO cf. 11-10-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) 7.5 + (9.6) .25 + SQ 7.0 (6.1) .50 + (10.3) 0 =

TOTAL GREASE LOSS 8.25 Gal. Post to DS 12.1 cf. 11-10-04

QC Review [Signature] Level II Date 1-26-05

A22/A459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: H62-18 TENDON END/BUTTRESS NO.: SHOP/BUTT. 6 SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 11-5-04

Q.C.
Signoff

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO ✓ 11-5-04

(7.5) Temp. of Concrete 60 F. Thermometer No. SM-2 Recalib. Date 8-2-05

Ambient Temp. 50 F. Thermometer No. PK42 Recalib. Date 8-2-05 ✓ 11-5-04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap 7.5 Gal. ✓ 11-5-04

(8.7.2) Grease to be Reused YES NO (8.7.2) Grease in Cap Protected N/A ✓ 11-5-04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	Uncoated	_____	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	Uncoated	_____	%
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	Uncoated	_____	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	Uncoated	_____	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	Uncoated	_____	%

✓ 11-5-04

(8.9) Unusual Conditions: NONE ✓ 11-5-04

(8.10.1) Grease Color: Match _____ Color _____ Comment _____

(8.10.2) No Match Color DARK BROWN Comment DARKER THAN NEW SAMPLE ✓ 11-5-04

(9.6) Amount of Grease Removed .50 Gal. - Will this be scrapped? YES NO ✓ 11-5-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal ANCHORAGE & CAP ✓ 11-5-04

FILLER DATA (Continue SQ 6.0)

COATED W/ GREASE & CAP REINSTALLED. 11-8-04

(10.2) Method of Tendon Protection CAP REPLACED ON 11-8-04 ✓ 11-8-04

(10.3) Amount of Grease Lost 0 Gal. - Will this be scrapped? YES N/A NO ✓ 11-8-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) 7.50 + (9.6) .50 + SQ 7.0 (6.1) .50 + (10.3) 0 =

TOTAL GREASE LOSS 8.50 Gal. Post to DS 12.1 ✓ 11-8-04

QC Review [Signature] Level II Date 1-26-05

A23/A459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: H 62-18 TENDON END/BUTTRESS NO.: Field/Butt. 2 SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 11-2-04

Q.C.
 Signoff

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO cf. 11-2-04

(7.5) Temp. of Concrete 70 F. Thermometer No. SM-2 Recalib. Date 8-2-05

Ambient Temp. 70 F. Thermometer No. PK42 Recalib. Date 8-2-05 cf. 11-2-04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap 7 Gal. cf. 11-2-04

(8.7.2) Grease to be Reused YES NO (8.7.2) Grease in Cap Protected H/A cf. 11-2-04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%

cf. 11-2-04

(8.9) Unusual Conditions: NONE

cf. 11-2-04

(8.10.1) Grease Color: Match N/A Color N/A Comment N/A

(8.10.2) No Match Color DARK BROWN Comment DARKER THAN NEW SAMPLE

cf. 11-2-04

(9.6) Amount of Grease Removed .50 Gal. - Will this be scrapped? YES NO cf. 11-2-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal ANCHORAGE 9' CAP cf. 11-2-04

FILLER DATA (Continue SQ 6.0)

(10.2) Method of Tendon Protection COATED w/ GREASE & WRAPPED IN PLASTIC. CAP REPLACED ON 11-3-04 cf. 11-3-04

(10.3) Amount of Grease Lost 0 Gal. - Will this be scrapped? YES N/A NO cf. 11-3-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) 7 + (9.6) .50 + SQ 7.0 (6.1) .50 + (10.3) 0 =

TOTAL GREASE LOSS 8.0 Gal. Post to DS 12.1 cf. 11-3-04

QC Review [Signature] Level II Date 1-26-05

A24/A459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: H62-26 TENDON END/BUTTRESS NO.: Skop/Butt.6 SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 9-22-04

Q.C.
 Signoff

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO 9/29/22-04

(7.5) Temp. of Concrete 82 F. Thermometer No. SM-2 Recalib. Date 8-2-05
 Ambient Temp. 84 F. Thermometer No. PK42 Recalib. Date 8-2-05 9/29/22-04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap 6 Gal. 9/29/22-04

(8.7.2) Grease to be Reused YES (8.7.2) Grease in Cap Protected N/A 9/29/22-04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%

9/29/22-04

(8.9) Unusual Conditions: NONE

9/29/22-04

(8.10.1) Grease Color: Match Color BROWN Comment Matched Sample

(8.10.2) No Match _____ Color _____ Comment _____

9/29/22-04

(9.6) Amount of Grease Removed 1/4 Gal. - Will this be scrapped? YES NO 9/29/22-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal AVENUE OF GREASE CAP 9/29/22-04

FILLER DATA (Continue SQ 6.0)

(10.2) Method of Tendon Protection COATED W/ GREASE & CAP INSTALLED 9/29/22-04

(10.3) Amount of Grease Lost 0 Gal. - Will this be scrapped? N/A YES NO 9/29/22-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) 6 + (9.6) 1/4 + SQ 7.0 (6.1) 6 + (10.3) 0 =

TOTAL GREASE LOSS 6 3/4 Gal. Post to DS 12.1 9/29/22-04

QC Review BID 26 Level II Date 1-26-05

A25/A459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: A12-26 TENDON END/BUTTRESS NO.: FIELD/BUTT-2 SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 9-27-04

Q.C.
Signoff

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO 24.9.27.04

(7.5) Temp. of Concrete 80 F. Thermometer No. SM-2 Recalib. Date 8-2-05

Ambient Temp. 78 F. Thermometer No. PK42 Recalib. Date 8-2-05 24.9.27.04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap 6 Gal. 24.9.27.04

(8.7.2) Grease to be Reused YES (8.7.2) Grease in Cap Protected N/A 24.9.27.04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%

24.9.27.04

(8.9) Unusual Conditions: NONE

24.9.27.04

(8.10.1) Grease Color: Match Color BROWN Comment MATCHES SAMPLE

(8.10.2) No Match Color Comment

24.9.27.04

(9.6) Amount of Grease Removed 1/4 Gal. - Will this be scrapped? YES NO 24.9.27.04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal ANCHORAGE + GREASE CAP 24.9.27.04

FILLER DATA (Continue SQ 6.0)

(10.2) Method of Tendon Protection COATED w/ GREASE + CAP INSTALLED 24.9.27.04

COVERED w/ GREASE + PLASTIC WRAPPED 24.9.27.04

(10.3) Amount of Grease Lost 0 Gal. - Will this be scrapped? N/A YES NO 24.9.27.04

0 24.9.27.04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) 6 + (9.6) 1/4 + SQ 7.0 (6.1) 1/2 + (10.3) 0 =

TOTAL GREASE LOSS 6 3/4 Gal. Post to DS 12.1 24.9.27.04

QC Review [Signature] Level II Date 1-26-04

A26/A459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: D-213 TENDON END/BUTTRESS NO.: SHDR / NW SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 9-13-04

Q.C.
 Signoff

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO 2809-13-04

(7.5) Temp. of Concrete 62 F. Thermometer No. SM-2 Recalib. Date 8-2-05

Ambient Temp. 60 F. Thermometer No. PK 42 Recalib. Date 8-2-05 2809-13-04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap 5 Gal. 2809-13-04

(8.7.2) Grease to be Reused YES NO (8.7.2) Grease in Cap Protected N/A 2809-13-04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%

2809-13-04

(8.9) Unusual Conditions: NONE

2809-13-04

(8.10.1) Grease Color: Match Color Comment

(8.10.2) No Match Color DK BROWN Comment DOES NOT MATCH SAMPLE 2809-13-04

(9.6) Amount of Grease Removed 1/4 Gal. - Will this be scrapped? YES NO 2809-13-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal GREASE CAP 2809-13-04

FILLER DATA (Continue SQ 6.0)

(10.2) Method of Tendon Protection COATED W/GRANULET CAP NUTS 2809-13-04

(10.3) Amount of Grease Lost 32 Gal. - Will this be scrapped? YES NO 2809-13-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) 5 + (9.6) 1/4 + SQ 7.0 (6.1) 1/2 + (10.3) 32 =

TOTAL GREASE LOSS 37 3/4 Gal. Post to DS 12.1 2809-13-04

QC Review Bill D. Gts Level II Date 1-26-05

A27/A459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: D-213 TENDON END/BUTTRESS NO.: FIELD/SE SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 9-11-04

Q.C.
 Signoff

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO X209-11-04

(7.5) Temp. of Concrete 78 F. Thermometer No. SM-2 Recalib. Date 8-2-05

Ambient Temp. 76 F. Thermometer No. PK42 Recalib. Date 8-2-05 X209-11-04

(8.7) Amount of Grease Lost 14 Gal. (8.7.1) Amount of Grease in Cap 5 Gal. X209-11-04

(8.7.2) Grease to be Reused YES (8.7.2) Grease in Cap Protected N/A X209-11-04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	_____	Uncoated	_____	%

X209-11-04

(8.9) Unusual Conditions: NONE

X209-11-04

(8.10.1) Grease Color: Match _____ Color _____ Comment _____

(8.10.2) No Match Color DARK BROWN Comment DIFFERENT MATCH SAMPLE X209-11-04

(9.6) Amount of Grease Removed 14 Gal. - Will this be scrapped? YES NO X209-11-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal ANCHORAGE & GREASE CAP X209-11-04

FILLER DATA (Continue SQ 6.0)

(10.2) Method of Tendon Protection COATED W/ GREASE & CAP INSTALLED X209-11-04

(10.3) Amount of Grease Lost 11 Gal. - Will this be scrapped? YES NO X209-11-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 14 + (8.7.1) 5 + (9.6) 14 + SQ 7.0 (6.1) 12 + (10.3) 11 =

TOTAL GREASE LOSS 17 Gal. Post to DS 12.1 X209-11-04

QC Review Bic & Cdo Level II Date 1-26-05

ABB/A459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: D-225 TENDON END/BUTTRESS NO.: SHOP/RW SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 9-14-04

Q.C.
 Signoff

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO X09-14-04

(7.5) Temp. of Concrete 78 F. Thermometer No. SM-2 Recalib. Date 8-2-05

Ambient Temp. 74 F. Thermometer No. PK42 Recalib. Date 8-2-05 X09-14-04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap 5 1/2 Gal. X09-14-04

(8.7.2) Grease to be Reused - YES NO (8.7.2) Grease in Cap Protected n/a X09-14-04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%

X09-14-04

(8.9) Unusual Conditions: none

X09-14-04

(8.10.1) Grease Color: Match Color BROWN Comment HATCHES SAMPLE

(8.10.2) No Match Color _____ Comment _____

X09-14-04

(9.6) Amount of Grease Removed 1/4 Gal. - Will this be scrapped? YES NO

X09-14-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal ANCHORAGE ASSEMBLY

X09-14-04

FILLER DATA (Continue SQ 6.0)

(10.2) Method of Tendon Protection COATED w/ GREASE & CAP INSTALLED

X09-14-04

(10.3) Amount of Grease Lost 0 Gal. - Will this be scrapped? n/a YES NO

X09-14-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(R.7) 0 + (8.7.1) 5 1/2 + (9.6) 1/4 + SQ 7.0 (6.1) 1/2 + (10.3) 0 =

TOTAL GREASE LOSS 6 1/4 Gal. Post to DS 12.1

X09-14-04

QC Review [Signature] Level II Date 1-26-05

A29/A459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: D-225 TENDON END/BUTTRESS NO.: FIELD / SW SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 9-14-04

Q.C.
Signoff

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO 2009-11-04

(7.5) Temp. of Concrete 78 F. Thermometer No. SM-2 Recalib. Date 8-2-05

Ambient Temp. 74 F. Thermometer No. PK42 Recalib. Date 8-2-05 2009-11-04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap 6 1/2 Gal. 2009-11-04

(8.7.2) Grease to be Reused YES NO (8.7.2) Grease in Cap Protected N/A 2009-11-04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%

2009-11-04

(8.9) Unusual Conditions: NONE

2009-11-04

(8.10.1) Grease Color: Match Color BROWN Comment MATCHES SAMPLE

(8.10.2) No Match Color _____ Comment _____

2009-11-04

(9.6) Amount of Grease Removed 1/4 Gal. - Will this be scrapped? YES NO 2009-11-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal ANCHORAGE ASSEMBLY

2009-11-04

FILLER DATA (Continue SQ 6.0)

(10.2) Method of Tendon Protection COATED W/ GREASE & CAP INSTALLED

2009-11-04

(10.3) Amount of Grease Lost 0 Gal. - Will this be scrapped? N/A YES NO 2009-11-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) 6 1/2 + (9.6) 1/4 + SQ 7.0 (6.1) 1/2 + (10.3) 0 =

2009-11-04

TOTAL GREASE LOSS 7 1/4 Gal. Post to DS 12.1

2009-11-04

QC Review [Signature] Level II Date 1-26-05

A30/A459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: D-230 TENDON END/BUTTRESS NO.: SNOP/BUTT. 5 ^{HEAR} SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 11-11-04

Q.C.
Signoff

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO 11-11-04

(7.5) Temp. of Concrete 45 F. Thermometer No. SM-2 Recalib. Date 8-2-05
Ambient Temp. 45 F. Thermometer No. PK42 Recalib. Date 8-2-05 11-11-04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap 6.5 Gal. 11-11-04

(8.7.2) Grease to be Reused YES (NO) (8.7.2) Grease in Cap Protected H/A 11-11-04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%

11-11-04

(8.9) Unusual Conditions: NONE

11-11-04

(8.10.1) Grease Color: Match Color BROWN Comment NONE

(8.10.2) No Match Color Comment

11-11-04

(9.6) Amount of Grease Removed .25 Gal. - Will this be scrapped? (YES) NO 11-11-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal GREASE CAP 11-11-04

11-11-04

FILLER DATA (Continue SQ 6.0)

RAM COUPLED & WRAPPED IN PLASTIC. 11-11-04

(10.2) Method of Tendon Protection CAP REPLACED ON 11-16-04. 11-16-04 11-16-04

11-16-04

(10.3) Amount of Grease Lost 8.5 Gal. - Will this be scrapped? YES NO 11-16-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) 6.5 + (9.6) .25 + SQ 7.0 (6.1) .50 + (10.3) 8.5 =

TOTAL GREASE LOSS 15.75 Gal. Post to DS 12.1 11-16-04

11-16-04

(10.3) 6.0 GALS 11-12-04

2.0 11-13-04 .5 11-16-04

QC Review [Signature] Level II Date 1-26-05

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: D-230 TENDON END/BUTTRESS NO.: FIELD / NEAR BUTT. 3 SURVEILLANCE YEAR: 30TH

FILLER DATA Date Removal Started 11-11-04 Q.C. Signoff

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO cf. 11-11-04

(7.5) Temp. of Concrete 45 F. Thermometer No. SM-2 Recalib. Date 8-2-05

Ambient Temp. 45 F. Thermometer No. PK42 Recalib. Date 8-2-05 cf. 11-11-04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap 6.5 Gal. cf. 11-11-04

(8.7.2) Grease to be Reused YES (NO) (8.7.2) Grease in Cap Protected n/a cf. 11-11-04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	Uncoated	_____ %
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	Uncoated	_____ %
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	Uncoated	_____ %
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	Uncoated	_____ %
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	Uncoated	_____ %

cf. 11-11-04

(8.9) Unusual Conditions: NONE cf. 11-11-04

(8.10.1) Grease Color: Match Color BROWN Comment NONE

(8.10.2) No Match _____ Color _____ Comment _____ cf. 11-11-04

(9.6) Amount of Grease Removed .25 Gal. - Will this be scrapped? (YES) NO cf. 11-11-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal GREASE CAP cf. 11-11-04

FILLER DATA (Continue SQ 6.0) RAM COUPLED & WRAPPED IN PLASTIC. 11-11-04
 (10.2) Method of Tendon Protection CAP REPLACED ON 11-16-04. 11-16-04 cf. 11-16-04

(10.3) Amount of Grease Lost 0 Gal. - Will this be scrapped? YES n/a NO cf. 11-16-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) 6.5 + (9.6) .25 + SQ 7.0 (6.1) .50 + (10.3) 0 =
 TOTAL GREASE LOSS 7.25 Gal. Post to DS 12.1 cf. 11-16-04

QC Review [Signature] Level II Date 1-26-05

A32/P459

PROJECT: THREE MILE ISLAND UNIT 1

TENDON NO.: D342 TENDON END/BUTTRESS NO.: FIELD/NEAR BUTT. 4 SURVEILLANCE YEAR: 30TH

FILLER DATA

Date Removal Started 11-3-04

Q.C.
Signoff

(7.4) Dry Ice Used on Grease Cap NO, Dry Ice Used Around Anchorage NO 2/11-3-04

(7.5) Temp. of Concrete 75 F. Thermometer No. SM-2 Recalib. Date 8-2-05

Ambient Temp. 60 F. Thermometer No. PK42 Recalib. Date 8-2-05 2/11-3-04

(8.7) Amount of Grease Lost 0 Gal. (8.7.1) Amount of Grease in Cap 7.5 Gal. 2/11-3-04

(8.7.2) Grease to be Reused YES NO (8.7.2) Grease in Cap Protected N/A 2/11-3-04

(8.8) GREASE COATING

Grease Cap	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Buttonheads	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Anchorage	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Shims	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%
Bearing Plate	- Complete	<input checked="" type="checkbox"/>	Partial	<input type="checkbox"/>	Uncoated	<input type="checkbox"/>	%

2/11-3-04

(8.9) Unusual Conditions: NONE

2/11-3-04

(8.10.1) Grease Color: Match N/A Color N/A Comment N/A

(8.10.2) No Match Color DARK BROWN Comment DARKER THAN NEW SAMPLE

2/11-3-04

(9.6) Amount of Grease Removed .25 Gal. - Will this be scrapped? YES NO 2/11-3-04

SQ 7.0 SAMPLES

(6.1) Grease Samples Taken 2 Quarts. (6.1) Samples Identified YES

(6.1) Location of Sample Removal GREASE CAP 2/11-3-04

FILLER DATA (Continue SQ 6.0)

(10.2) Method of Tendon Protection CAP REPLACED on 11-3-04 2/11-3-04

(10.3) Amount of Grease Lost 0 Gal. - Will this be scrapped? YES N/A NO 2/11-4-04

(11.2) Add quantities of lost grease as each applies; Post total on Data Sheet 12.1

(8.7) 0 + (8.7.1) 7.5 + (9.6) .25 + SQ 7.0 (6.1) .50 + (10.3) 0 =

TOTAL GREASE LOSS 8.25 Gal. Post to DS 12.1 2/11-4-04

QC Review [Signature] Level II Date 1-26-05

DATA SHEET 9
Tendon Anchorage Area Moisture/Free Water Inspection

Inspection Period 8TH

Tendon No.	Location	Moisture/Water (Yes or No)	Description of Free Moisture/Water-Quantity, Location	Date Insp.	Inspect. By (Initials)
1. <u>V32</u>	<u>T</u>	<u>NO</u>	<u>N/A</u>	<u>8-31-04</u>	<u>SPD</u>
2. <u>V53</u>	<u>T</u>	<u>NO</u>	<u>N/A</u>	<u>8-31-04</u>	<u>SPD</u>
3. <u>V66</u>	<u>T</u>	<u>NO</u>	<u>N/A</u>	<u>8-31-04</u>	<u>SPD</u>
4. <u>V140</u>	<u>T</u>	<u>NO</u>	<u>N/A</u>	<u>8-31-04</u>	<u>SPD</u>
5. <u>V32</u>	<u>B</u>	<u>NO</u>	<u>N/A</u>	<u>9-2-04</u>	<u>SPD</u>
6. <u>V53</u>	<u>B</u>	<u>NO</u>	<u>N/A</u>	<u>9-2-04</u>	<u>SPD</u>
7. <u>V66</u>	<u>B</u>	<u>NO</u>	<u>N/A</u>	<u>9-2-04</u>	<u>SPD</u>
8. <u>V140</u>	<u>B</u>	<u>NO</u>	<u>N/A</u>	<u>9-2-04</u>	<u>SPD</u>
9. <u>D-213</u>	<u>F/2</u>	<u>NO</u>	<u>N/A</u>	<u>9-11-04</u>	<u>SPD</u>
10. <u>D-213</u>	<u>S/6</u>	<u>NO</u>	<u>N/A</u>	<u>9-13-04</u>	<u>SPD</u>
11. <u>D-225</u>	<u>S/6</u>	<u>NO</u>	<u>N/A</u>	<u>9-14-04</u>	<u>SPD</u>
12. <u>D-225</u>	<u>F/3</u>	<u>NO</u>	<u>N/A</u>	<u>9-14-04</u>	<u>SPD</u>

NOTE:

Location:

Hoop Tendons:

Vertical Tendons:

Dome Tendons:

1 to 6 - Buttress number at end of tendon

T or B - Top or Bottom

1 to 6 - Number of buttress nearest to end of tendon

Cognizant QV Inspector

Verification By:

Date: 11-24-04

Cognizant Mech/Struct Engineer

Review By:

Date: 27 FEB 05

A330/P459

DATA SHEET 9
Tendon Anchorage Area Moisture/Free Water Inspection

Inspection Period 8TH

Tendon No.	Location	Moisture/Water (Yes or No)	Description of Free Moisture/Water-Quantity, Location	Date Insp.	Inspect. By (Initials)
1. <u>H35-49</u>	<u>S/5</u>	<u>NO</u>	<u>N/A</u>	<u>9-16-04</u>	<u>DPO</u>
2. <u>H35-49</u>	<u>F/3</u>	<u>NO</u>	<u>N/A</u>	<u>9-15-04</u>	<u>DPO</u>
3. <u>H62-26</u>	<u>S/6</u>	<u>NO</u>	<u>N/A</u>	<u>9-22-04</u>	<u>N.H. 9-22-04</u> <u>D.P.O.</u>
4. <u>H62-26</u>	<u>F/2</u>	<u>NO</u>	<u>N/A</u>	<u>9-27-04</u>	<u>N.H. 9-27-04</u>
5. <u>H46-25</u>	<u>S/6</u>	<u>NO</u>	<u>N/A</u>	<u>11-10-04</u>	<u>2/ 11-10-04</u>
6. <u>H46-25</u>	<u>F/4</u>	<u>NO</u>	<u>N/A</u>	<u>11-9-04</u>	<u>2/ 11-9-04</u>
7. <u>D230</u>	<u>S/5</u>	<u>NO</u>	<u>N/A</u>	<u>11-15-04</u>	<u>2/ 11-15-04</u>
8. <u>D230</u>	<u>F/3</u>	<u>NO</u>	<u>N/A</u>	<u>11-15-04</u>	<u>2/ 11-15-04</u>
9. <u>H62-18</u>	<u>S/6</u>	<u>NO</u>	<u>N/A</u>	<u>11-5-04</u>	<u>2/ 11-5-04</u>
10. <u>H62-18</u>	<u>F/2</u>	<u>NO</u>	<u>N/A</u>	<u>11-2-04</u>	<u>2/ 11-2-04</u>
11. <u>H13-11</u>	<u>S/1</u>	<u>NO</u>	<u>N/A</u>	<u>11-4-04</u>	<u>2/ 11-4-04</u>
12. <u>H13-11</u>	<u>F/3</u>	<u>NO</u>	<u>N/A</u>	<u>11-12-04</u>	<u>2/ 11-12-04</u>

NOTE: Location:
Hoop Tendons: 1 to 6 - Buttress number at end of tendon
Vertical Tendons: T or B - Top or Bottom
Dome Tendons: 1 to 6 - Number of buttress nearest to end of tendon

Cognizant QV Inspector Verification By: [Signature] Date: 11-24-04
Cognizant Mech/Struct Engineer Review By: [Signature] Date: 27 FEB 05

A34/A459

DATA SHEET 9
Tendon Anchorage Area Moisture/Free Water Inspection

Inspection Period 8+5

Tendon No.	Location	Moisture/Water (Yes or No)	Description of Free Moisture/Water-Quantity, Location	Date Insp.	Inspect. By (Initials)
1. <u>V137</u>	<u>SHOP/TOP</u>	<u>NO</u>	<u>N/A</u>	<u>11-19-04</u>	<u>W.</u>
2. <u>V141</u>	<u>SHOP/TOP</u>	<u>No</u>	<u>N/A</u>	<u>11-17-04</u>	<u>W.</u>
3. <u>V137</u>	<u>FIELD/BOTTOM</u>	<u>No</u>	<u>N/A</u>	<u>11-19-04</u>	<u>W.</u>
4. <u>V141</u>	<u>FIELD/BOTTOM</u>	<u>No</u>	<u>N/A</u>	<u>11-18-04</u>	<u>W.</u>
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

NOTE: Location:
 Hoop Tendons: 1 to 6 - Buttress number at end of tendon
 Vertical Tendons: T or B - Top or Bottom
 Dome Tendons: 1 to 6 - Number of buttress nearest to end of tendon

Cognizant QV Inspector
 Verification By: [Signature] Date: 11-22-04
 Cognizant Mech/Struct Engineer
 Review By: [Signature] Date: 27 FEB 05

A350/A459

A30/A459

PROJECT: TMI UNIT 1 DATE: 8-31-04

TENDON NO.: V32 TENDON END/BUTTRESS NO.: SHOT/TOP SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes NO Quantity n/a Sample Taken Yes NO
Comments n/a

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes NO Quantity n/a Sample Taken Yes NO
Comments n/a

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes NO Quantity n/a Sample Taken Yes NO
Comments n/a

(9.10) DURING DETENSIONING n/a

(9.10.1) n/a Water Detected n/a Yes No Quantity n/a Sample Taken Yes NO
Comments n/a

(11.) OWNER/AGENT NOTIFIED n/a Yes No Date n/a

CONDITION: n/a OBSERVABLE n/a SIGNIFICANT n/a

(12.1) SAMPLES ADEQUATELY IDENTIFIED n/a Yes NO

(12.2) SAMPLES STORED AT n/a

QC Signoff Daniel P. O'Brien Level II Date 8-31-04

Review Bio S. Cato Level IV Date 1-27-05

A37/A459

PROJECT: TMI UNIT 1 DATE: 8-31-04

TENDON NO.: V53 TENDON END/BUTTRESS NO.: SHOP/TOP SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes NO Quantity n/a Sample Taken Yes NO
Comments n/a

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes NO Quantity n/a Sample Taken Yes NO
Comments n/a

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes NO Quantity n/a Sample Taken Yes NO
Comments n/a

(9.10) DURING DETENSIONING n/a

(9.10.1) n/a Water Detected Yes No Quantity n/a Sample Taken Yes NO
Comments n/a

(11.) OWNER/AGENT NOTIFIED n/a Yes No Date n/a

CONDITION: n/a OBSERVABLE n/a SIGNIFICANT n/a

(12.1) SAMPLES ADEQUATELY IDENTIFIED n/a Yes NO

(12.2) SAMPLES STORED AT n/a

QC Signoff Daniel P. O'Brien Level II Date 8-31-04

Review Butler Level II Date 1-27-05

A30/A459

PROJECT: TMI UNIT 1 DATE: 9-2-04

TENDON NO.: V32 TENDON END/BUTTRESS NO.: FIELD/BOTTOM SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes No Quantity n/a Sample Taken Yes NO
Comments _____

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes No Quantity n/a Sample Taken Yes NO
Comments _____

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes No Quantity n/a Sample Taken Yes NO
Comments _____

(9.10) DURING DETENSIONING n/a

(9.10.1) n/a Water Detected n/a Yes No Quantity n/a Sample Taken Yes NO
Comments n/a

(11.) OWNER/AGENT NOTIFIED n/a Yes No Date n/a

CONDITION: n/a OBSERVABLE n/a SIGNIFICANT n/a

(12.1) SAMPLES ADEQUATELY IDENTIFIED n/a Yes NO

(12.2) SAMPLES STORED AT n/a

QC Signoff Daniel P. O'Hara Level II Date 9-2-04

Review Biv & Cato Level II Date 1-27-05

A39/A459

PROJECT: TMI UNIT 1 DATE: 9-2-04

TENDON NO.: V53 TENDON END/BUTTRESS NO.: FIELD/BOTTOM SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes NO Quantity N/A Sample Taken Yes NO
Comments N/A

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes NO Quantity N/A Sample Taken Yes NO
Comments N/A

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes NO Quantity N/A Sample Taken Yes NO
Comments N/A

(9.10) DURING DETENSIONING N/A

(9.10.1) N/A Water Detected N/A Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(11.) OWNER/AGENT NOTIFIED N/A Yes No Date N/A

CONDITION: N/A OBSERVABLE N/A SIGNIFICANT N/A

(12.1) SAMPLES ADEQUATELY IDENTIFIED N/A Yes NO

(12.2) SAMPLES STORED AT N/A

QC Signoff [Signature] Level II Date 9-2-04

Review [Signature] Level II Date 1-27-05

A40/A459

PROJECT: TMI UNIT 1 DATE: 8-31-04

TENDON NO.: V66 TENDON END/BUTTRESS NO.: SHOP/TOP SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes NO Quantity n/a Sample Taken Yes NO
Comments n/a

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes NO Quantity n/a Sample Taken Yes NO
Comments n/a

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes NO Quantity n/a Sample Taken Yes NO
Comments n/a

(9.10) DURING DETENSIONING n/a

(9.10.1) n/a Water Detected n/a Yes No Quantity n/a Sample Taken Yes NO
Comments n/a

(11.) OWNER/AGENT NOTIFIED n/a Yes No Date n/a

CONDITION: n/a OBSERVABLE n/a SIGNIFICANT n/a

(12.1) SAMPLES ADEQUATELY IDENTIFIED n/a Yes NO

(12.2) SAMPLES STORED AT n/a

QC Signoff David P. O'Brien Level II Date 8-31-04

Review Bill D. Cant Level II Date 1-27-05

A41/A459

PROJECT: TMI UNIT 1 DATE: 9-2-04

TENDON NO.: V66 TENDON END/BUTTRESS NO.: Head/BOTTOM SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes NO Quantity n/a Sample Taken Yes NO
Comments n/a

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes NO Quantity n/a Sample Taken Yes NO
Comments n/a

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes NO Quantity n/a Sample Taken Yes NO
Comments n/a

(9.10) DURING DETENSIONING n/a

(9.10.1) n/a Water Detected n/a Yes No Quantity n/a Sample Taken Yes NO
Comments n/a

(11.) OWNER/AGENT NOTIFIED n/a Yes No Date n/a

CONDITION: n/a OBSERVABLE n/a SIGNIFICANT n/a

(12.1) SAMPLES ADEQUATELY IDENTIFIED n/a Yes NO

(12.2) SAMPLES STORED AT n/a

QC Signoff Daniel P. O'Neil Level II Date 9-2-04

Review BUD Level II Date 1-27-05

A42/A459

PROJECT: TMI UNIT 1 DATE: 11-23-04

TENDON NO.: V86 TENDON END/BUTTRESS NO.: FIELD/BOTTOM SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN (DRAIN PLUG USING Y-DEVICE)

(9.4.1) Water Detected Yes No Quantity _____ Sample Taken Yes NO
Comments N/A

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes N/A No Quantity N/A Sample Taken Yes N/A NO
Comments N/A

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes N/A No Quantity N/A Sample Taken Yes N/A NO
Comments N/A

(9.10) DURING DETENSIONING N/A

(9.10.1) N/A Water Detected N/A Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(11.) OWNER/AGENT NOTIFIED Yes N/A No Date N/A

CONDITION: OBSERVABLE N/A SIGNIFICANT N/A

(12.1) SAMPLES ADEQUATELY IDENTIFIED Yes N/A NO

(12.2) SAMPLES STORED AT N/A

QC Signoff [Signature] Level II Date 11-23-04

Review [Signature] Level II Date 1-27-05

A43/A459

PROJECT: TMI UNIT 1 DATE: 11-11-04

TENDON NO.: V137 TENDON END/BUTTRESS NO.: SHOT/TOP SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes No ¹¹⁻¹¹⁻⁰⁴ Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes No ¹¹⁻¹¹⁻⁰⁴ Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes No ¹¹⁻¹¹⁻⁰⁴ Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.10) DURING DETENSIONING

(9.10.1) Water Detected Yes No ¹¹⁻¹¹⁻⁰⁴ Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(11.) OWNER/AGENT NOTIFIED Yes N/A No Date N/A

CONDITION: OBSERVABLE N/A SIGNIFICANT N/A

(12.1) SAMPLES ADEQUATELY IDENTIFIED Yes N/A NO

(12.2) SAMPLES STORED AT N/A

QC Signoff [Signature] Level II Date 11-19-04

Review [Signature] Level II Date 1-27-05

A44/A459

PROJECT: TMI UNIT 1 DATE: 11-19-04

TENDON NO.: V137 TENDON END/BUTTRESS NO.: FIELD/BOTTOM SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes No Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes No Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes No Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.10) DURING DETENSIONING

(9.10.1) Water Detected Yes No Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(11.) OWNER/AGENT NOTIFIED Yes N/A No Date N/A

CONDITION: OBSERVABLE N/A SIGNIFICANT N/A

(12.1) SAMPLES ADEQUATELY IDENTIFIED Yes N/A NO

(12.2) SAMPLES STORED AT N/A

QC Signoff [Signature] Level II Date 11-19-04

Review [Signature] Level II Date 1-27-05

A45/A459

PROJECT: TMI UNIT 1 DATE: 8-31-04

TENDON NO.: V140 TENDON END/BUTTRESS NO.: SNOP/TOP SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes NO ^{8/31/04} Quantity n/a Sample Taken Yes NO
Comments n/a

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes NO ^{8/31/04} Quantity n/a Sample Taken Yes NO
Comments n/a

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes NO ^{8/31/04} Quantity n/a Sample Taken Yes NO
Comments n/a

(9.10) DURING DETENSIONING

(9.10.1) Water Detected Yes NO Quantity n/a Sample Taken Yes NO
Comments n/a

(11.) OWNER/AGENT NOTIFIED n/a Yes No Date n/a

CONDITION: n/a OBSERVABLE n/a SIGNIFICANT n/a

(12.1) SAMPLES ADEQUATELY IDENTIFIED n/a Yes NO

(12.2) SAMPLES STORED AT n/a

QC Signoff Shirley P. O'Brien Level TL Date 9-8-04

Review B. D. Cato Level II Date 1-27-05

A46/A459

PROJECT: TMI UNIT 1 DATE: 9-2-04

TENDON NO.: V140 TENDON END/BUTTRESS NO.: FIELD/BOTTOM SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes No ^{8/09-2-04} Quantity n/a Sample Taken Yes NO

Comments _____

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes No ^{8/09-2-04} Quantity n/a Sample Taken Yes NO

Comments _____

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes No ^{8/09-2-04} Quantity n/a Sample Taken Yes NO

Comments _____

(9.10) DURING DETENSIONING

(9.10.1) Water Detected Yes No Quantity n/a Sample Taken Yes NO

Comments n/a

(11.) OWNER/AGENT NOTIFIED n/a Yes No Date n/a

CONDITION: n/a OBSERVABLE n/a SIGNIFICANT n/a

(12.1) SAMPLES ADEQUATELY IDENTIFIED n/a Yes NO

(12.2) SAMPLES STORED AT n/a

QC Signoff Paul P. O'Brien Level II Date 9-8-04

Review Bill & Cato Level II Date 1-27-05

A47/A459

PROJECT: TMI UNIT 1 DATE: 11-11-04

TENDON NO.: V141 TENDON END/BUTTRESS NO.: SHOP/TOP SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes No ^{✓ 11-11-04} Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes No ^{✓ 11-11-04} Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes No ^{✓ 11-11-04} Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.10) DURING DETENSIONING

(9.10.1) Water Detected Yes No Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(11.) OWNER/AGENT NOTIFIED Yes N/A No Date N/A

CONDITION: OBSERVABLE N/A SIGNIFICANT N/A

(12.1) SAMPLES ADEQUATELY IDENTIFIED Yes N/A NO

(12.2) SAMPLES STORED AT N/A

QC Signoff [Signature] Level II Date 11-17-04

Review [Signature] Level II Date 1-27-05

A48/A459

PROJECT: TMI UNIT 1 DATE: 11-17-04

TENDON NO.: V141 TENDON END/BUTTRESS NO.: FIELD/BOTTOM SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes No ¹¹⁻¹⁷⁻⁰⁴ Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes No ¹¹⁻¹⁷⁻⁰⁴ Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes No ¹¹⁻¹⁷⁻⁰⁴ Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.10) DURING DETENSIONING

(9.10.1) Water Detected Yes No Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(11.) OWNER/AGENT NOTIFIED Yes N/A No Date N/A

CONDITION: OBSERVABLE N/A SIGNIFICANT N/A

(12.1) SAMPLES ADEQUATELY IDENTIFIED Yes N/A NO

(12.2) SAMPLES STORED AT N/A

QC Signoff [Signature] Level II Date 11-18-04

Review [Signature] Level II Date 1-27-05

A49/A459

PROJECT: TMI UNIT 1 DATE: 11-23-04

TENDON NO.: V164 TENDON END/BUTTRESS NO.: FIELD/BOTTOM SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN (DRAIN PLVA USING Y-DEVICE)

(9.4.1) Water Detected Yes No Quantity _____ Sample Taken Yes NO
Comments H/A

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes H/A No Quantity H/A Sample Taken Yes H/A NO
Comments H/A

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes H/A No Quantity H/A Sample Taken Yes H/A NO
Comments H/A

(9.10) DURING DETENSIONING N/A

(9.10.1) N/A Water Detected N/A Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(11.) OWNER/AGENT NOTIFIED Yes H/A No Date H/A

CONDITION: OBSERVABLE H/A SIGNIFICANT H/A

(12.1) SAMPLES ADEQUATELY IDENTIFIED Yes H/A NO

(12.2) SAMPLES STORED AT H/A

QC Signoff [Signature] Level II Date 11-23-04

Review [Signature] Level II Date 1-27-05

A50/A459

PROJECT: TMI UNIT 1 DATE: 11-4-04

TENDON NO.: H13-11 TENDON END/BUTTRESS NO.: SHOP/BUTT#1 SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes No Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes No Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes No Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.10) DURING DETENSIONING N/A

(9.10.1) N/A Water Detected N/A Yes No Quantity N/A Sample Taken Yes N/A NO
Comments N/A

(11.) OWNER/AGENT NOTIFIED Yes N/A No Date N/A

CONDITION: OBSERVABLE N/A SIGNIFICANT N/A

(12.1) SAMPLES ADEQUATELY IDENTIFIED Yes N/A NO

(12.2) SAMPLES STORED AT N/A

QC Signoff [Signature] Level II Date 11-4-04

Review [Signature] Level II Date 1-27-05

A51/A459

PROJECT: TMI UNIT 1 DATE: 11-12-04

TENDON NO.: H13-11 TENDON END/BUTTRESS NO.: Field / 3 ^{BOTT.} SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes No Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes No Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes No Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.10) DURING DETENSIONING N/A

(9.10.1) N/A Water Detected N/A Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(11.) OWNER/AGENT NOTIFIED Yes N/A No Date N/A

CONDITION: OBSERVABLE N/A SIGNIFICANT N/A

(12.1) SAMPLES ADEQUATELY IDENTIFIED Yes N/A NO

(12.2) SAMPLES STORED AT N/A

QC Signoff [Signature] Level II Date 11-12-04

Review [Signature] Level II Date 1-27-05

A52/A459

PROJECT: TMI UNIT 1 DATE: 9-16-04

TENDON NO.: #35-49 TENDON END/BUTTRESS NO.: Sho/Butt 5 SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(9.10) DURING DETENSIONING N/A

(9.10.1) N/A Water Detected N/A Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(11.) OWNER/AGENT NOTIFIED N/A Yes No Date N/A

CONDITION: N/A OBSERVABLE N/A SIGNIFICANT N/A

(12.1) SAMPLES ADEQUATELY IDENTIFIED N/A Yes NO

(12.2) SAMPLES STORED AT N/A

QC Signoff [Signature] Level II Date 9-16-04

Review [Signature] Level II Date 1-27-05

A53/A459

PROJECT: TMI UNIT 1 DATE: 9-15-04

TENDON NO.: H35-49 TENDON END/BUTTRESS NO.: Field/Butt 3 SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(9.10) DURING DETENSIONING N/A

(9.10.1) N/A Water Detected N/A Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(11.) OWNER/AGENT NOTIFIED N/A Yes No Date N/A

CONDITION: N/A OBSERVABLE N/A SIGNIFICANT N/A

(12.1) SAMPLES ADEQUATELY IDENTIFIED N/A Yes NO

(12.2) SAMPLES STORED AT N/A

QC Signoff Daniel P. O'Hara Level II Date 9-15-04

Review Brian C. C. B. Level II Date 1-27-05

A54/A459

PROJECT: TMI UNIT 1 DATE: 11.8.04

TENDON NO.: H46-25 TENDON END/BUTTRESS NO.: STOP/BUTT #6 SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(9.10) DURING DETENSIONING

(9.10.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(11.) OWNER/AGENT NOTIFIED Yes No Date N/A

CONDITION: OBSERVABLE N/A SIGNIFICANT N/A

(12.1) SAMPLES ADEQUATELY IDENTIFIED Yes NO

(12.2) SAMPLES STORED AT N/A

QC Signoff CLIFFORD PETERS AS PER TELECOM Level II Date 1.18.05

Review [Signature] Level II Date 1-27-05

A55/A459

PROJECT: TMI UNIT 1 DATE: 11-8-04

TENDON NO.: H46-25 TENDON END/BUTTRESS NO.: FIELD/ BUTT. 4 SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes No ¹¹⁻⁸⁻⁰⁴ Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes No ¹¹⁻⁸⁻⁰⁴ Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes No ¹¹⁻⁸⁻⁰⁴ Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.10) DURING DETENSIONING

(9.10.1) Water Detected Yes No Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(11.) OWNER/AGENT NOTIFIED Yes N/A No Date N/A

CONDITION: OBSERVABLE N/A SIGNIFICANT N/A

(12.1) SAMPLES ADEQUATELY IDENTIFIED Yes N/A NO

(12.2) SAMPLES STORED AT N/A

QC Signoff [Signature] Level II Date 11-9-04

Review [Signature] Level II Date 1-27-05

A50/A459

PROJECT: TMI UNIT 1 DATE: 11-5-04

TENDON NO.: H62-18 TENDON END/BUTTRESS NO.: SHOP/BUTT. L6 SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes No Quantity N/A Sample Taken Yes N/A NO

Comments _____

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes No Quantity N/A Sample Taken Yes N/A NO

Comments _____

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes No Quantity N/A Sample Taken Yes N/A NO

Comments _____

(9.10) DURING DETENSIONING N/A

(9.10.1) N/A Water Detected N/A Yes No Quantity N/A Sample Taken Yes N/A NO

Comments N/A

(11.) OWNER/AGENT NOTIFIED Yes N/A No Date N/A

CONDITION: OBSERVABLE N/A SIGNIFICANT N/A

(12.1) SAMPLES ADEQUATELY IDENTIFIED Yes N/A NO

(12.2) SAMPLES STORED AT N/A

QC Signoff [Signature] Level II Date 11-5-04

Review [Signature] Level II Date 1-27-05

A57/A459

PROJECT: TMI UNIT 1 DATE: 11-2-04

TENDON NO.: H62-18 TENDON END/BUTTRESS NO.: FIELD/BUTT. 2 SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes No Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes No Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes No Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.10) DURING DETENSIONING N/A

(9.10.1) N/A Water Detected N/A Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(11.) OWNER/AGENT NOTIFIED Yes N/A No Date N/A

CONDITION: OBSERVABLE N/A SIGNIFICANT N/A

(12.1) SAMPLES ADEQUATELY IDENTIFIED Yes N/A NO

(12.2) SAMPLES STORED AT _____

QC Signoff [Signature] Level II Date 11-2-04

Review [Signature] Level II Date 1-27-05

A50/A459

PROJECT: TMI UNIT 1 DATE: 9-22-04

TENDON NO.: H62-26 TENDON END/BUTTRESS NO.: SHOP/BUTT 6 SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(9.10) DURING DETENSIONING N/A

(9.10.1) N/A Water Detected N/A Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(11.) OWNER/AGENT NOTIFIED N/A Yes No Date N/A

CONDITION: N/A OBSERVABLE N/A SIGNIFICANT N/A

(12.1) SAMPLES ADEQUATELY IDENTIFIED N/A Yes NO

(12.2) SAMPLES STORED AT N/A

QC Signoff [Signature] Level II Date 9-22-04

Review [Signature] Level II Date 1-27-05

A59/A459

PROJECT: TMI UNIT 1 DATE: 9.27.04

TENDON NO.: HLL-2C 24.8/29/04
6242C TENDON END/BUTTRESS NO.: FIELD/BUTT #2 SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
N.H. 9/29/04
Comments N/A

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
N.H. 9/29/04
Comments N/A

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
N.H. 9/29/04
Comments N/A

(9.10) DURING DETENSIONING N/A

(9.10.1) N/A Water Detected N/A Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(11.) OWNER/AGENT NOTIFIED N/A Yes No Date N/A

CONDITION: N/A OBSERVABLE N/A SIGNIFICANT N/A

(12.1) SAMPLES ADEQUATELY IDENTIFIED N/A Yes NO

(12.2) SAMPLES STORED AT N/A

QC Signoff H. Handrickson Level AWSC III Date 9-29-04

Review Bio & Cat Level TL Date 1-27-05

A60/A459

PROJECT: TMI UNIT 1 DATE: 9-13-04

TENDON NO.: D-213 TENDON END/BUTTRESS NO.: SHOP/NW SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(9.10) DURING DETENSIONING N/A

(9.10.1) N/A Water Detected N/A Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(11.) OWNER/AGENT NOTIFIED N/A Yes No Date N/A

CONDITION: N/A OBSERVABLE N/A SIGNIFICANT N/A

(12.1) SAMPLES ADEQUATELY IDENTIFIED N/A Yes NO

(12.2) SAMPLES STORED AT N/A

QC Signoff [Signature] Level II Date 9-13-04

Review [Signature] Level II Date 1-27-05

A61/A459

PROJECT: TMI UNIT 1 DATE: 9-11-04

TENDON NO.: D213 TENDON END/BUTTRESS NO.: HEAD/SE SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(9.10) DURING DETENSIONING N/A

(9.10.1) N/A Water Detected N/A Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(11.) OWNER/AGENT NOTIFIED N/A Yes No Date N/A

CONDITION: N/A OBSERVABLE N/A SIGNIFICANT N/A

(12.1) SAMPLES ADEQUATELY IDENTIFIED N/A Yes NO

(12.2) SAMPLES STORED AT N/A

QC Signoff David P. O'Hara Level II Date 9-11-04

Review Bill D. Cat Level II Date 1-27-05

A62/A459

PROJECT: TMI UNIT 1 DATE: 9-14-04

TENDON NO.: D-225 TENDON END/BUTTRESS NO.: SHOP/NW SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes No Quantity n/a Sample Taken Yes NO
Comments n/a

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes No Quantity n/a Sample Taken Yes NO
Comments n/a

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes No Quantity n/a Sample Taken Yes NO
Comments n/a

(9.10) DURING DETENSIONING N/A

(9.10.1) N/A Water Detected N/A Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(11.) OWNER/AGENT NOTIFIED n/a Yes No Date n/a

CONDITION: n/a OBSERVABLE n/a SIGNIFICANT n/a

(12.1) SAMPLES ADEQUATELY IDENTIFIED n/a Yes NO

(12.2) SAMPLES STORED AT n/a

QC Signoff Paul P. O'Brien Level II Date 9-14-04

Review Bill D. Cato Level II Date 1-27-05

AG3/A459

PROJECT: TMI UNIT 1 DATE: 9-14-04

TENDON NO.: D-225 TENDON END/BUTTRESS NO.: FIELD/SW SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes NO Quantity n/a Sample Taken Yes NO
Comments n/a

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes NO Quantity n/a Sample Taken Yes NO
Comments n/a

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes NO Quantity n/a Sample Taken Yes NO
Comments n/a

(9.10) DURING DETENSIONING N/A

(9.10.1) N/A Water Detected N/A Yes No Quantity N/A Sample Taken Yes NO
Comments N/A

(11.) OWNER/AGENT NOTIFIED n/a Yes No Date n/a

CONDITION: n/a OBSERVABLE n/a SIGNIFICANT n/a

(12.1) SAMPLES ADEQUATELY IDENTIFIED n/a Yes NO

(12.2) SAMPLES STORED AT n/a

QC Signoff John P. O'Hara Level II Date 9-14-04

Review Bio D. Cato Level II Date 1-27-05

A64/A459

PROJECT: TMI UNIT 1 DATE: 11-11-04

TENDON NO.: D230 TENDON END/BUTTRESS NO.: FIELD/NEAR BUTT. 3 SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN
(9.4.1) Water Detected Yes No Quantity H/A Sample Taken Yes No
Comments NONE

(9.7) IN GREASE CAN
(9.7.1) Water Detected Yes No Quantity H/A Sample Taken Yes No
Comments NONE

(9.8) AROUND TENDON ANCHORAGE
(9.8.1) Water Detected Yes No Quantity H/A Sample Taken Yes No
Comments NONE

(9.10) DURING DETENSIONING
(9.10.1) Water Detected Yes No Quantity H/A Sample Taken Yes No
Comments NONE

(11.) OWNER/AGENT NOTIFIED Yes No Date H/A
CONDITION: OBSERVABLE H/A SIGNIFICANT H/A

(12.1) SAMPLES ADEQUATELY IDENTIFIED Yes No

(12.2) SAMPLES STORED AT H/A

QC Signoff [Signature] Level II Date 11-15-04

Review [Signature] Level II Date 1-27-05

A65/A459

PROJECT: TMI UNIT 1 DATE: 11-11-04
TENDON NO.: D230 TENDON END/BUTTRESS NO.: SHOP/NEAR BUTT.S SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN
(9.4.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
Comments NONE *✓ 11-11-04*

(9.7) IN GREASE CAN
(9.7.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
Comments NONE *✓ 11-11-04*

(9.8) AROUND TENDON ANCHORAGE
(9.8.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
Comments NONE *✓ 11-11-04*

(9.10) DURING DETENSIONING
(9.10.1) Water Detected Yes No Quantity N/A Sample Taken Yes NO
Comments NONE

(11.) OWNER/AGENT NOTIFIED Yes NO Date N/A
CONDITION: OBSERVABLE N/A SIGNIFICANT N/A

(12.1) SAMPLES ADEQUATELY IDENTIFIED Yes NO
(12.2) SAMPLES STORED AT N/A

QC Signoff [Signature] Level II Date 11-15-04

Review [Signature] Level II Date 1-27-05

AG0/A459

PROJECT: TMI UNIT 1 DATE: 11-3-05

TENDON NO.: D342 TENDON END/BUTTRESS NO.: FIELD/NEAR BUTT. 4 SURVEILLANCE YEAR: 30TH

(9.4) DURING LOOSENING OF GREASE CAN

(9.4.1) Water Detected Yes No Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.7) IN GREASE CAN

(9.7.1) Water Detected Yes No Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.8) AROUND TENDON ANCHORAGE

(9.8.1) Water Detected Yes No Quantity N/A Sample Taken Yes N/A NO
Comments NONE

(9.10) DURING DETENSIONING

(9.10.1) Water Detected Yes No Quantity _____ Sample Taken Yes NO
Comments _____

(11.) OWNER/AGENT NOTIFIED Yes No Date 11-3-05

CONDITION: OBSERVABLE SIGNIFICANT

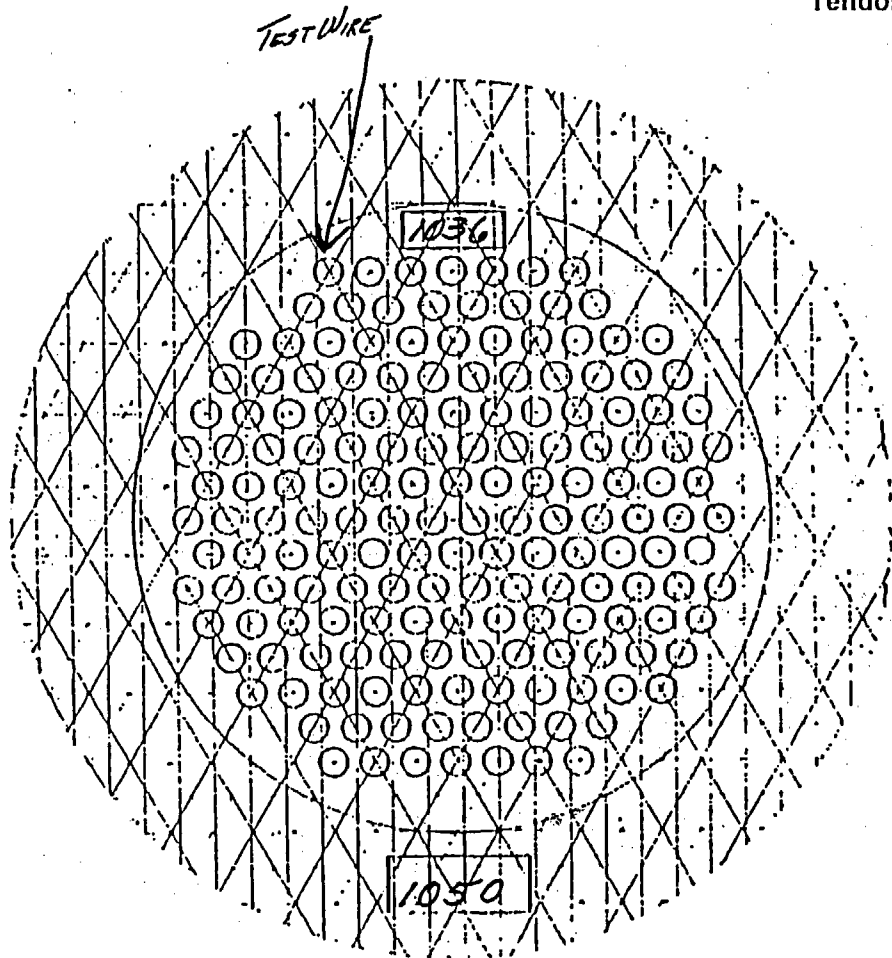
(12.1) SAMPLES ADEQUATELY IDENTIFIED Yes NO

(12.2) SAMPLES STORED AT _____

QC Signoff [Signature] Level II Date 11-3-05

Review [Signature] Level II Date 1-27-05

Tendon Buttonhead Inspection



RB Tendon Surveillance

COMMENT: *ALL BUTTONHEADS ACCEPTABLE*

*SHIM STACK
19.15"*

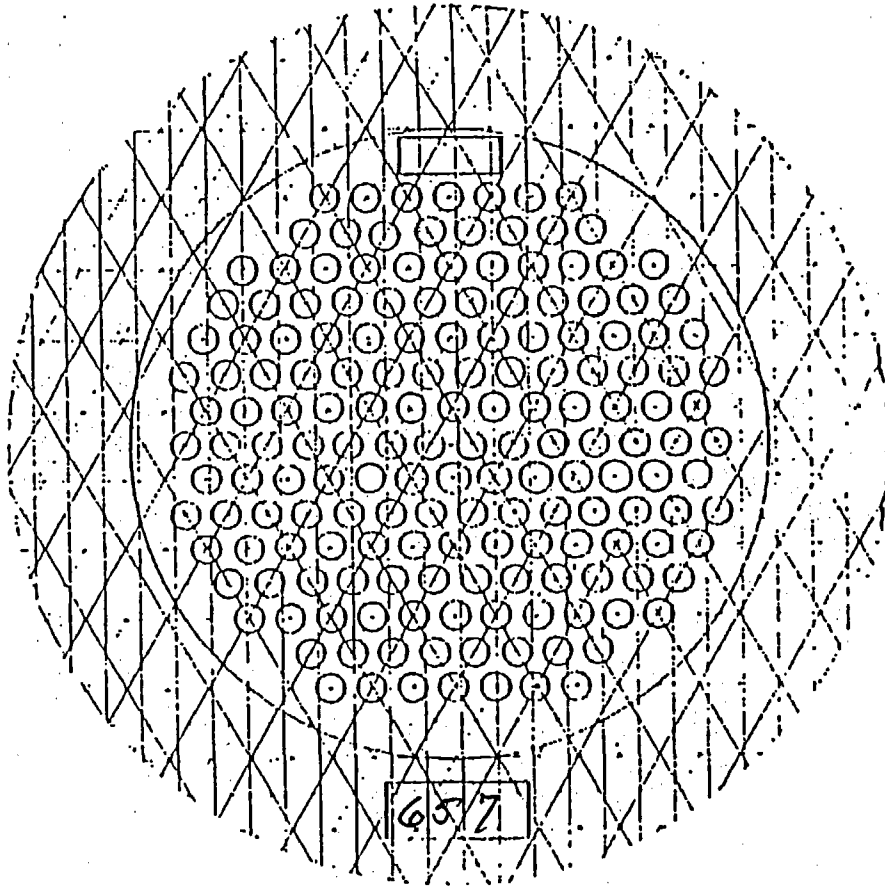
INSPECTED BY	<i>[Signature]</i>	Date <u>8-31-04</u>
CONTRACTOR FOREMAN		
VERIFIED BY		
COGNIZANT QV INSPECTOR	<i>[Signature]</i>	Date <u>8-31-04</u>
COGNIZANT MECH/STRUCT ENGINEER	<i>[Signature]</i>	Date <u>27 FEB 05</u>
REVIEWED BY		

INSPECTION PERIOD 8TH

Tendon # 1352
 END: FIELD with (1 piece washer)
 SHOP X (2 piece washer)

107/1459

Tendon Buttonhead Inspection



RB Tendon Surveillance

COMMENT: *ALL BUTTONHEADS ACCEPTABLE*

*SNIP STACK
2.1"*

INSPECTED BY _____ Date 9-2-04
 CONTRACTOR FOREMAN *[Signature]*
 VERIFIED BY _____ Date 9-2-04
 COGNIZANT QV INSPECTOR *[Signature]*
 COGNIZANT MECH/STRUCT ENGINEER *[Signature]* Date 27 Feb 05
 REVIEWED BY _____

INSPECTION PERIOD 8TH

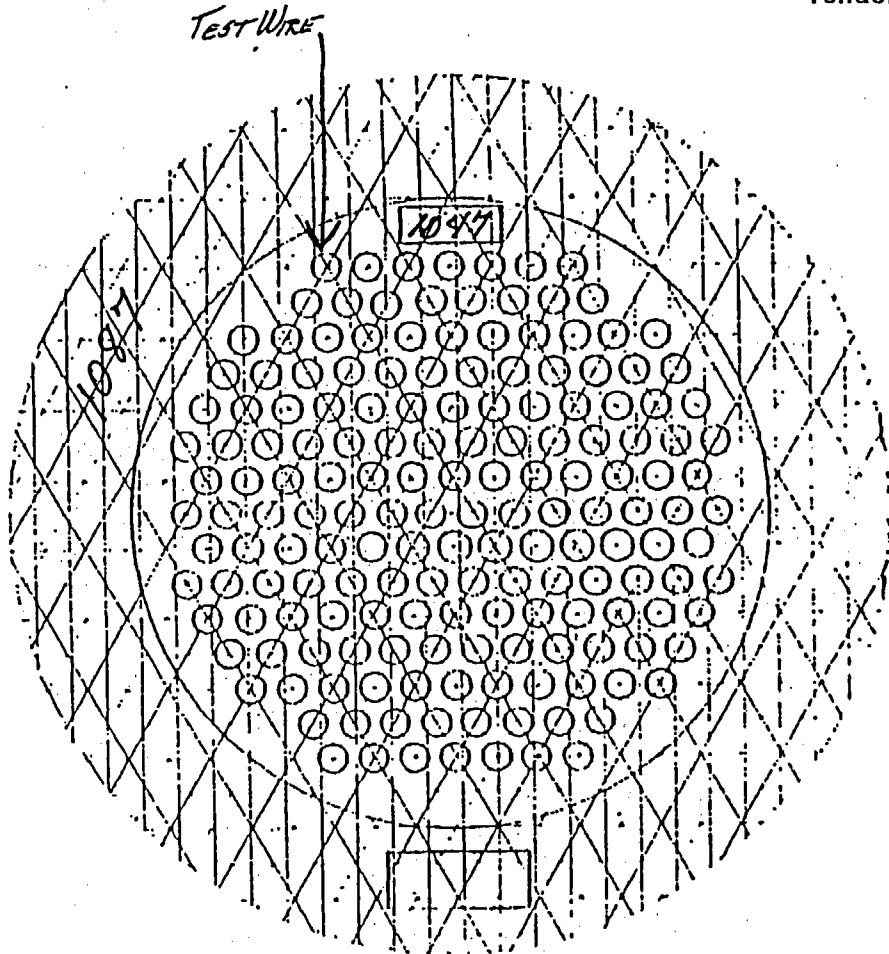
Tendon # V32
 END: FIELD X (1 piece washer)
 SHOP 1/2 (2 piece washer)

RB/A459

ENCLOSURE 6
Data Sheet 4

1301-9.1
Revision 18
Page 9 of 16

Tendon Buttonhead Inspection



RB Tendon Surveillance

COMMENT: *ALL ACCEPTABLE*

*SHIM STACK
15.30"*

INSPECTED BY
CONTRACTOR FOREMAN *[Signature]*

Date *8-31-04*

VERIFIED BY

COGNIZANT QV INSPECTOR *[Signature]*
COGNIZANT MECH/STRUCT ENGINEER *[Signature]*

Date *8-31-04*

Date *27 FEB 05*

REVIEWED BY

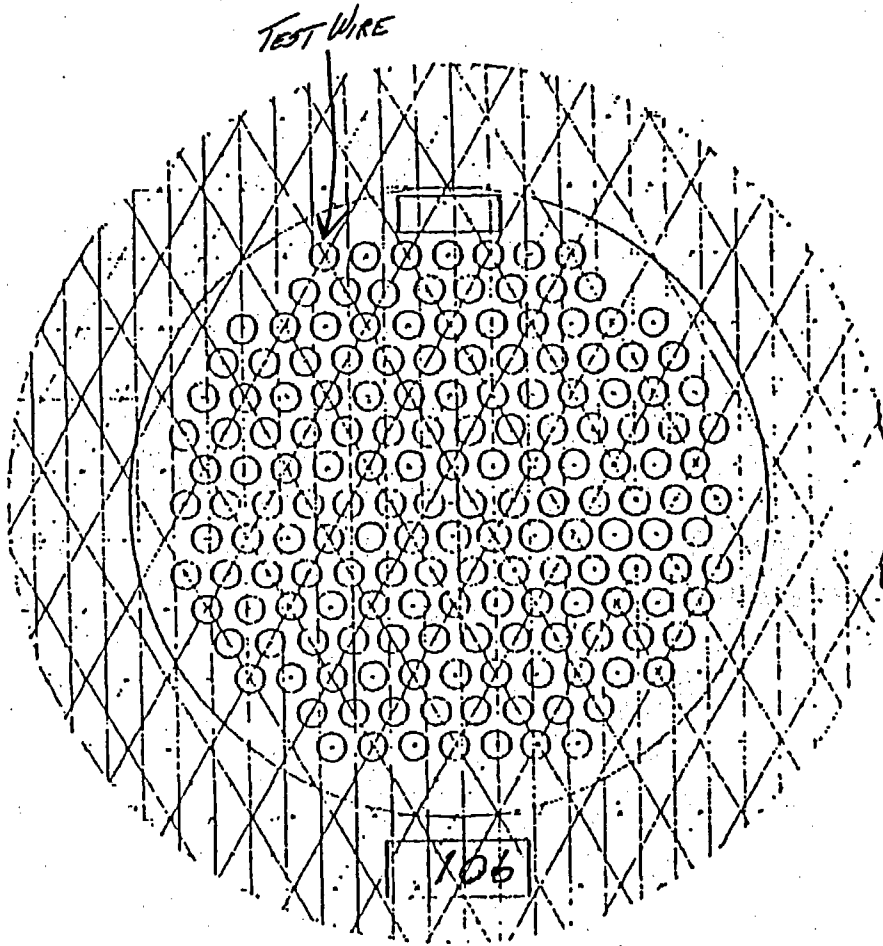
INSPECTION PERIOD *8TH*

Tendon # *V53*
END: FIELD *1/4* (1 piece washer)
SHOP *X* (2 piece washer)

AG/459

ENCLOSURE 6
Data Sheet 4

Tendon Buttonhead Inspection



RB Tendon Surveillance

COMMENT: *ALL BUTTONHEADS ACCEPTABLE*

*SHIM STACK
2.30"*

INSPECTED BY
CONTRACTOR FOREMAN
VERIFIED BY
COGNIZANT QV INSPECTOR
COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY

[Signature]

Date 9-2-04

[Signature]

Date 9-2-04

[Signature]

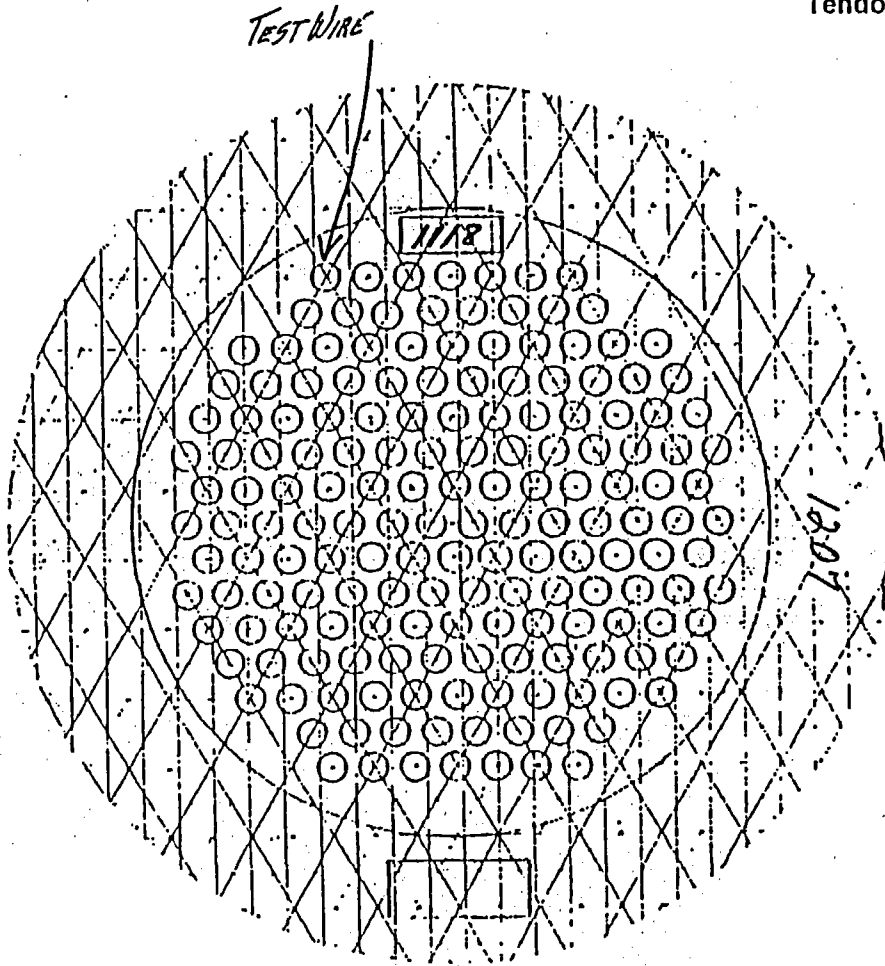
Date 27 FEB 05

INSPECTION PERIOD 9TH

Tendon # V53
END: FIELD X (1 piece washer)
SHOP N/A (2 piece washer)

R70/4459

Tendon Buttonhead Inspection



RB Tendon Surveillance

COMMENT: ALL BUTTONHEADS ACCEPTABLE

SHIM STACK
14.30°

INSPECTED BY
CONTRACTOR FOREMAN

Date 8-31-04

VERIFIED BY
COGNIZANT QV INSPECTOR
COGNIZANT MECH/STRUCT ENGINEER

Date 8-31-04

Date 27 FEB 05

REVIEWED BY

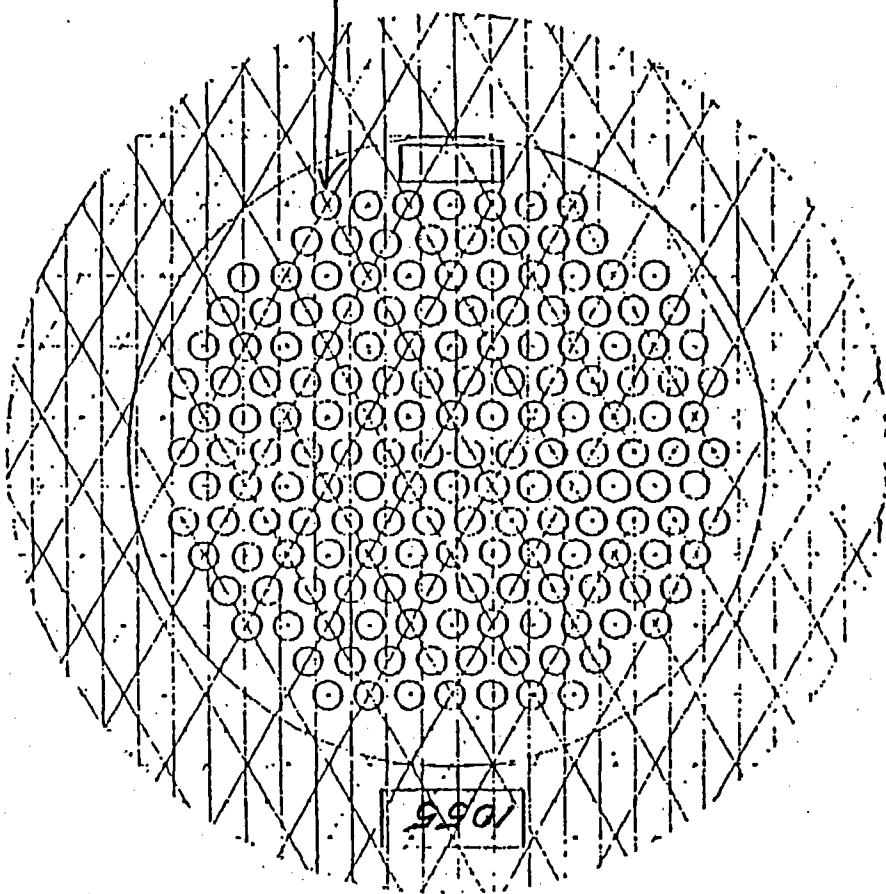
INSPECTION PERIOD 8TH

Tendon # V66
END: FIELD 1/2 (1 piece washer)
SHOP X (2 piece washer)

A71/A459

Tendon Buttonhead Inspection

TEST WIRE



RB Tendon Surveillance

COMMENT: *ALL BUTTONHEADS ACCEPTABLE*

*SHIM STACK
2.05"*

INSPECTED BY _____ Date 9-2-04
 CONTRACTOR FOREMAN *[Signature]*
 VERIFIED BY _____ Date 9-20-04
 COGNIZANT QV INSPECTOR *[Signature]*
 COGNIZANT MECH/STRUCT ENGINEER *[Signature]* Date 27 FEB 05
 REVIEWED BY _____

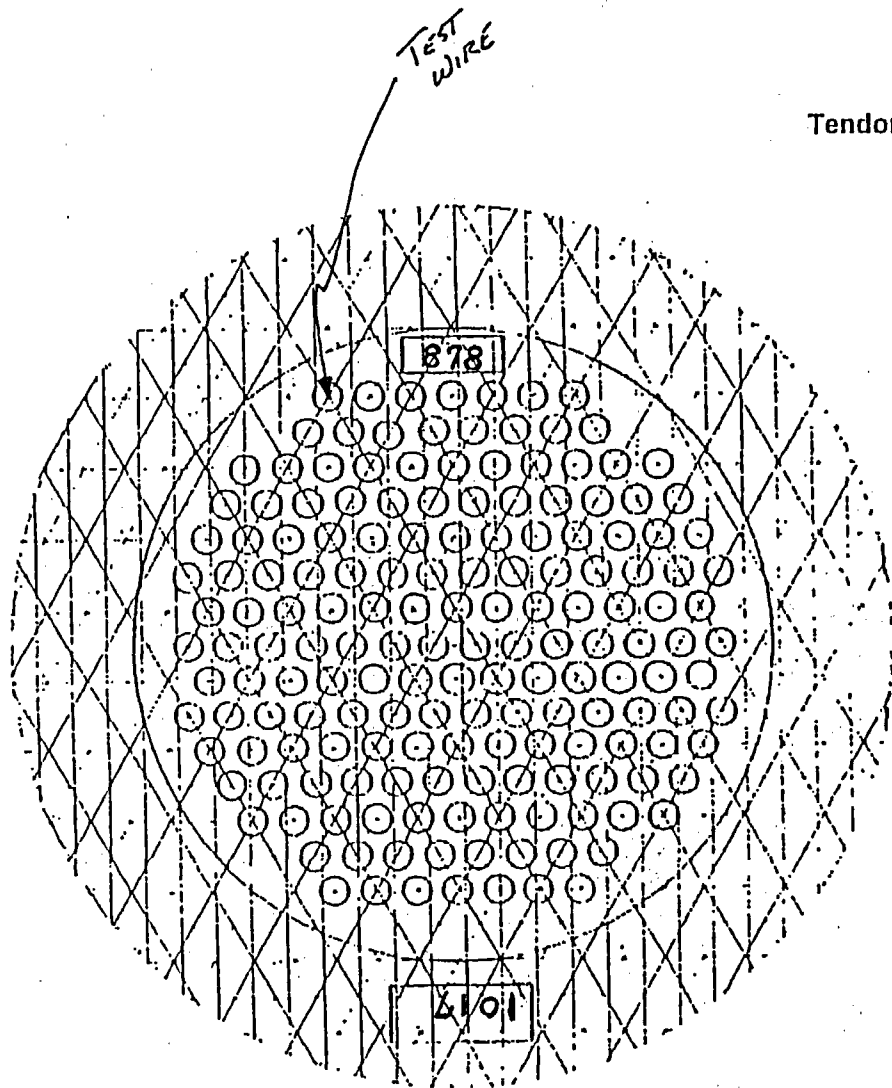
INSPECTION PERIOD 9TH

Tendon # V66
 END: FIELD X (1 piece washer)
 SHOP N/A (2 piece washer)

APQ/A455

ENCLOSURE 6
Data Sheet 4

Tendon Buttonhead Inspection



RB Tendon Surveillance

COMMENT: All Button Heads Acceptable.

NOTE: No change in Button Heads
After Detensioning / Retensioning.

✓
11-19-04

SHIM STACK

4", 4", 4", 2", 1/2", 1/8" = Total Height 15"

INSPECTED BY CONTRACTOR FOREMAN [Signature] Date 11-17-04

VERIFIED BY COGNIZANT QV INSPECTOR [Signature] Date 11-17-04

COGNIZANT MECH/STRUCT ENGINEER [Signature] Date 27 Feb 05

REVIEWED BY

SHIM STACK AFTER RETENSIONING

4", 4", 4", 1/2", 1/2", 1/2", 2" = 15.9"

A93/A459

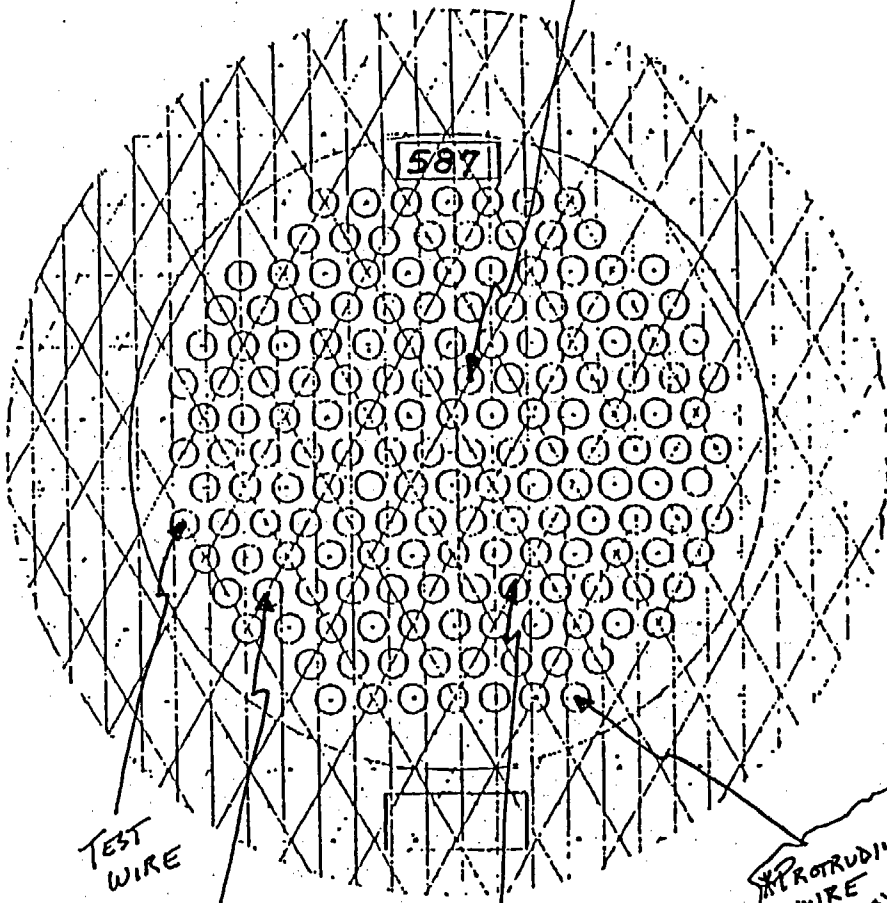
INSPECTION PERIOD 8th

Tendon # V137
END: FIELD (1 piece washer)
SHOP X (2 piece washer)

ENCLOSURE 6
Data Sheet 4

Tendon Buttonhead Inspection

*PROTRUDING
WIRE
APPROX.
.40" ④



RB Tendon Surveillance

COMMENT: * FOUR PROTRUDING WIRES / BUTTON HEADS
AS MAPPED. 4. (PRIOR TO DETENSIONING)
11-19-04

NOTE: AFTER RETENSIONING

- ① PROTRUDING APPROX .05"
- ② PROTRUDING APPROX 1.00"
- ③ PROTRUDING APPROX .10"
- ④ PROTRUDING APPROX .30"

SHIM STACK
2"

INSPECTED BY [Signature] Date 11-19-04
 CONTRACTOR FOREMAN
 VERIFIED BY [Signature] Date 11-19-04
 COGNIZANT QV INSPECTOR
 COGNIZANT MECH/STRUCT ENGINEER [Signature] Date 27 FEB 05
 REVIEWED BY

INSPECTION PERIOD 8+M

Tendon # V137

END: FIELD (1 piece washer)
 SHOP (2 piece washer)

*PROTRUDING
WIRE
APPROX.
.20" ①

*PROTRUDING
WIRE
APPROX. "
.60" ②

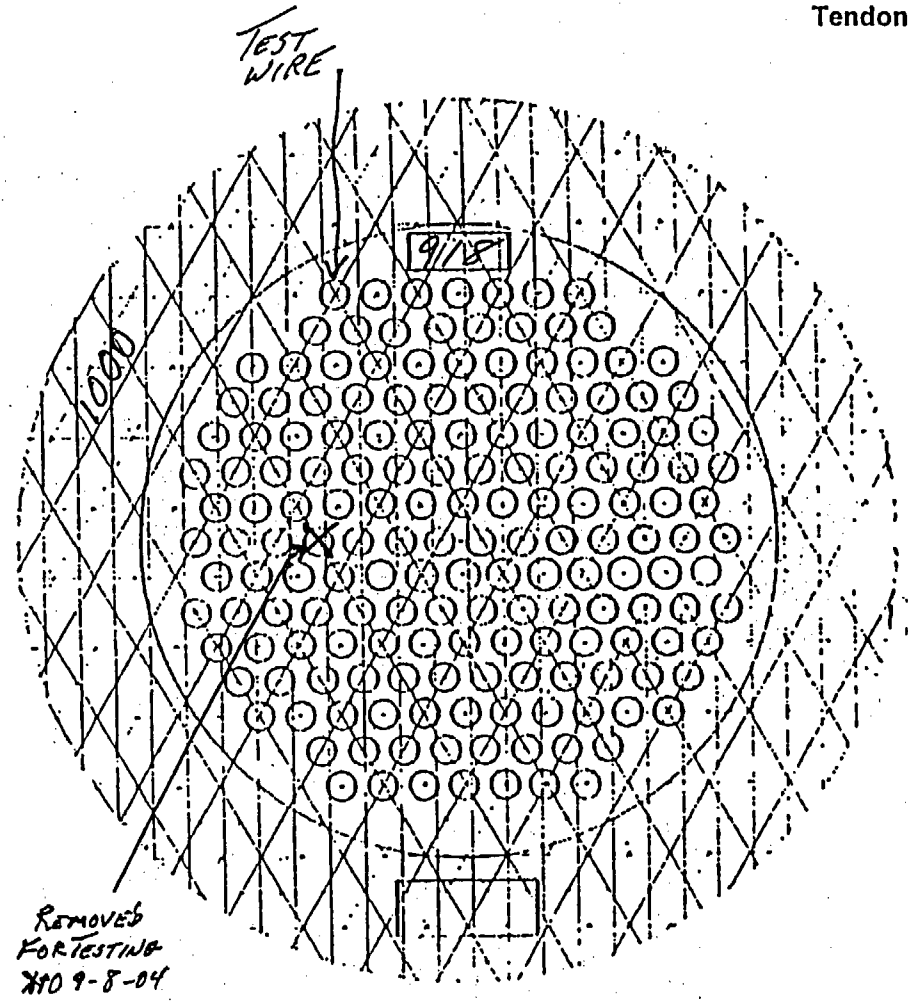
*PROTRUDING
WIRE
APPROX.
.56" ③

SHIM STACK AFTER
DETENSIONING & RETENSIONING
2" (NO CHANGE)

MAY/AUG 09

ENCLOSURE 6
Data Sheet 4

Tendon Buttonhead Inspection



RB Tendon Surveillance

COMMENT: *ALL BUTTONHEADS ACCEPTABLE*

*SHIM STACK
15.65*

*RETENSIONED
SHIM STACK
15.85/15.90"*

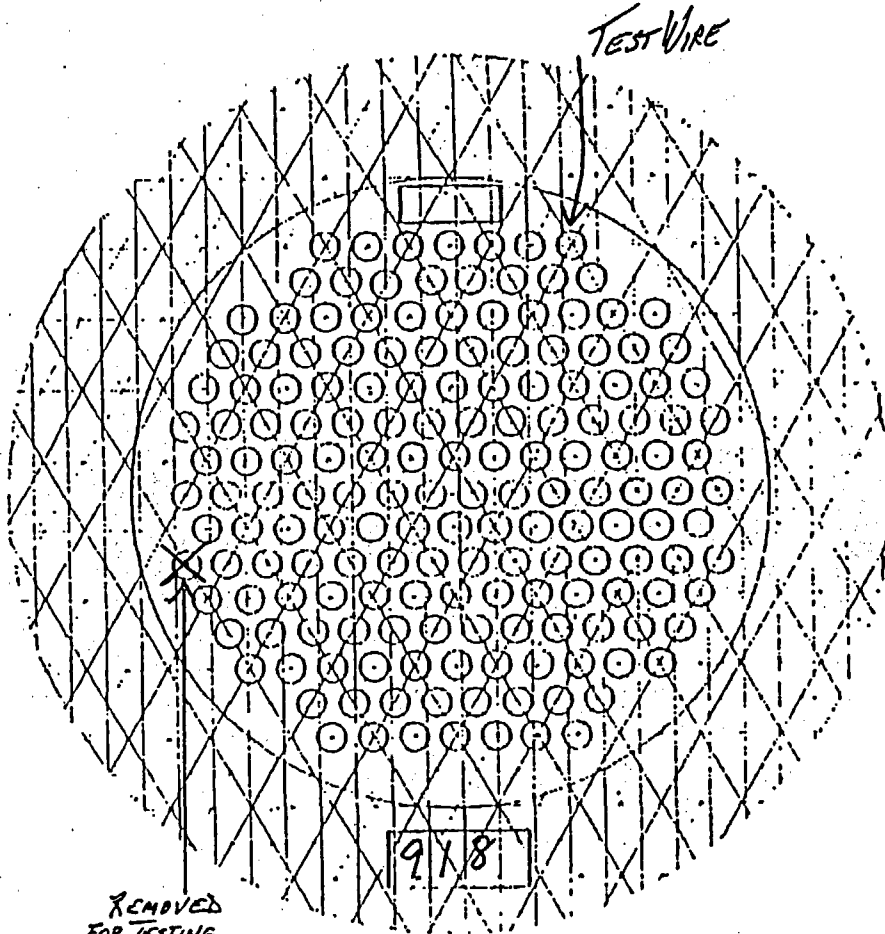
INSPECTED BY *[Signature]* Date 8-31-04
 CONTRACTOR FOREMAN
 VERIFIED BY *[Signature]* Date 9-31-04
 COGNIZANT QV INSPECTOR
 COGNIZANT MECH/STRUCT ENGINEER *[Signature]* Date 27 FEB 05
 REVIEWED BY

INSPECTION PERIOD 8TH
 Tendon # V140
 END: FIELD N/A (1 piece washer)
 SHOP X (2 piece washer)

A75/A459

ENCLOSURE 6
Data Sheet 4

Tendon Buttonhead Inspection



REMOVED
FOR TESTING
SPD 9-8-04

INSPECTION PERIOD 8TH

Tendon # V140
END: FIELD X (1 piece washer)
SHOP N/A (2 piece washer)

RB Tendon Surveillance

COMMENT: ALL BUTTONHEADS ACCEPTABLE

SHIM STACK
2"

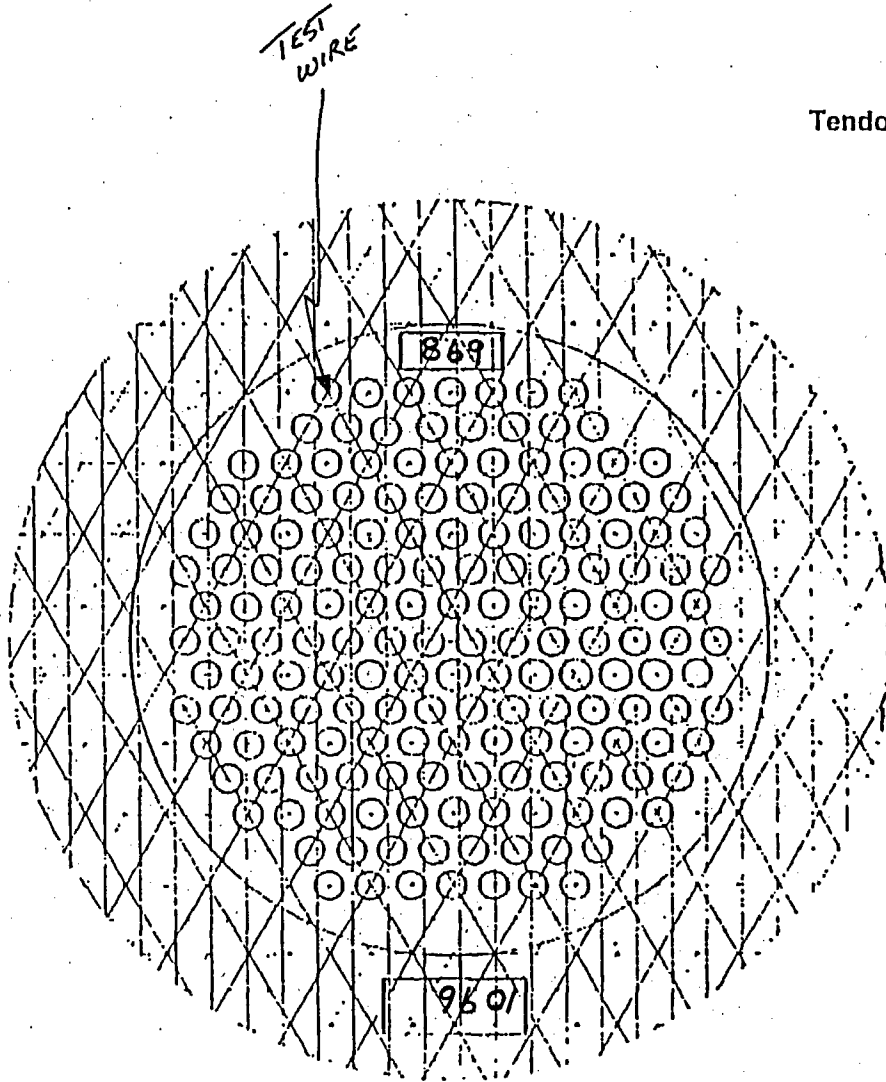
RETENSIONED
SHIM STACK
6.05"

INSPECTED BY [Signature] Date 9-7-04
CONTRACTOR FOREMAN
VERIFIED BY [Signature] Date 9-2-04
COGNIZANT QV INSPECTOR
COGNIZANT MECH/STRUCT ENGINEER [Signature] Date 27 Feb 05
REVIEWED BY

APD/A459

ENCLOSURE 6
Data Sheet 4

Tendon Buttonhead Inspection



RB Tendon Surveillance

COMMENT: ALL BUTTON HEADS ACCEPTABLE.

NOTE: NO CHANGE IN BUTTON HEADS
AFTER RETENSIONING.
11-19-04

SHIM STACK

4", 4", 4", 2", 1", 1/4" = TOTAL HEIGHT 15.6"

INSPECTED BY [Signature] Date 11-17-04
CONTRACTOR FOREMAN
VERIFIED BY [Signature] Date 11-17-04
COGNIZANT QV INSPECTOR
COGNIZANT MECH/STRUCT ENGINEER [Signature] Date 27 FEB 05
REVIEWED BY

INSPECTION PERIOD 8+3

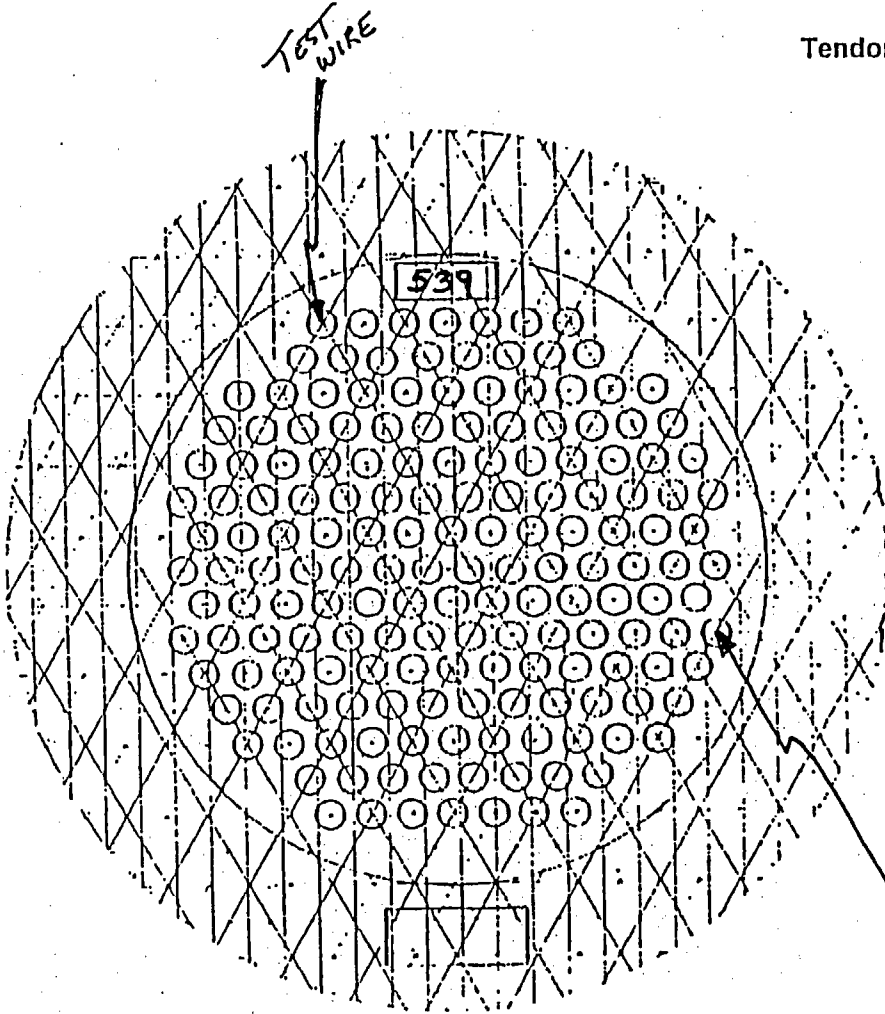
Tendon # V141
END: FIELD (1 piece washer)
SHOP X (2 piece washer)

FINAL SHIM STACK AFTER DETENSIONING
4", 4", 4", 1", 2" = 15.3"

ATX/A459

ENCLOSURE 6
Data Sheet 4

Tendon Buttonhead Inspection



RB Tendon Surveillance

COMMENT: All Button Heads Acceptable.

NOTE: WHILE RETENSIONING (1ST TIME)
ONE BUTTON HEAD POPPED OFF @ OSF
AS MAPPED @ LEFT. 2/11/19-04

SHIM STACK
2"

INSPECTED BY [Signature] Date 11-17-04
CONTRACTOR FOREMAN
VERIFIED BY [Signature] Date 11-17-04
COGNIZANT QV INSPECTOR
COGNIZANT MECH/STRUCT ENGINEER [Signature] Date 27 Feb 05
REVIEWED BY

INSPECTION PERIOD 8th

Tendon # V141
END: FIELD X (1 piece washer)
SHOP _____ (2 piece washer)

Button Head
Popped Off on
11-18-04.
2/11/19-04

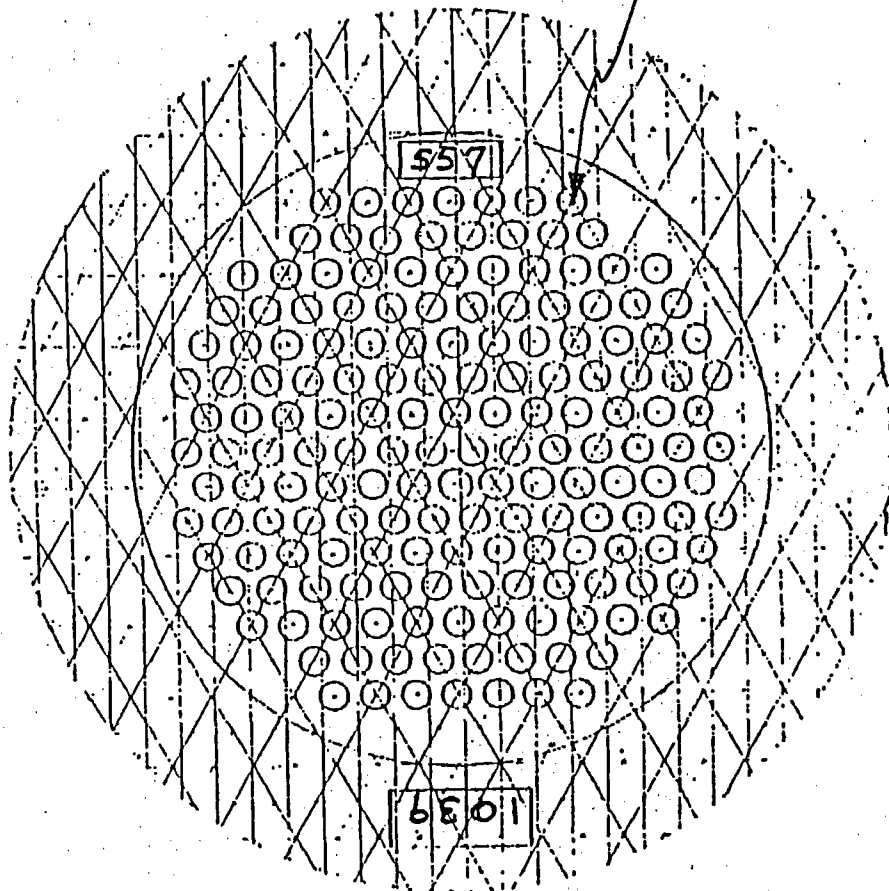
SHIM STACK AFTER
DETENSIONING:
 $3/4, 1/2, 3/4, 3/4, 3/4, 2" =$
TOTAL HEIGHT 5.5"

APB/AUG 9

ENCLOSURE 6
Data Sheet 4

Tendon Buttonhead Inspection

TEST WIRE



RB Tendon Surveillance

COMMENT:

ALL BUTTON HEADS ACCEPTABLE.

4.
11-9-04

NOTE: NO CHANGE IN BUTTON HEADS

4.
11-20-04 AFTER LIFT-OFF.

4.
11-20-04

SWIM STACK

$\frac{1}{8}$ " , $\frac{1}{4}$ " , 1" , 2" , 4" = TOTAL HEIGHT 7.5"

INSPECTED BY
CONTRACTOR FOREMAN

[Signature]

Date 11-4-04

VERIFIED BY

COGNIZANT QV INSPECTOR

[Signature]

Date 11-4-04

COGNIZANT MECH/STRUCT ENGINEER

[Signature]

Date 27 Feb 05

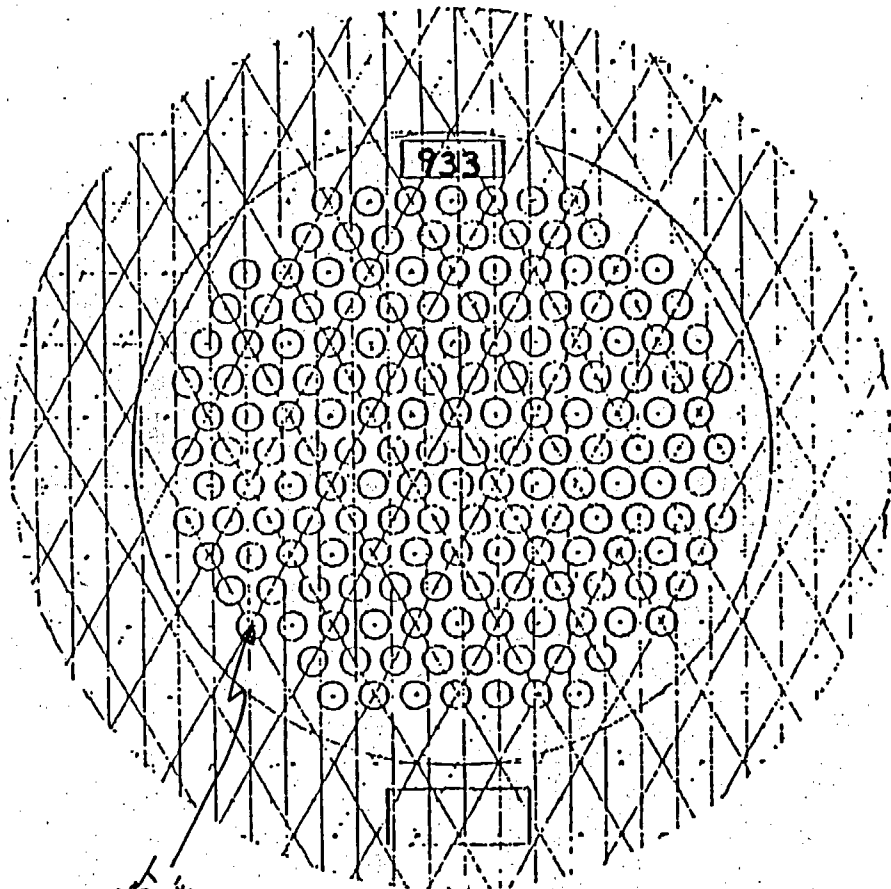
REVIEWED BY

INSPECTION PERIOD 6th

Tendon # H13-11
END: FIELD (1 piece washer)
SHOP (2 piece washer)

APP/AV59

Tendon Buttonhead Inspection



INSPECTION PERIOD 8 + h

Tendon # 1413-11
END: FIELD X (1 piece washer)
SHOP _____ (2 piece washer)

RB Tendon Surveillance

COMMENT: ALL BUTTON HEADS ACCEPTABLE.

NOTE: NO CHANGE IN BUTTON HEADS AFTER
LEFT OFF.

4.
11-22-04

SHIM STACK

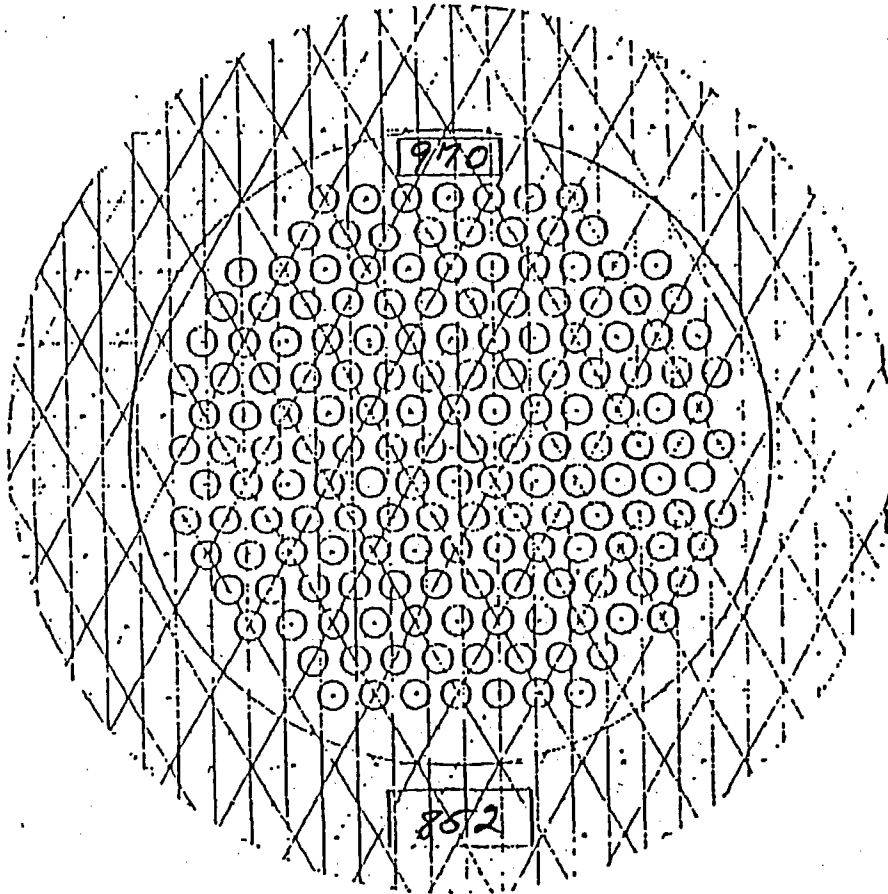
$\frac{1}{2}''$, $1''$, $1''$, $4''$ = TOTAL HEIGHT 6.6''

INSPECTED BY _____ Date 11-12-04
CONTRACTOR FOREMAN [Signature]
VERIFIED BY _____ Date 11-12-04
COGNIZANT QV INSPECTOR [Signature]
COGNIZANT MECH/STRUCT ENGINEER [Signature] Date 27 FEB 05
REVIEWED BY _____

1801/1459

ENCLOSURE 6
Data Sheet 4

Tendon Buttonhead Inspection



RB Tendon Surveillance

COMMENT: *ALL BUTTONHEADS ACCEPTABLE*

*SHIM STACK
7.25"
(3, 2, 1/2")*

INSPECTED BY
CONTRACTOR FOREMAN

Date 9-16-04

VERIFIED BY
COGNIZANT QV INSPECTOR

Date 9-16-04

COGNIZANT MECH/STRUCT ENGINEER

Date 27 Feb 05

REVIEWED BY

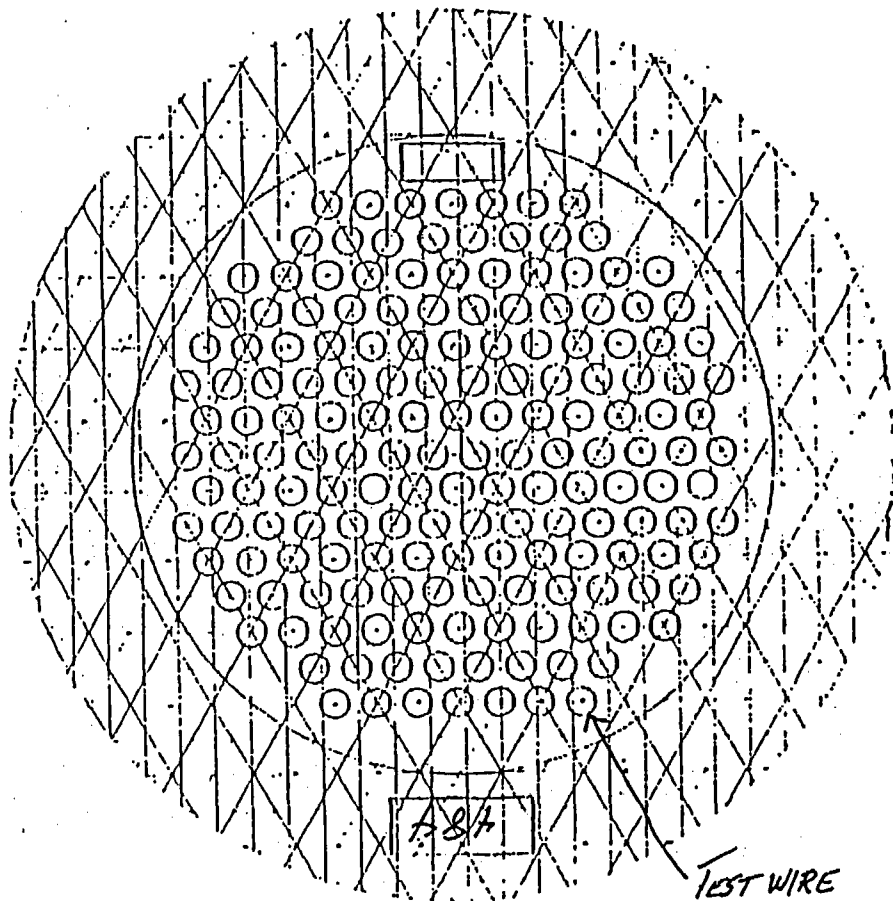
INSPECTION PERIOD 8TH

Tendon # 435-49
END: FIELD MA (1 piece washer)
SHOP X (2 piece washer)

PA/A455

ENCLOSURE 6
Data Sheet 4

Tendon Buttonhead Inspection



RB Tendon Surveillance

COMMENT: *ALL BUTTON HEADS ACCEPTABLE*

*SHIM STACK
6.85"
4, 2, 1/2, 1/4"*

INSPECTED BY _____ Date 9-15-04
CONTRACTOR FOREMAN *[Signature]*
VERIFIED BY _____ Date 9-15-04
COGNIZANT QV INSPECTOR *[Signature]*
COGNIZANT MECH/STRUCT ENGINEER *[Signature]* Date 27 FEB 05
REVIEWED BY _____

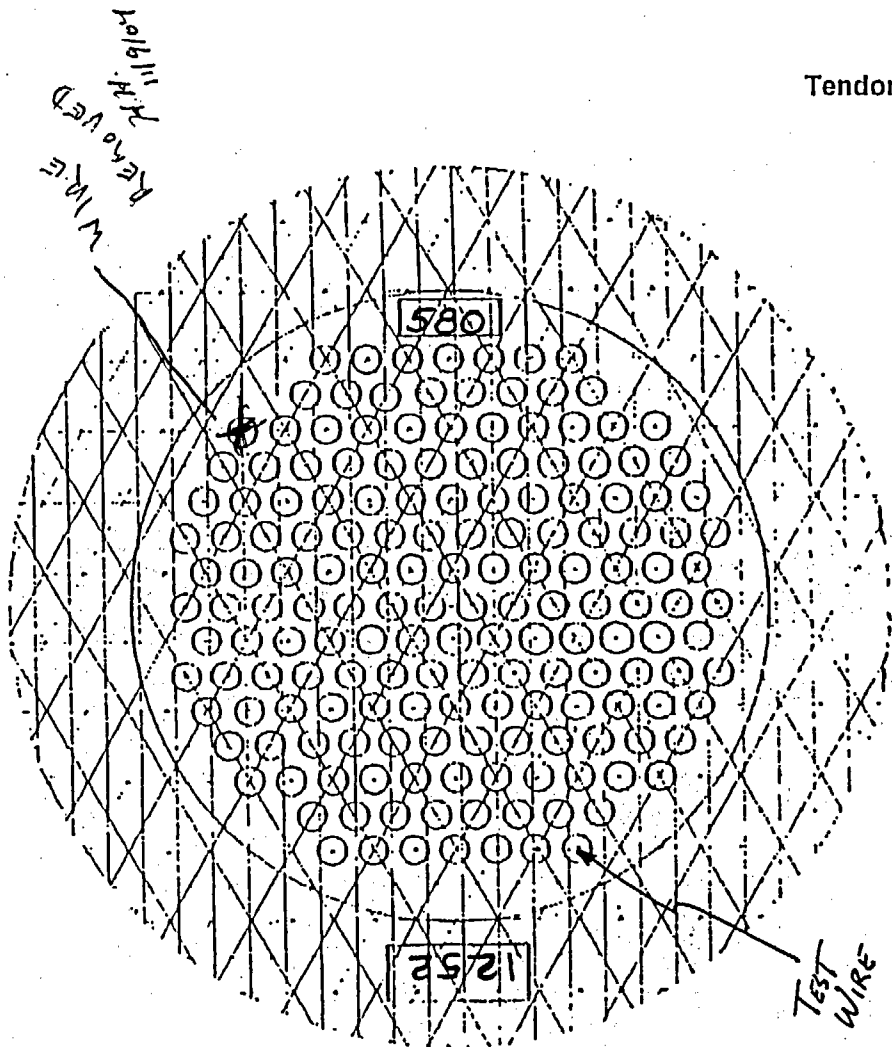
INSPECTION PERIOD 8TH

Tendon # K35-49
END: FIELD X (1 piece washer)
SHOP MIA (2 piece washer)

102/1455

ENCLOSURE 6
Data Sheet 4

Tendon Buttonhead Inspection



RB Tendon Surveillance

COMMENT: ALL BUTTON HEADS ACCEPTABLE.

SHIM STACK

$\frac{1}{8}$ " $\frac{1}{4}$ " 2" 4" = TOTAL HEIGHT 6.5"

INSPECTED BY [Signature] Date 11-5-04
 CONTRACTOR FOREMAN
 VERIFIED BY [Signature] Date 11-5-04
 COGNIZANT QV INSPECTOR
 COGNIZANT MECH/STRUCT ENGINEER [Signature] Date 27 Feb 06
 REVIEWED BY

INSPECTION PERIOD 8th

Tendon # H 46-25
 END: FIELD (1 piece washer)
 SHOP X (2 piece washer)

FINAL SHIM STACK AFTER DETENSIONING.
 2 " $\frac{1}{8}$ " $\frac{1}{4}$ " $\frac{1}{4}$ " $\frac{1}{2}$ " $\frac{1}{2}$ " 4" = TOTAL HEIGHT 7.75"

NOTE: ALL BUTTON HEADS ACCEPTABLE AFTER

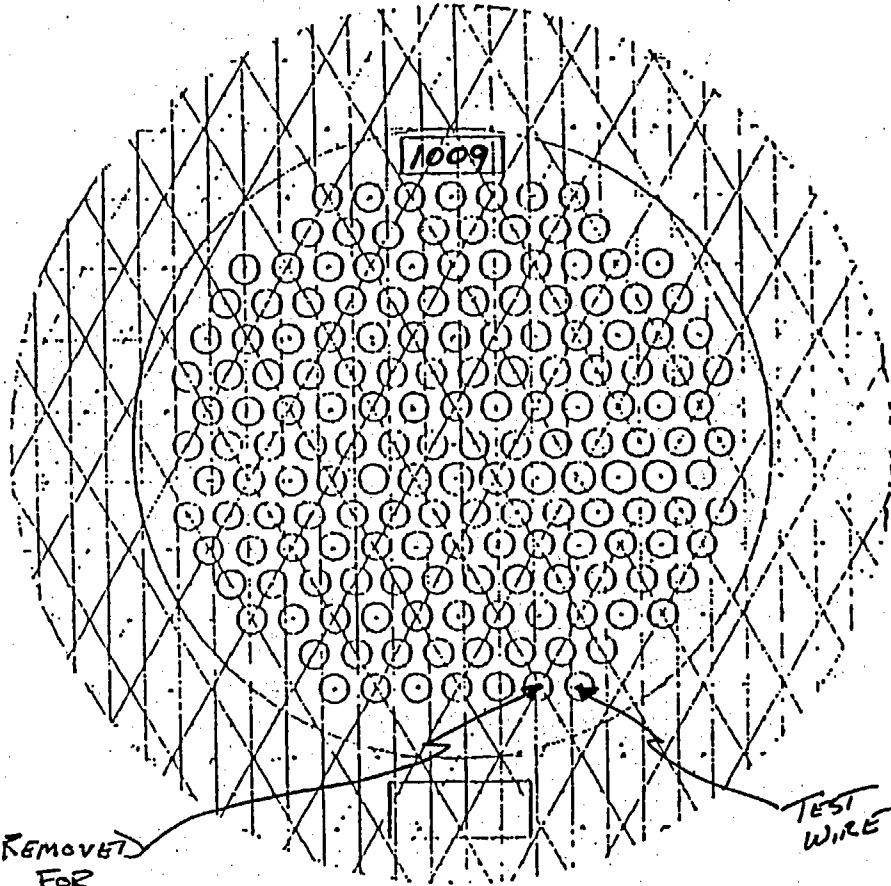
FINAL LIFT-OFF

A83/A459

ENCLOSURE 6
Data Sheet 4

1301-9.1
Revision 18
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Tendon Buttonhead Inspection



REMOVED FOR TESTING ON 11-9-04
INSPECTION PERIOD 8th

Tendon # H46-2S
END: FIELD X (1 piece washer)
SHOP _____ (2 piece washer)

RB Tendon Surveillance

COMMENT: *ALL BUTTON HEADS ACCEPTABLE.*

SHIM STACK

1", 2", 4" = TOTAL HEIGHT 7.1"

INSPECTED BY _____
CONTRACTOR FOREMAN [Signature] Date 11-8-04
VERIFIED BY _____
COGNIZANT QV INSPECTOR [Signature] Date 11-8-04
COGNIZANT MECH/STRUCT ENGINEER [Signature] Date 27 FEB 05
REVIEWED BY _____

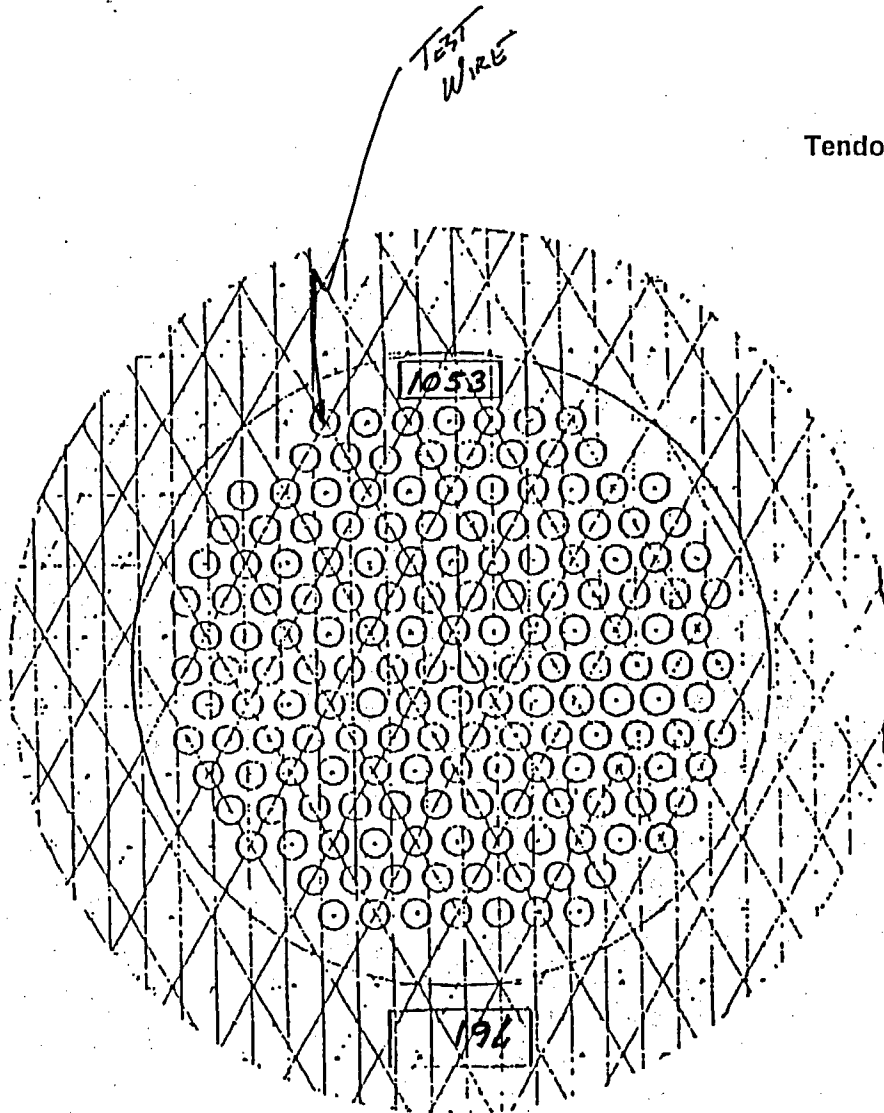
FINAL SHIM STACK AFTER DETENSIONING.
 $\frac{1}{2}$ ", $\frac{1}{8}$ ", $\frac{1}{4}$ ", 1", 2", 4" = TOTAL HEIGHT 8.0"

RBY/H459

NOTE: ALL BUTTON HEADS ACCEPTABLE AFTER
70 FINAL LIFT-OFF. 11-10-04

ENCLOSURE 6
Data Sheet 4

Tendon Buttonhead Inspection



RB Tendon Surveillance

COMMENT: All Button Heads Acceptable.

SHIM STACK

$\frac{1}{8}$ " $\frac{1}{4}$ " $\frac{1}{2}$ " 2" 4" = TOTAL HEIGHT 7"

INSPECTED BY
CONTRACTOR FOREMAN [Signature] Date 11-5-04

VERIFIED BY
COGNIZANT QV INSPECTOR [Signature] Date 11-5-04

COGNIZANT MECH/STRUCT ENGINEER [Signature] Date 27 FEB 05

REVIEWED BY

INSPECTION PERIOD 8/04

Tendon # H 62-18
END: FIELD (1 piece washer)
SHOP X (2 piece washer)

PRE LIFT-OFF 11-5-04

NOTE: No CHANGE AFTER LIFT-OFF.
11-8-04

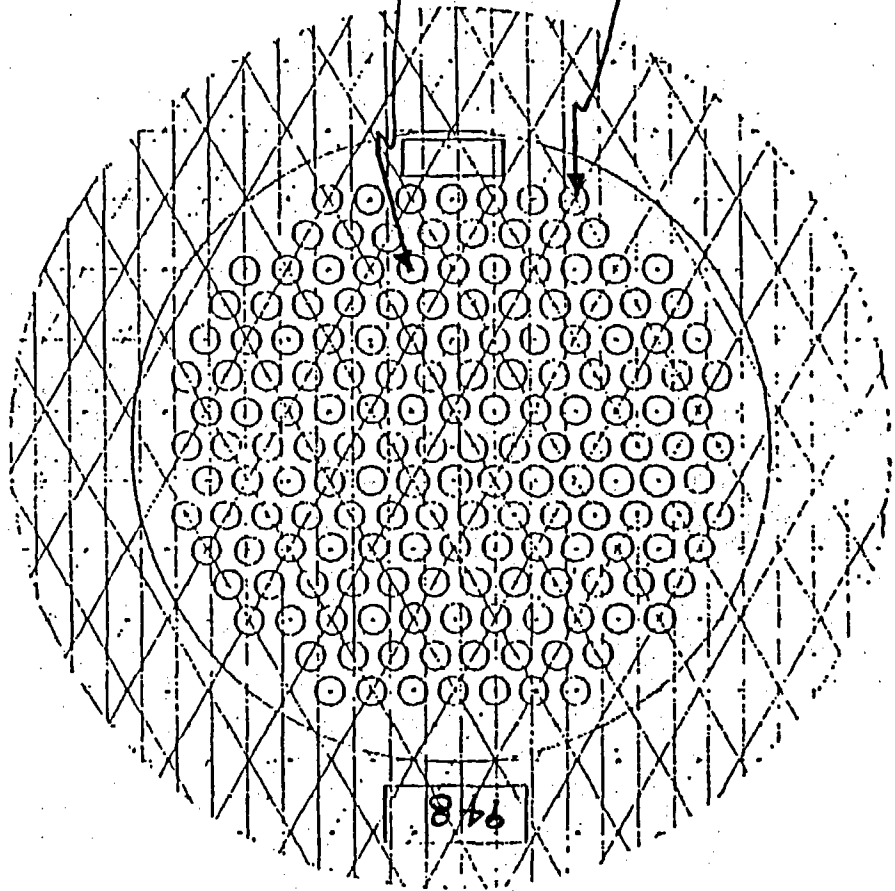
105/1459

ENCLOSURE 6
Data Sheet 4

Tendon Buttonhead Inspection

PROTRUDING
BUTTON HEAD
APPROX $\frac{1}{8}$ "

TEST WIRE



RB Tendon Surveillance

COMMENT: ONE PROTRUDING BUTTON HEAD APPROX. $\frac{1}{8}$ "
AS MAPPED. 11-2-04

SHIM STACK

$\frac{1}{8}$ ", $\frac{1}{4}$ ", 1", 2", 4" = TOTAL HIGH 7.5"

INSPECTED BY [Signature] Date 11-2-04
CONTRACTOR FOREMAN
VERIFIED BY [Signature] Date 11-2-04
COGNIZANT QV INSPECTOR
COGNIZANT MECH/STRUCT ENGINEER [Signature] Date 27 FEB 05
REVIEWED BY

INSPECTION PERIOD 8th

Tendon # H62-18
END: FIELD X (1 piece washer)
SHOP _____ (2 piece washer)

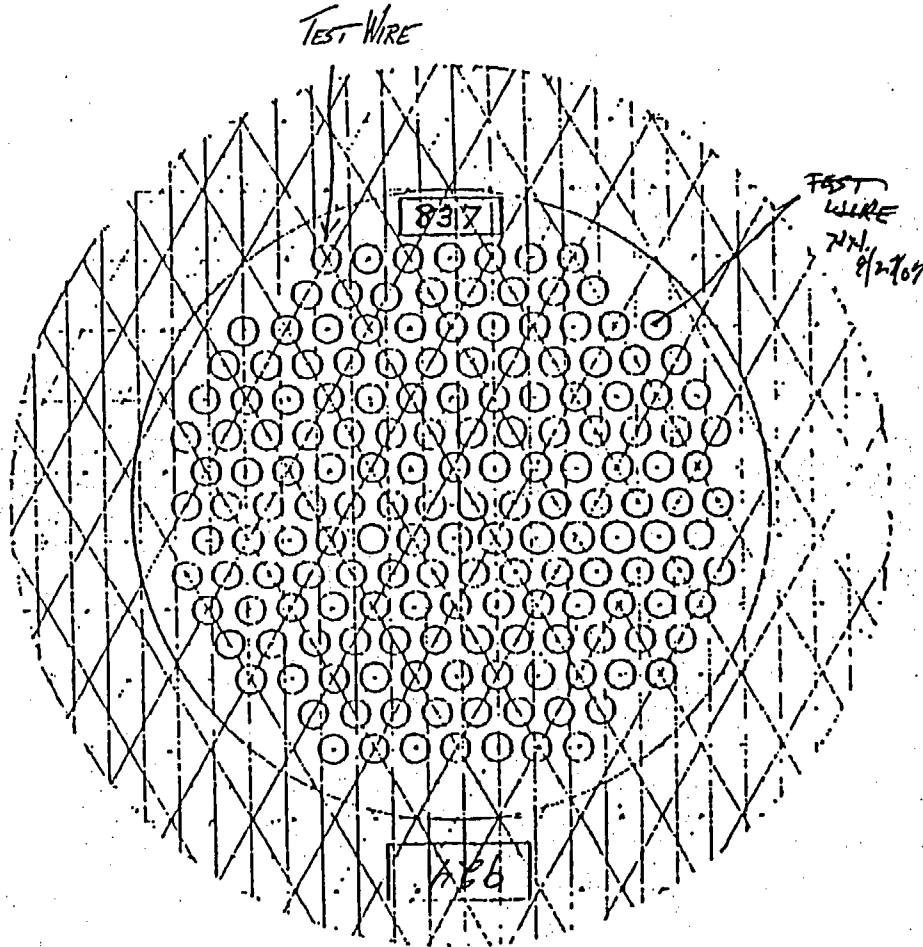
PRE LIFT-OFF 11-2-04
NOTE: NO CHANGE AFTER LIFT-OFF.
11-3-04

PO/AUG

ENCLOSURE 6
Data Sheet 4

1301-9.1
Revision 18
Page 9 of 16

Tendon Buttonhead Inspection



RB Tendon Surveillance

COMMENT: ALL BUTTONHEADS ACCEPTABLE

SHIM STACK
6.80
(4, 2, 1/2, 1/4")

INSPECTED BY [Signature] Date 9-22-04
CONTRACTOR FOREMAN
VERIFIED BY [Signature] Date 9-22-04
COGNIZANT QV INSPECTOR
COGNIZANT MECH/STRUCT ENGINEER [Signature] Date 27 FEB 05
REVIEWED BY

INSPECTION PERIOD 8TH

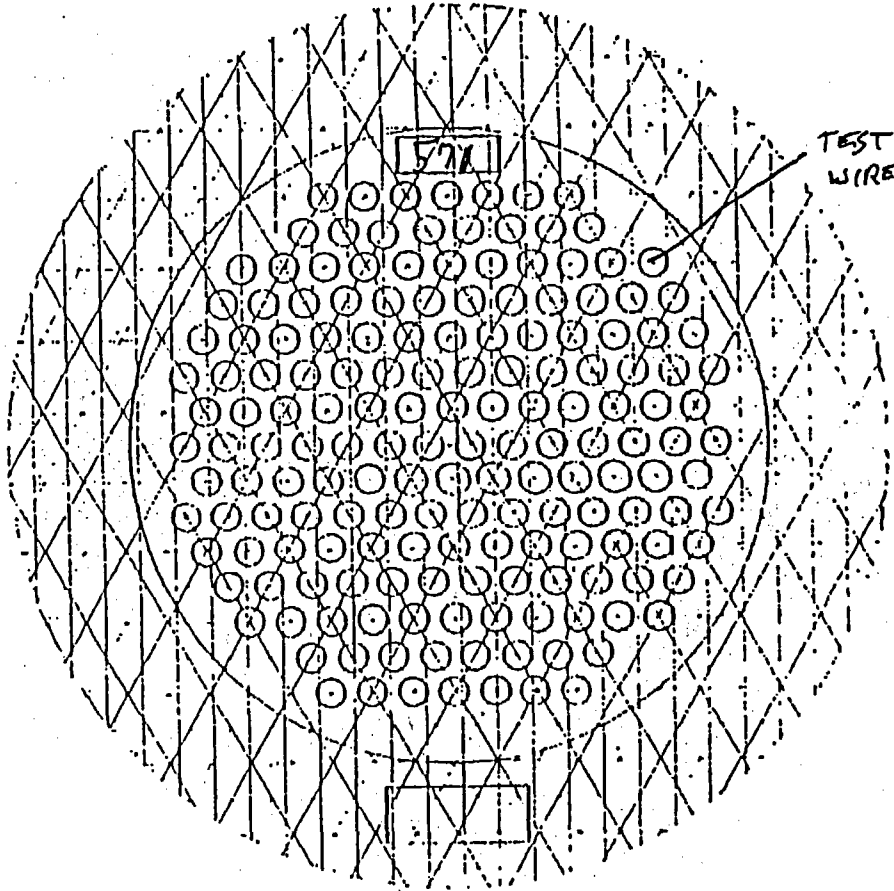
Tendon # H62-26
END: FIELD N/A (1 piece washer)
SHOP X (2 piece washer)

NO 1/14/09

ENCLOSURE 6
Data Sheet 4

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Revision 18
Page 9 of 16

Tendon Buttonhead Inspection



RB Tendon Surveillance

COMMENT: ALL BUTTONHEADS ACCEPTABLE

SHIM STACK

AH. 7.304 B.P.
8" 1", 2" 1/4"

INSPECTED BY
CONTRACTOR FOREMAN

Date 9-27-04

VERIFIED BY

COGNIZANT QV INSPECTOR

Date 9-27-04

COGNIZANT MECH/STRUCT ENGINEER

Date 27 FEB 05

REVIEWED BY

INSPECTION PERIOD 8th

Tendon # 1462-26
END: FIELD X (1 piece washer)
SHOP N/A (2 piece washer)

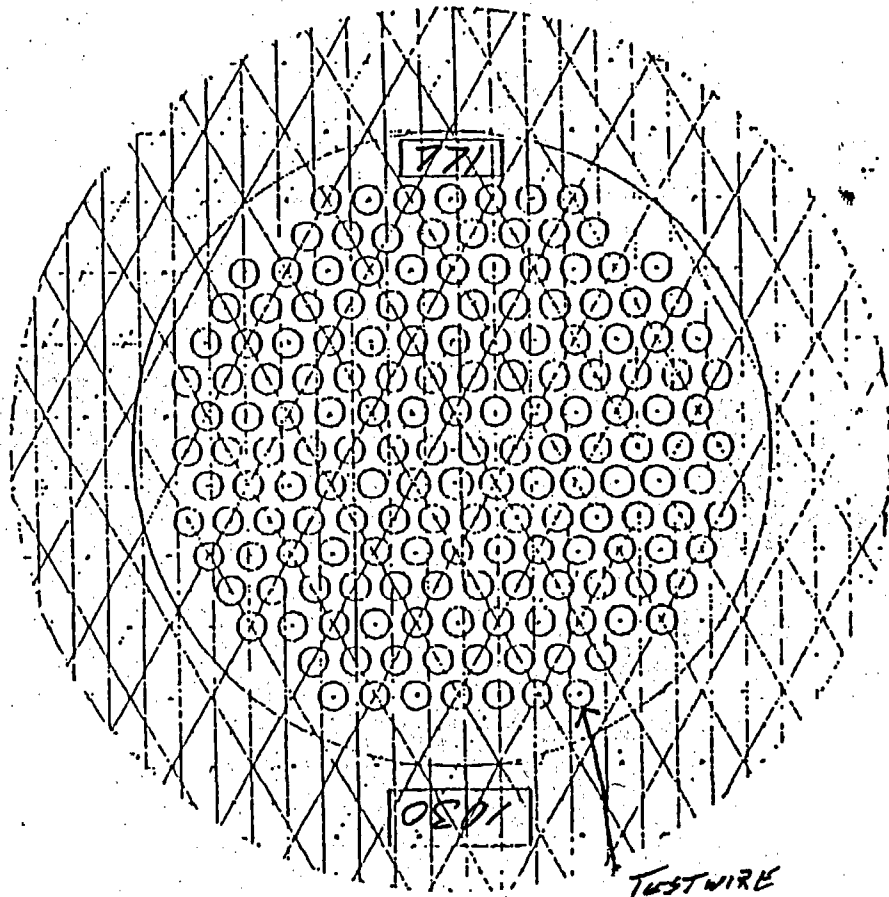
NOTE: NO CHANGE AFTER LIFT-OFF. 2.11.2004

ABO/A459

ENCLOSURE 6
Data Sheet 4

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Revision 18
Page 9 of 16

Tendon Buttonhead Inspection



RB Tendon Surveillance

COMMENT: *All BUTTONHEADS ACCEPTABLE*

*SHIM STACK HEIGHT
5.90"
(4, 1, 1/2, 1/4")*

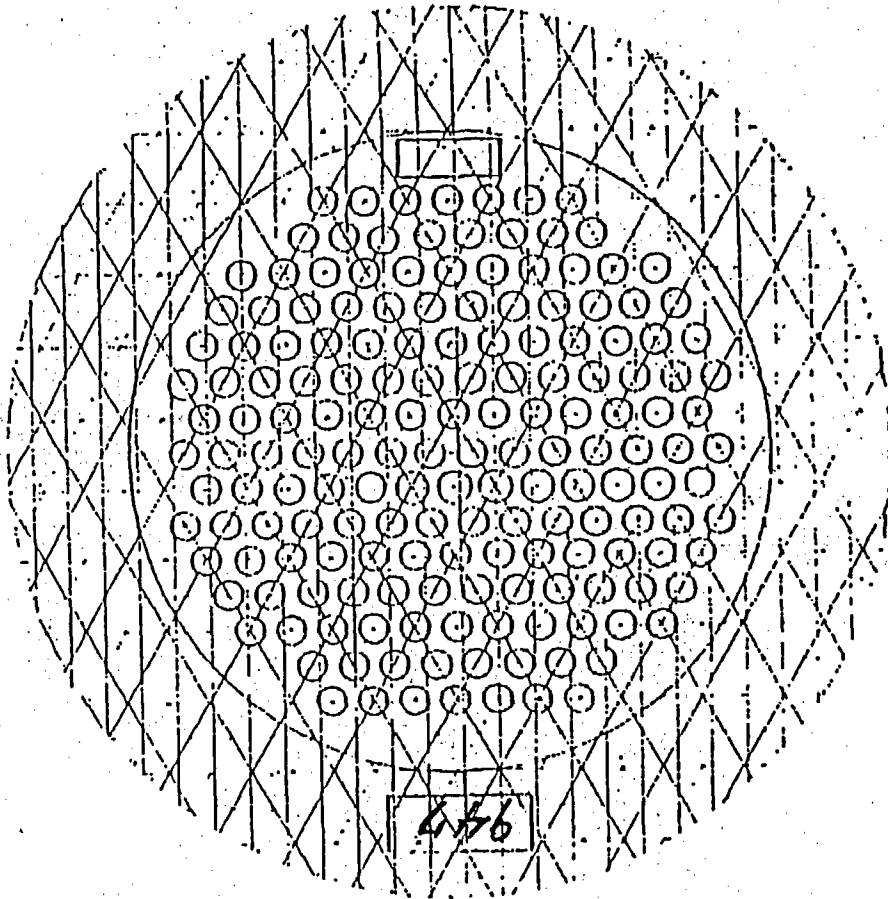
INSPECTED BY *[Signature]* Date *9-13-04*
CONTRACTOR FOREMAN
VERIFIED BY *[Signature]* Date *9-13-04*
COGNIZANT QV INSPECTOR *[Signature]* Date *27 FEB 05*
COGNIZANT MECH/STRUCT ENGINEER *[Signature]*
REVIEWED BY

INSPECTION PERIOD 8TH

Tendon # D-213
END: FIELD (1 piece washer)
SHOP X (2 piece washer)

APR 1 / 4159

Tendon Buttonhead Inspection



RB Tendon Surveillance

COMMENT: *ALL BUTTONHEADS ACCEPTABLE*

*SHIM STACK
5.40"
(4.64")*

INSPECTED BY _____ Date 9-11-04
 CONTRACTOR FOREMAN *[Signature]*
 VERIFIED BY _____ Date 9-11-04
 COGNIZANT QV INSPECTOR *[Signature]*
 COGNIZANT MECH/STRUCT ENGINEER *[Signature]* Date 27 FEB 05
 REVIEWED BY _____

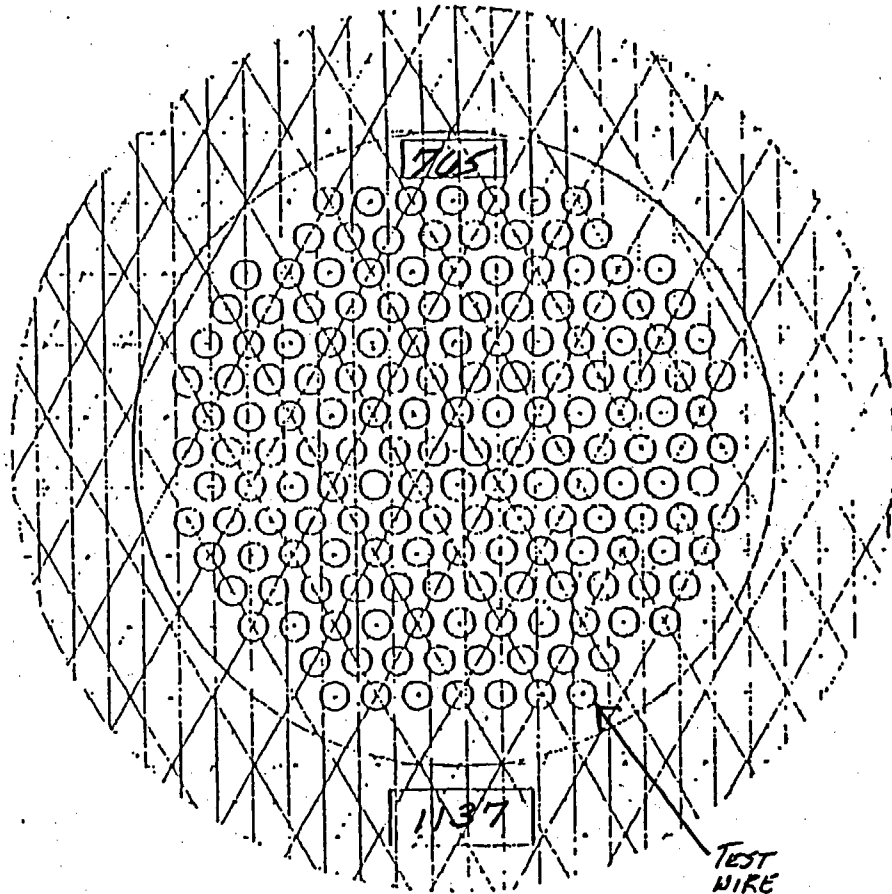
INSPECTION PERIOD 8TH

Tendon # D-213 SE
 END: FIELD X (1 piece washer)
 SHOP _____ (2 piece washer)

PP/AUS9

ENCLOSURE 6
Data Sheet 4

Tendon Buttonhead Inspection



RB Tendon Surveillance

COMMENT: *ALL BUTTONHEADS ACCEPTABLE*

*SHIM STACK
7.60"
(2, 2, 2, 1, 1/2")*

INSPECTED BY _____ Date 9-14-04
CONTRACTOR FOREMAN *[Signature]*
VERIFIED BY _____ Date 9-14-04
COGNIZANT QV INSPECTOR *[Signature]*
COGNIZANT MECH/STRUCT ENGINEER *[Signature]* Date 27 Feb 05
REVIEWED BY _____

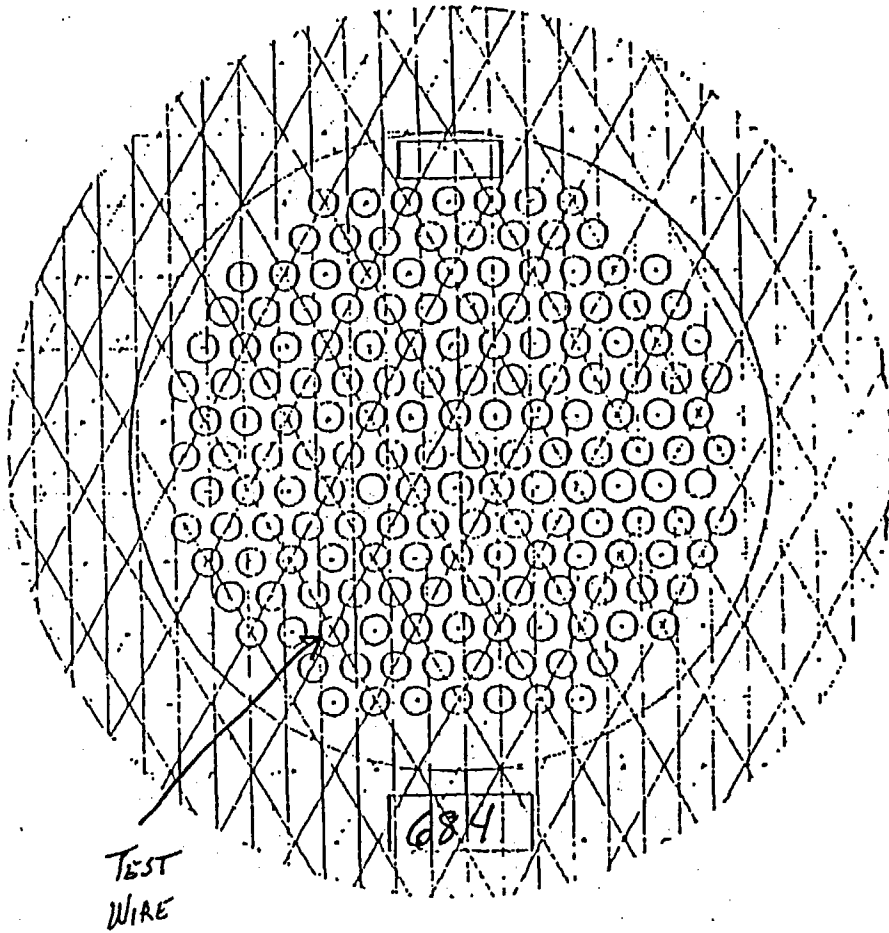
INSPECTION PERIOD 8TH

Tendon # D-225
END: FIELD _____ (1 piece washer)
SHOP X (2 piece washer)

PA1/A459

ENCLOSURE 6
Data Sheet 4

Tendon Buttonhead Inspection



RB Tendon Surveillance

COMMENT: *ALL BUTTONHEADS ACCEPTABLE*

*SHIM STACK
4.70"
(2, 2, 1/2, 1/8")*

INSPECTED BY
CONTRACTOR FOREMAN

Date 9-14-04

VERIFIED BY

COGNIZANT QV INSPECTOR
COGNIZANT MECH/STRUCT ENGINEER

Date 9-14-04

Date 27 FEB 05

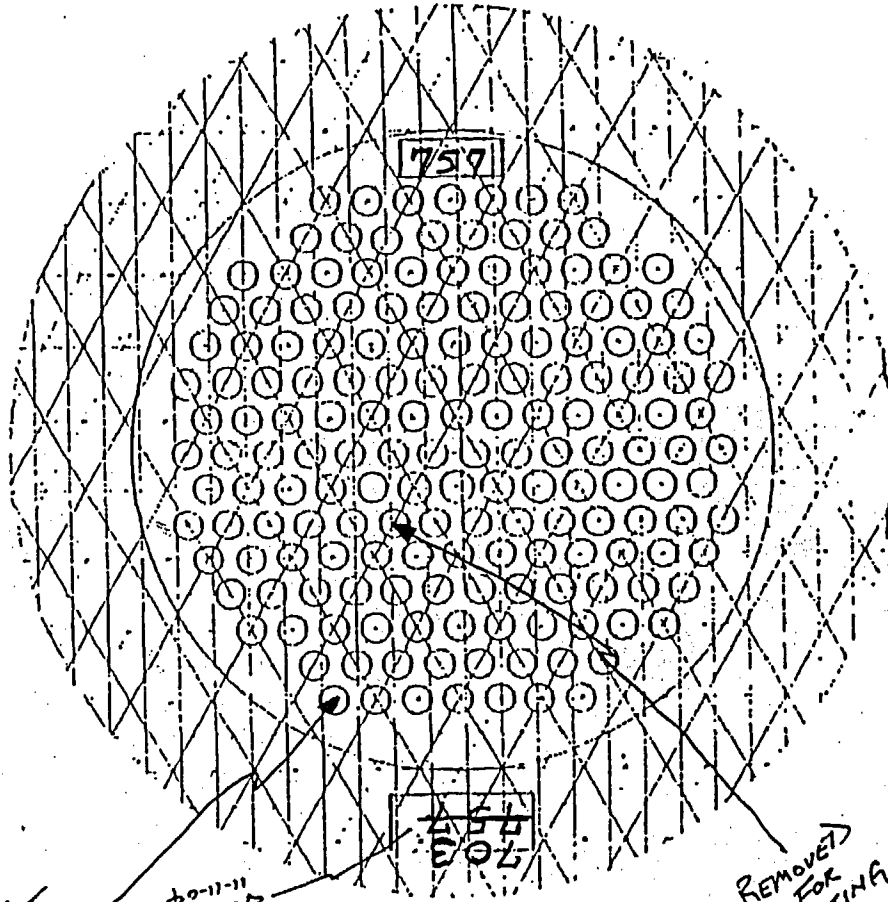
REVIEWED BY

INSPECTION PERIOD 8TH

Tendon # D-225
END: FIELD X (1 piece washer)
SHOP _____ (2 piece washer)

P92/A459

Tendon Buttonhead Inspection



TEST WIRE
INSPECTION PERIOD 8TH

Tendon # D-230
END: FIELD (1 piece washer)
SHOP X (2 piece washer)

REMOVED FOR TESTING ON 11-15-04
J. 11-15-04

RB Tendon Surveillance

COMMENT: ALL BUTTON HEADS ACCEPTABLE...

SHIM STACK

$\frac{1}{8}'' , \frac{1}{4}'' , 2'' , 4'' = \text{TOTAL HEIGHT } 6.5''$

INSPECTED BY [Signature] Date 11-11-04
 CONTRACTOR FOREMAN
 VERIFIED BY [Signature] Date 11-16-04
 COGNIZANT QV INSPECTOR
 COGNIZANT MECH/STRUCT ENGINEER [Signature] Date 27 FEB 05
 REVIEWED BY

FINAL SHIM STACK AFTER DETENSIONING

$4'' , \frac{1}{4}'' , \frac{1}{2}'' , 2'' = \text{TOTAL HEIGHT } 6.9''$

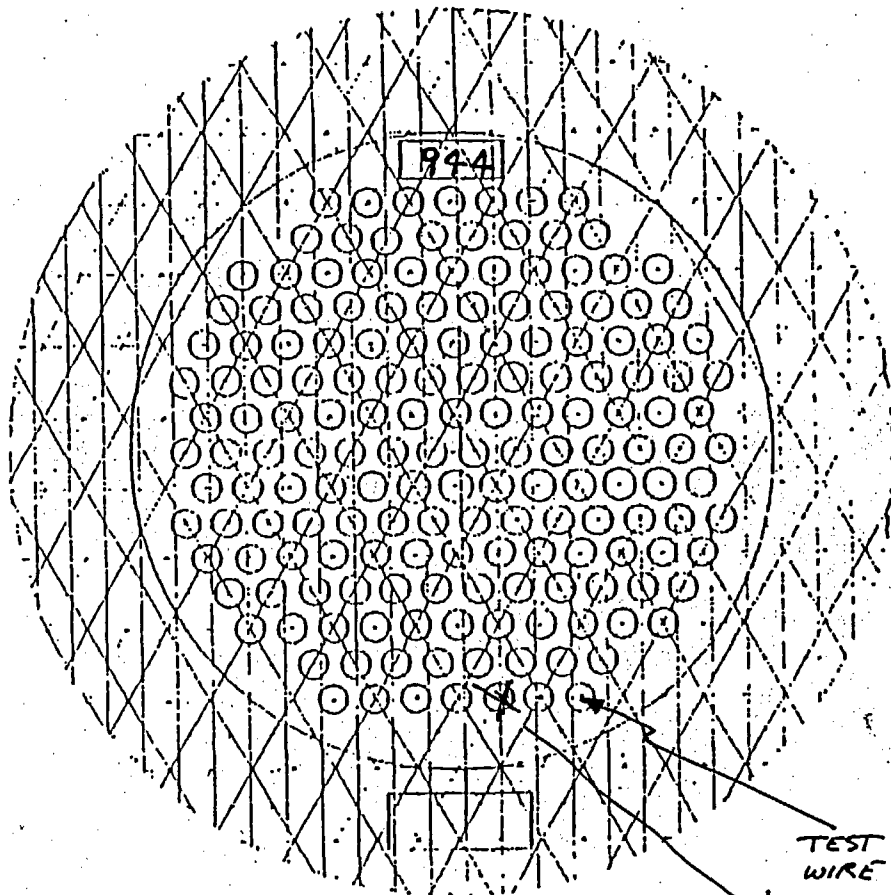
NOTE: ALL BUTTON HEADS ACCEPTABLE AFTER

FINAL LIFT-OFF. J.
11-16-04

PP3/AUSG

ENCLOSURE 6
Data Sheet 4

Tendon Buttonhead Inspection



RB Tendon Surveillance

COMMENT: *All Button Heads Acceptable.*

Slim Stack
2", 4" = Total Height 6.1"

INSPECTED BY	<i>[Signature]</i>
CONTRACTOR FOREMAN	Date <u>11-11-04</u>
VERIFIED BY	<i>[Signature]</i>
COGNIZANT QV INSPECTOR	Date <u>11-11-04</u>
COGNIZANT MECH/STRUCT ENGINEER	Date <u>27 Feb 05</u>
REVIEWED BY	<i>[Signature]</i>

INSPECTION PERIOD 8th.

Tendon # D-230
END: FIELD X (1 piece washer)
SHOP _____ (2 piece washer)

TEST WIRE
SAMPLE WIRE REMOVED

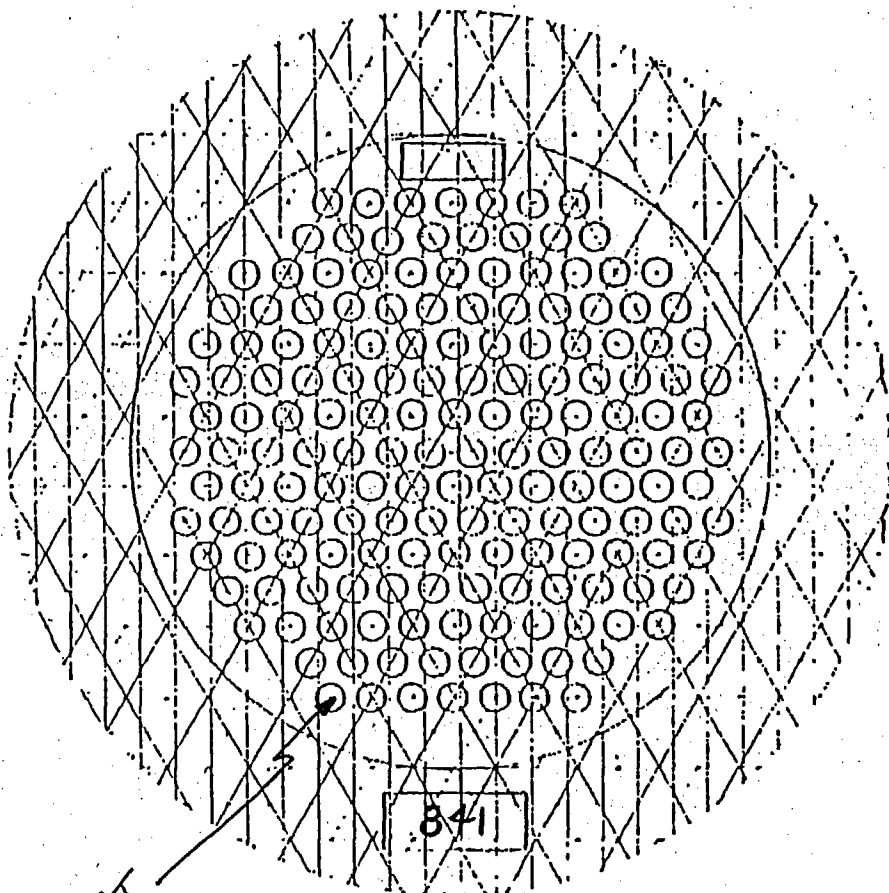
AFTER RETENSIONING
Slim Stack

$2'' + \frac{1}{4}'' + \frac{1}{2}'' + \frac{1}{2}'' + \frac{1}{2}'' + \frac{1}{2}'' + 4'' = \text{TOTAL HEIGHT } 7.8''$

NOTE: All Button Heads Acceptable After
FINAL LIFT-OFF. 11-16-04

PWX/455

Tendon Buttonhead Inspection



RB Tendon Surveillance

COMMENT: *All Button Heads Acceptable.*
4.11.3-04

SHIM STACK

1", 4" = TOTAL HEIGHT 5.1"

INSPECTED BY _____ Date *11-3-04*
 CONTRACTOR FOREMAN *[Signature]*
 VERIFIED BY _____ Date *11-3-04*
 COGNIZANT QV INSPECTOR *[Signature]*
 COGNIZANT MECH/STRUCT ENGINEER *[Signature]* Date *27 FEB 05*
 REVIEWED BY _____

INSPECTION PERIOD *8th*

Tendon # *D342*
 END: FIELD (1 piece washer)
 SHOP _____ (2 piece washer)

PA5/4459

PRIOR TO LIFT-OFF TEST
ENCLOSURE 6

1301-9.1
Revision 18
Page 6 of 16

Data Sheet 1
Anchorage Assembly Surveillance Inspection
Dome Tendons

INSPECTION PERIOD 8TH

TENDON	END	BUTTONHEADS				STRESSING WASHER & NUT			SHIMS			BEARING PLATE			DATE INSP.	COMMENTS	INSP. BY CONTR. FOREMAN	VERIF. BY COGNIZANT QV INSP.
		NO. OF MISSING, BROKEN, AND/OR DAMAGED WIRES	CORR.	SKETCHED	CORR.	CRACKS	SKETCHED	CORR.	CRACKS	SKETCHED	CORR.	CRACKS	SKETCHED	CORR.				
I.D.	Location	Corr.	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. D-213	S	1	0	1	N/A	1	NONE	N/A	1	NONE	N/A	2	NONE	N/A	9-13-04	NONE	PKG	SK
	F	1	0	1	N/A	1	NONE	N/A	1	NONE	N/A	2	NONE	N/A	9-11-04	NONE	PKG	SK
2. D-225	S	1	0	1	N/A	1	NONE	N/A	1	NONE	N/A	2	NONE	N/A	9-14-04	NONE	PKG	SK
	F	1	0	1	N/A	1	NONE	N/A	1	NONE	N/A	2	NONE	N/A	9-14-04	NONE	PKG	SK
3. D-235																		
4. D-230	S	N	0	N	N/A	N	NONE	N/A	N	NONE	N/A	N	NONE	N/A	11-11-04	NONE	PKG	SK
	F	N	0	N	N/A	N	NONE	N/A	N	NONE	N/A	N	NONE	N/A	11-11-04	NONE	PKG	SK
5. D-342	S	N	0	N	N/A	N	NONE	N/A	N	NONE	N/A	N	NONE	N/A	11-3-04	NONE	PKG	SK
	F	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
6.																		

LEGEND

GENERAL

TENDON END-LOCATION

Y = YES
N = NO

IDENTIFY TENDON END (SHOP OR FIELD) AND NW, NE, SW, SE

PKG/459

Data Sheet 1
Anchorage Assembly Surveillance Inspection
Dome Tendons

INSPECTION PERIOD 8TH

TENDON 1	END 2	CORR. 3	NO. OF MISSING, BROKEN, AND/OR DAMAGED WIRES 4	BUTTONHEADS			STRESSING WASHER & NUT			SHIMS			BEARING PLATE			DATE INSP.	COMMENTS 17	INSP. BY CONTR. FOREMAN 18	VERIF. BY COGNIZANT QV INSP. 19
				CORR. 5	SKETCHED 6	CORR. 7	CRACKS 8	SKETCHED 9	CORR. 10	CRACKS 11	SKETCHED 12	CORR. 13	CRACKS 14	SKETCHED 15					
1.D-213	S	1	0	1	N/A	1	NONE	N/A	1	NONE	N/A	2	NONE	N/A	8-13-04	NONE	TRG	200	
	F	1	0	1	N/A	1	NONE	N/A	1	NONE	N/A	2	NONE	N/A	9-11-04	NONE	TRG	200	
2.D-225	S	1	0	1	N/A	1	NONE	N/A	1	NONE	N/A	2	NONE	N/A	9-14-04	NONE	TRG	200	
	F	1	0	1	N/A	1	NONE	N/A	1	NONE	N/A	2	NONE	N/A	9-17-04	NONE	TRG	200	
3.D-230	S	N	* 1	H	N/A	N	NONE	N/A	N	NONE	N/A	N	NONE	N/A	11-16-04	H/OHE	TRG	21.	
	F	N	* 1	N	N/A	N	NONE	N/A	N	NONE	N/A	N	NONE	N/A	11-16-04	NONE	TRG	21.	
4.D-342	S	No LIFT-OFF			PERFORMED. 21. 11-3-04														
	F	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5.																			
6.																			

LEGEND

GENERAL

Y = YES
N = NO

TENDON END-LOCATION

IDENTIFY TENDON END (SHOP OR FIELD) AND NW, NE, SW, SE

* ONE WIRE REMOVED FOR TESTING ON 11-15-04.
21. 11-15-04

DPT/A459

Data Sheet 2
Anchorage Assembly Surveillance Inspection
Vertical Tendons

INSPECTION PERIOD 8TH

TENDON	END	BUTTONHEADS				STRESSING WASHER & NUT				SHIMS			BEARING PLATE			DATE INSP.	COMMENTS	INSP. BY CONTR. FOREMAN	VERIF. BY COGNIZANT QV INSP.
		NO. OF MISSING, BROKEN, AND/OR DAMAGED WIRES	CORR.	SKETCHED	CORR.	CORR.	CRACKS	SKETCHED	CORR.	CRACKS	SKETCHED	CORR.	CRACKS	SKETCHED					
I.D.	Location	Corr.	4	5	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
1. V32	S/T	1	0	1	N/A	1	NONE	N/A	1	NONE	N/A	2	NONE	N/A	8-31-04	NONE	ENG	SPD	
	E/B	1	0	1	N/A	1	NONE	N/A	1	NONE	N/A	1	NONE	N/A	9-2-04		ENG	SPD	
2. V53	S/T	2	0	1	N/A	2	NONE	N/A	2	NONE	N/A	2	NONE	N/A	8-31-04	CR. SURFACE CRACKS	ENG	SPD	
	E/B	1	0	1	N/A	1	NONE	N/A	1	NONE	N/A	1	NONE	N/A	9-2-04		ENG	SPD	
3. V66	S/T	1	0	1	N/A	1	NONE	N/A	2	NONE	N/A	2	NONE	N/A	8-31-04	NONE	ENG	SPD	
	E/B	1	0	1	N/A	1	NONE	N/A	1	NONE	N/A	1	NONE	N/A	9-2-04		ENG	SPD	
4. V140	S/T	1	0	1	N/A	1	NONE	N/A	2	NONE	N/A	2	NONE	N/A	8-31-04	NONE	ENG	SPD	
	E/B	1	0	1	N/A	1	NONE	N/A	1	NONE	N/A	1	NONE	N/A	9-2-04		ENG	SPD	
5.																			
6.																			

LEGEND

GENERAL

Y = YES
N = NO

TENDON END-LOCATION

IDENTIFY TENDON END (SHOP OR FIELD) AND TOP (T) OR BOTTOM (B) OF TENDON

PP01/4459

Data Sheet 2
Anchorage Assembly Surveillance Inspection
Vertical Tendons

INSPECTION PERIOD 9TH

TENDON	END	BUTTONHEADS				STRESSING WASHER & NUT				SHIMS				BEARING PLATE				DATE INSP.	COMMENTS	INSP. BY CONTR. FOREMAN	VERIF. BY COGNIZANT QV INSP.
		NO. OF MISSING, BROKEN, AND/OR DAMAGED WIRES	CORR.	SKETCHED	CORR.	CRACKS	SKETCHED	CORR.	CRACKS	SKETCHED	CORR.	CRACKS	SKETCHED	CORR.	CRACKS	SKETCHED					
I.D.	Location	Corr.	4	5	7	8	9	10	11	12	13	14	15	16	17	18	19	20			
1. V32	S/T	1	0	1	N/A	1	NONE	N/A	1	NONE	N/A	2	NONE	N/A	9-7-04 NO CHANGE 9-7-04 NO CHANGE	FAG	DPO				
	F/B	1	0	1	N/A	1	NONE	N/A	1	NONE	N/A	1	NONE	N/A							
2. V53	S/T	2	0	1	N/A	2	NONE	N/A	2	NONE	N/A	2	NONE	N/A	9-7-04 NO CHANGE 9-7-04 NO CHANGE	FAG	DPO				
	F/B	1	0	1	N/A	1	NONE	N/A	1	NONE	N/A	1	NONE	N/A							
3. V66	S/T	1	0	1	N/A	1	NONE	N/A	2	NONE	N/A	2	NONE	N/A	9-3-04 NO CHANGE 9-3-04 NO CHANGE	FAG	DPO				
	F/B	1	0	1	N/A	1	NONE	N/A	1	NONE	N/A	1	NONE	N/A							
4. V140	S/T	1	*2	1	N/A	1	NONE	N/A	2	NONE	N/A	2	NONE	N/A	9-9-04 NO CHANGE 9-9-04 NO CHANGE	FAG	DPO				
	F/B	1	*2	1	N/A	1	NONE	N/A	1	NONE	N/A	1	NONE	N/A							
5.																					
6.																					

LEGEND * : NOTE - 1 WIRE REMOVED FOR TESTING 2/09-9-04

GENERAL TENDON END-LOCATION
Y = YES
N = NO
IDENTIFY TENDON END (SHOP OR FIELD) AND TOP (T) OR BOTTOM (B) OF TENDON

APP/4459

PRIOR TO LIFT-OFF TEST
ENCLOSURE 6

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Data Sheet 3
Anchorage Assembly Surveillance Inspection
Hoop Tendons.

INSPECTION PERIOD 8TH

TENDON	END	BUTTONHEADS				STRESSING WASHER & NUT			SHIMS			BEARING PLATE			DATE INSP.	COMMENTS	INSP. BY CONTR. FOREMAN	VERIF. BY COGNIZANT QV INSP.
		I.D.	Location	Corr.	NO. OF MISSING, BROKEN, AND/OR DAMAGED WIRES	CORR.	SKETCHED	CORR.	CRACKS	SKETCHED	CORR.	CRACKS	SKETCHED	CORR.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. H35-49	S/5	1	0	1	N/A	1	NONE	N/A	2	NONE	N/A	2	NONE	N/A	9-16-04	NONE	PKG	PKG
	F/3	1	0	1	N/A	1	NONE	N/A	1	NONE	N/A	2	NONE	N/A	9-15-04		PKG	PKG
2. H62-26	S/6	1	0	1	N/A	1	NONE	N/A	1	NONE	N/A	2	NONE	N/A	9-22-04	24.9.27.04 FOR 7.7.01	PKG	24.9.27.04 FOR 7.7.01
	F/2	NO INSPECTION PERFORMED OR NOT DOCUMENTED PRIOR TO LIFT-OFF. cf.													11-2-04			
3. H13-11	S/1	H	0	N	N/A	N	NONE	N/A	N	NONE	N/A	N	NONE	N/A	11-9-04	NONE	PKG	2/.
	F/3	N	0	H	N/A	N	NONE	N/A	N	NONE	N/A	N	NONE	N/A	11-12-04	NONE	PKG	2/.
4. H62-25	S/6	N	0	N	N/A	N	NONE	N/A	N	NONE	N/A	N	NONE	N/A	11-5-04	NONE	PKG	2/.
	F/4	N	0	N	N/A	N	NONE	N/A	N	NONE	N/A	N	NONE	N/A	11-8-04	NONE	PKG	2/.
5. H62-18	S/6	N	0	N	N/A	N	NONE	N/A	N	NONE	N/A	N	NONE	N/A	11-5-04	NONE	PKG	2/.
	F/2	H	0	H	N/A	N	NONE	N/A	N	NONE	N/A	H	NONE	N/A	11-2-04	NONE	PKG	2/.
6.																		

LEGEND

GENERAL

TENDON END-LOCATION

Y = YES
N = NO

IDENTIFY TENDON END (SHOP OR FIELD) AND NUMBER OF BUTTRESS (1 TO 6) NEAREST TO TENDON END

ADP/AVES

Data Sheet 3
Anchorage Assembly Surveillance Inspection
Hoop Tendons

INSPECTION PERIOD _____

TENDON 1	END 2	CORR. 3	NO. OF MISSING, BROKEN, AND/OR DAMAGED WIRES 4	BUTTONHEADS			STRESSING WASHER & NUT			SHIMS			BEARING PLATE			DATE INSP.	COMMENTS 17	INSP. BY CONTR. FOREMAN 18	VERIF. BY COGNIZANT QV INSP. 19
				CORR. 5	SKETCHED 6	CORR. 7	CRACKS 8	SKETCHED 9	CORR. 10	CRACKS 11	SKETCHED 12	CORR. 13	CRACKS 14	SKETCHED 15					
1H35-49	S/B	I	0	I	N/A	I	NONE	N/A	2	NONE	N/A	2	NONE	N/A	9-16-04	NONE	BAG	✓	
	F/B	I	0	I	N/A	I	NONE	N/A	1	NONE	N/A	2	NONE	N/A	9-15-04	NONE	BAG	✓	
2H62-26	S/G	I	0	I	N/A	I	NONE	N/A	1	NONE	N/A	2	NONE	N/A	9-22-04	NONE	BAG	✓	
	F/Z	N	0	N	H/A	N	NONE	H/A	N	NONE	N/A	N	NONE	H/A	11-2-04	NONE	BAG	✓	
3H13-11	S/I	N	0	H	N/A	H	NONE	H/A	N	NONE	H/A	N	NONE	H/A	11-22-04	NONE	BAG	✓	
	F/Z	H	0	H	H/A	H	NONE	N/A	N	NONE	H/A	H	NONE	H/A	11-22-04	NONE	BAG	✓	
4H46-25	S/G	N	*1	N	H/A	N	NONE	H/A	N	NONE	H/A	N	NONE	H/A	11-10-04	NONE	BAG	✓	
	F/4	N	*1	N	H/A	N	NONE	H/A	N	NONE	H/A	N	NONE	H/A	11-10-04	NONE	BAG	✓	
5H62-18	S/G	H	0	N	H/A	N/A	NONE	N/A	N	NONE	N/A	N	NONE	H/A	11-8-04	NONE	BAG	✓	
	F/Z	H	0	N	H/A	N	NONE	H/A	N	NONE	N/A	N	NONE	H/A	11-3-04	NONE	BAG	✓	
6.																			

LEGEND

GENERAL

TENDON END-LOCATION

Y = YES
N = NO

IDENTIFY TENDON END (SHOP OR FIELD) AND NUMBER OF BUTTRESS (1 TO 6) NEAREST TO TENDON END

* ONE WIRE REMOVED FOR TESTING ON 11-9-04

69 11-9-04

A101/AH59

A102/A459

ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet No.:		Exam Date: <u>8-31-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.:		Tendon End: <input checked="" type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery, Buttress: <u>TOP</u>		Elevation:		Bearing Plate I.D.: <u>COULD NOT LOCATE</u>	
Bearing Plate I.D. <u>COULD NOT LOCATE</u>		Anchor Head I.D. <u>1036</u>		Bushing I.D. <u>1050</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI 1-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR #02-E W# 8-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>8-31-04</u> Time: <u>07:30 AM</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>V32</u> <u>SHOP/TOP</u>	<u>X</u>				
Results Legend: NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>Daniel C. O'Neil</u>		LEVEL <u>II</u>		DATE: <u>8-31-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

A103/A459

ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <i>THREE MILE ISLAND</i> Unit: <i>1</i>		Exam Data Sheet No.:		Exam Date: <i>9-7-04</i>	
Work Order No(s): <i>R1801589</i>		Tendon Anchorage No.: <i>V32</i>		Tendon End: <input checked="" type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery, Buttress: <i>TOP</i>		Elevation:		Bearing Plate I.D.: <i>COULD NOT LOCATE</i>	
Bearing Plate I.D.: <i>COULD NOT LOCATE</i>		Anchor Head I.D.: <i>1136</i>		Bushing I.D.: <i>1250</i>	
Examination Procedure: <i>ER-AA-335-018</i>		Rev. <i>2</i>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s): <i>TMI-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR #00-E 008 8-2-05</i>			
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>	
Illumination Used: <i>FLASHLIGHT</i>		Illumination Verified: <i>9-7-04</i>		Time: <i>7:30</i>	
Special / Specific Instructions:		<i>NEAR DISTANCE TEST CHART</i>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<i>V32</i> <i>SHOP/TOP</i>	<i>X</i>			<i>NO CHANGE FROM AS FOUND INSPECTION</i>	
<i>POST LIFT-OFF</i>					
Results Legend: NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <i>David P. O'Brien</i>		LEVEL: <i>II</i>		DATE: <i>9-7-04</i>	
RESPONSIBLE ENGINEER SIGNATURE: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

A104/A459

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Revision 2
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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet No.:		Exam Date: <u>9-2-04</u>	
Work Order No(s):	<u>R1801589</u>	Tendon Anchorage No.:	<u>V32</u>	Tendon End:	<input type="checkbox"/> Shop <input checked="" type="checkbox"/> Field
Location: <u>Tunnel</u> Gallery, Buttress:		Elevation:		Bearing Plate I.D. <u>COULD NOT LOCATE</u>	
Bearing Plate I.D. <u>COULD NOT LOCATE</u>		Anchor Head I.D. <u>657</u>		Bushing I.D. <u>N/A</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR #06-E 018 8-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>9-1-04</u>	Time: <u>10:00 AM</u>
Special / Specific Instructions:		<u>HEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>V32</u> <u>FIELD / BOTTOM</u>	<u>X</u>				
Results Legend: NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL <u>II</u>		DATE: <u>9-2-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>22 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE:				DATE:	

A105/A459

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet No.:		Exam Date: <u>8-31-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>V53</u>		Tendon End: <input checked="" type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery, Buttress: <u>TOP</u>		Elevation:		Bearing Plate I.D.: <u>COULD NOT LOCATE</u>	
Bearing Plate I.D. <u>COULD NOT LOCATE</u>		Anchor Head I.D. <u>1047</u>		Bushing I.D. <u>1087</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI 1-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR #02-E 016 8-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>8-31-04</u> Time: <u>07:30AM</u>	

Special / Specific Instructions: NEAR DISTANCE TEST CHART

Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)
	NI	RI TYPE	I.N.	
<u>V53</u> <u>SHOP/TOP</u>			<u>F.</u>	<u>LIGHT SURFACE RUST ON BUSHING & TOP SHIM .</u> <u>AREAS CLEANED AND NO PITTING FOUND . CORROSION</u> <u>INACTIVE</u>

Results Legend:
NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)

- Recordable Indication Type Codes:**
- | | | |
|--------------------------------------|---|--------------------|
| A. Missing Wires | H. Cracks | O. Other (Explain) |
| B. Missing Button Heads | I. Pitting | |
| C. Protruding / Unseated Wires | J. Nicks, Gouges, Mechanical Damage | |
| D. Broken Wires | K. Uneven Shim Stack | |
| E. Active Corrosion | L. Excessive Shim Gaps | |
| F. Other Corrosion | M. Gasket Seating Surface Damage | |
| G. Evidence Of Free Water (Quantify) | N. Surface Discontinuities, Deflections | |

Supplemental Information : Yes No Sketch Photo Video Other (Describe):

VISUAL EXAMINER SIGNATURE: [Signature] LEVEL II DATE: 8-31-04

RESPONSIBLE ENGINEER SIGNATURE: [Signature] DATE: 27 FEB 05

FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL: Accept Reject

Comments: _____

ANII REVIEW SIGNATURE: _____ DATE: _____

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ATTACHMENT 5 ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet. No.:		Exam Date: <u>9-7-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>V53</u>		Tendon End: <input checked="" type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery, Buttress: <u>TOP</u>		Elevation:		Bearing Plate I.D.: <u>COULD NOT LOCATE</u>	
Bearing Plate I.D. <u>COULD NOT LOCATE</u>		Anchor Head I.D. <u>1047</u>		Bushing I.D. <u>1087</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR #02-E #8-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>9-7-04</u> Time: <u>7:30AM</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>V53 SHOP/TOP POST LIFT-OFF</u>	<u>X</u>			<u>NO CHANGE FROM AS FOUND INSPECTION</u>	
Results Legend: NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL: <u>II</u>		DATE: <u>9-7-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE:				DATE:	

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
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Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet No.:		Exam Date: <u>9-2-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>V53</u>		Tendon End: <input type="checkbox"/> Shop <input checked="" type="checkbox"/> Field	
Location: <u>(Tunnel)</u> Gallery, Buttress: <u>TUNNEL</u>		Elevation:		Bearing Plate I.D. <u>COULD NOT LOCATE</u>	
Bearing Plate I.D. <u>COULD NOT LOCATE</u>		Anchor Head I.D. <u>901</u>		Bushing I.D. <u>N/A</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR #02-E USE 8-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>9-1-04</u> Time: <u>07:30</u>	
Special / Specific Instructions:		<u>HEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>V53</u> <u>FIELD/BOTTOM</u>	<u>X</u>				
Results Legend: NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL <u>II</u>		DATE: <u>9-2-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
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Station: <i>THREE MILE ISLAND</i> Unit: <i>1</i>		Exam Data Sheet No.:		Exam Date: <i>8-31-04</i>	
Work Order No(s): <i>R1801589</i>		Tendon Anchorage No.: <i>V66</i>		Tendon End: <input checked="" type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery, Buttress: <i>TOP</i>		Elevation:		Bearing Plate I.D.: <i>COULD NOT LOCATE</i>	
Bearing Plate I.D.: <i>COULD NOT LOCATE</i>		Anchor Head I.D.: <i>1118</i>		Bushing I.D.: <i>1027</i>	
Examination Procedure <i>ER-AA-335-018</i>		Rev. <i>2</i>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <i>TMI 1-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR #02-E 018 8-2-05</i>			
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>	
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified:		Date: <i>8-31-04</i> Time: <i>11:30 AM</i>	
Special / Specific Instructions:		<i>NEAR DISTANCE TEST CHART</i>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<i>V66 SHOP TOP</i>			<i>F.</i>	<i>LIGHT SURFACE RUST ON SHIMS & BEARING PLATE. AREAS CLEARED AND NO PITTING FOUND. CORROSION INACTIVE.</i>	
Results Legend:					
NI - No Indications		RI - Recordable Indication		I.N. - Indication Number (if applicable)	
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks			O. Other (Explain)	
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <i>Daniel P. O'Brien</i>		LEVEL: <i>II</i>		DATE: <i>8-31-04</i>	
RESPONSIBLE ENGINEER SIGNATURE: <i>[Signature]</i>				DATE: <i>27 FEB 05</i>	
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE:				DATE:	

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
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Station: <i>THREE MILE ISLAND</i> Unit: <i>1</i>		Exam Data Sheet No.:		Exam Date: <i>9-3-04</i>	
Work Order No(s): <i>R1801589</i>		Tendon Anchorage No.:		Tendon End: <input checked="" type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery, Buttress: <i>TOP</i>		Elevation:		Bearing Plate I.D. <i>COULD NOT LOCATE</i>	
Bearing Plate I.D. <i>COULD NOT LOCATE</i>		Anchor Head I.D. <i>111 8</i>		Bushing I.D. <i>1027</i>	
Examination Procedure <i>ER-AA-335-018</i>		Rev. <i>2</i>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <i>TMI-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR #02-E DUE 8-2-05</i>			
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>9-30-05</i>	
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified:		Date: <i>9-3-06</i> Time: <i>7:30 AM</i>	
Special / Specific Instructions:		<i>NEAR DISTANCE TEST CHART</i>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<i>V66 SHOP TOP</i>	<i>X</i>			<i>NO CHANGE FROM AS FOUND INSPECTION</i>	
<i>POST LIFT-OFF</i>					
Results Legend: NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <i>Daniel P. O'Brien</i>		LEVEL <i>II</i>		DATE: <i>9-31-04</i>	
RESPONSIBLE ENGINEER SIGNATURE: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
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Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet No.:		Exam Date: <u>9-2-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>V66</u>		Tendon End: <input type="checkbox"/> Shop <input checked="" type="checkbox"/> Field	
Location: <u>(Tunnel)</u> Gallery, Buttress: <u>TUNNEL</u>		Elevation:		Bearing Plate I.D.: <u>COULD NOT LOCATE</u>	
Bearing Plate I.D.: <u>COULD NOT LOCATE</u>		Anchor Head I.D.: <u>1055</u>		Bushing I.D.: <u>N/A</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI 1-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR *DL-E DUE 8-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>9-2-04</u> Time: <u>07:30</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>V66</u> <u>FIELD/BOTTOM</u>	<u>X</u>				
Results Legend: NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL <u>II</u>		DATE: <u>9-2-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____ DATE: _____					

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
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Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet No.:		Exam Date: <u>8-31-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>V140</u>		Tendon End: <input checked="" type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery, Buttress: <u>TOP</u>		Elevation:		Bearing Plate I.D.: <u>COULD NOT LOCATE</u>	
Bearing Plate I.D. <u>COULD NOT LOCATE</u>		Anchor Head I.D. <u>918</u>		Bushing I.D. <u>1000</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI 1-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR *DC-E ONE 8-2-03</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>8-31-04</u> Time: <u>11:30 AM</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>V140 SHOP/TOP</u>			<u>F</u>	<u>LIGHT SURFACE RUST ON SHIMS + BEARING PLATE. AREAS CLEANED AND NO PITTING OBSERVED. CORROSION IS INACTIVE</u>	
Results Legend:					
NI - No Indications		RI - Recordable Indication		I.N. - Indication Number (if applicable)	
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges; Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL <u>II</u>		DATE: <u>8-31-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____ DATE: _____					

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
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Station: <i>THREE MILE ISLAND</i> Unit: <i>1</i>		Exam Data Sheet No.:		Exam Date: <i>9-8-04</i>	
Work Order No(s): <i>R1801589</i>		Tendon Anchorage No.: <i>V140</i>		Tendon End: <input checked="" type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery, Buttress: <i>TOP</i>		Elevation:		Bearing Plate I.D.: <i>COULD NOT LOCATE</i>	
Bearing Plate I.D. <i>COULD NOT LOCATE</i>		Anchor Head I.D. <i>918</i>		Bushing I.D. <i>1000</i>	
Examination Procedure <i>ER-AA-335-018</i>		Rev. <i>2</i>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <i>TMI 1-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR #02-E 8-2-05</i>			
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>	
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified:		Date: <i>9-8-04</i> Time:	
Special / Specific Instructions:		<i>NEAR DISTANCE TEST CHART</i>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<i>V140 SHOP/TOP DETENSION INSPECTION</i>	<i>X</i>			<i>NO MISSING, BROKEN, AND/OR DAMAGED WIRES PROTRUDING FROM THE ANCHORHEAD</i>	
Results Legend:					
NI - No Indications		RI - Recordable Indication		I.N. - Indication Number (if applicable)	
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL: <i>IF</i>		DATE: <i>9-8-04</i>	
RESPONSIBLE ENGINEER SIGNATURE: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE:				DATE:	

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
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Station: <i>THREEMILE ISLAND</i> Unit: <i>1</i>		Exam Data Sheet No.:		Exam Date: <i>9-9-04</i>	
Work Order No(s): <i>R1801589</i>		Tendon Anchorage No.: <i>V140</i>		Tendon End: <input checked="" type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery, Buttress: <i>TOP</i>		Elevation:		Bearing Plate I.D.: <i>COULD NOT LOCATE</i>	
Bearing Plate I.D. <i>COULD NOT LOCATE</i>		Anchor Head I.D. <i>918</i>		Bushing I.D. <i>1000</i>	
Examination Procedure <i>ER-AA-335-018</i>		Rev. <i>2</i>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input type="checkbox"/> As Found Exam		<input checked="" type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <i>TMI 1-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR #00-E ONE 8-2-05</i>			
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>	
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified:		Date: <i>9-9-04</i> Time: <i>12:30 PM</i>	
Special / Specific Instructions:		<i>NEAR DISTANCE TEST CHART</i>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<i>V140 SHOP/TOP RETENSION INSPECTION</i>			<i>A</i>	<i>1 WIRE REMOVED FOR TESTING ON 9-9-04</i>	
Results Legend: NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <i>David P. Elton</i>		LEVEL <i>II</i>		DATE: <i>9-9-04</i>	
RESPONSIBLE ENGINEER SIGNATURE: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE:				DATE:	

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Revision 2
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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
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Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet. No.:		Exam Date: <u>9-2-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>V140</u>		Tendon End: <input type="checkbox"/> Shop <input checked="" type="checkbox"/> Field	
Location: <u>Tunnel</u> , Gallery, Buttress:		Elevation:		Bearing Plate I.D.: <u>COULD NOT LOCATE</u>	
Bearing Plate I.D. <u>COULD NOT LOCATE</u>		Anchor Head I.D. <u>918</u>		Bushing I.D. <u>N/A</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI 1-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR # 02-E DUE 8-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>9-2-04</u> Time: <u>10:00 AM</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>V140</u> <u>FIELD/BOTTOM</u>	<u>X</u>				
Results Legend:					
NI - No Indications		RI - Recordable Indication		I.N. - Indication Number (if applicable)	
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL: <u>II</u>		DATE: <u>9-2-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet. No.:		Exam Date: <u>9-8-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>V140</u>		Tendon End: <input type="checkbox"/> Shop <input checked="" type="checkbox"/> Field	
Location: <u>Tunnel</u> Gallery, Buttress:		Elevation:		Bearing Plate I.D.: <u>COULD NOT LOCATE</u>	
Bearing Plate I.D.: <u>COULD NOT LOCATE</u>		Anchor Head I.D.: <u>9/8</u>		Bushing I.D.: <u>N/A</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI1-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR #00-E DUE 8-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>9-8-04</u> Time: <u>11:00 AM</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>V140</u> <u>FIELD/BOTTOM</u> <u>DETENSION INSPECTION</u>	<u>X</u>			<u>NO BROKEN, MISSING, AND/OR DAMAGED WIRES PROTRUDING FROM THE ANCHORHEAD</u>	
Results Legend: NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL <u>II</u>		DATE: <u>9-8-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
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Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet. No.:		Exam Date: <u>9-10-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>V1140</u>		Tendon End: <input type="checkbox"/> Shop <input checked="" type="checkbox"/> Field	
Location: <u>Tunnel</u> Gallery, Buttress:		Elevation:		Bearing Plate I.D.: <u>COULD NOT LOCATE</u>	
Bearing Plate I.D. <u>COULD NOT LOCATE</u>		Anchor Head I.D. <u>918</u>		Bushing I.D. <u>N/A</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input type="checkbox"/> As Found Exam		<input checked="" type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI 1-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR #02-E 048 8-1-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>9-10-04</u> Time: <u>7:30 AM</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>V1140</u> <u>FIELD / BOTTOM</u> <u>RETENSION INSPECTION</u>			<u>A</u>	<u>1 WIRE REMOVED FOR TESTING ON 9-8-04</u>	
Results Legend:					
NI - No Indications		RI - Recordable Indication		I.N. - Indication Number (if applicable)	
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL <u>II</u>		DATE: <u>9-10-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
 Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet No.:		Exam Date: <u>11-4-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>H13-11</u>		Tendon End: <input checked="" type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery, <u>Buttress</u> : <u>1</u>		Elevation: <u>312'</u>		Bearing Plate I.D.: <u>NONE FOUND</u>	
Bearing Plate I.D.: <u>NONE FOUND</u>		Anchor Head I.D.: <u>557</u>		Bushing I.D.: <u>1039</u>	
Examination Procedure: <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s): <u>TMI-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR #OC-E DUE 8-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used: <u>FLASHLIGHT</u>		Illumination Verified: <u>11-4-04</u>		Date: <u>11-4-04</u> Time: <u>10:30 A.M.</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>H13-11</u> <u>SHOP / BUTT. 1</u> <u>PRE LIFT-OFF</u>	<u>X</u>				
Results Legend: NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL: <u>II</u>		DATE: <u>11-4-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

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ATTACHMENT 5

ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record

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Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet No.:		Exam Date: <u>11-20-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>H13-11</u>		Tendon End: <input checked="" type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery, <u>Buttress</u> : <u>1</u>		Elevation: <u>312'</u>		Bearing Plate I.D.: <u>NONE FOUND</u>	
Bearing Plate I.D. <u>NONE FOUND</u>		Anchor Head I.D. <u>557</u>		Bushing I.D. <u>1039</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR #OC-E DUE 6-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>11-20-04</u> Time: <u>10:00 AM.</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>H 13-11</u> <u>SHOP / BUTT. 1</u> <u>POST LIFT-OFF</u>	<u>X</u>				
Results Legend: NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL: <u>IF</u>		DATE: <u>11-20-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE:				DATE:	

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet No.:		Exam Date: <u>11-12-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>H13-11</u>		Tendon End: <input type="checkbox"/> Shop <input checked="" type="checkbox"/> Field	
Location: Tunnel, Gallery, <u>(Buttress)</u> <u>3</u>		Elevation: <u>312'</u>		Bearing Plate I.D.: <u>(None Found)</u>	
Bearing Plate I.D. <u>(None Found)</u>		Anchor Head I.D. <u>933</u>		Bushing I.D. <u>N/A</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI-0016</u>		Visual Aids: <u>OPTICAL COMPARETOR #OC-E DUE 6-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>11-12-04</u> Time: <u>8:00 A.M.</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>H13-11</u> <u>FIELD / BOT. 3</u>	<u>X</u>				
<u>PRE LIFT-OFF</u>					
Results Legend:					
NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL <u>II</u>		DATE: <u>11-12-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL: <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE:				DATE:	

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet No.:		Exam Date: <u>11-22-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>H13-11</u>		Tendon End: <input type="checkbox"/> Shop <input checked="" type="checkbox"/> Field	
Location: Tunnel, Gallery <u>Buttress: 3</u>		Elevation: <u>312'</u>		Bearing Plate I.D.: <u>NONE FOUND</u>	
Bearing Plate I.D. <u>NONE FOUND</u>		Anchor Head I.D. <u>933</u>		Bushing I.D. <u>H/A</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR #OC-E DUE 8-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>11-22-04</u> Time: <u>10:30 A.M.</u>	
Special / Specific Instructions:		<u>HEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>H13-11</u> <u>FIELD / BUTT. 3</u>	<u>X</u>				
<u>POST LIFT-OFF</u>					
Results Legend:					
NI - No Indications		RI - Recordable Indication		I.N. - Indication Number (if applicable)	
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL: <u>II</u>		DATE: <u>11-22-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

ARU/A459

ER-AA-335-018
Revision 2
Page 23 of 24

ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet No.:		Exam Date: <u>9-16-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>H35-49</u>		Tendon End: <input checked="" type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery <u>Buttress: 5</u>		Elevation:		Bearing Plate I.D. <u>COULD NOT LOCATE</u>	
Bearing Plate I.D. <u>COULD NOT LOCATE</u>		Anchor Head I.D. <u>970</u>		Bushing I.D. <u>852</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR #00-E ONE 8-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>9-16-04</u> Time: <u>07:30 AM</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>H35-49 SHOP END BUTT. 5</u>			<u>F.</u>	<u>LT. SURFACE RUST ON SHIMS. CLEANED & NO PITTING OBSERVED, CORROSION INACTIVE</u>	
Results Legend:					
NI - No Indications		RI - Recordable Indication		I.N. - Indication Number (if applicable)	
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>David P. Doherty</u>		LEVEL: <u>II</u>		DATE: <u>9-16-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>Antony</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

A122/A459

ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet No.:		Exam Date: <u>9-16-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>H35-49</u>		Tendon End: <input checked="" type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery, <u>Buttress: 5</u>		Elevation:		Bearing Plate I.D.: <u>COULD NOT LOCATE</u>	
Bearing Plate I.D.: <u>COULD NOT LOCATE</u>		Anchor Head I.D.: <u>970</u>		Bushing I.D.: <u>852</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI 1-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR *02-E DUE 8-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>9-16-04</u> Time: <u>07:30 AM</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>H35-49</u> <u>SHOP END</u> <u>BUTT 5</u> <u>POST LIFT-OFF</u>	<u>X</u>			<u>NO CHANGE FROM AS FOUND INSPECTION</u>	
Results Legend: NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL: <u>II</u>		DATE: <u>9-16-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____ DATE: _____					

AN3/A459

ER-AA-335-018
 Revision 2
 Page 23 of 24

ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
 Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet No.:		Exam Date: <u>9-15-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>H35-49</u>		Tendon End: <input type="checkbox"/> Shop <input checked="" type="checkbox"/> Field	
Location: Tunnel, Gallery, <u>Buttress: 3</u>		Elevation:		Bearing Plate I.D.: <u>COULD NOT LOCATE</u>	
Bearing Plate I.D.: <u>COULD NOT LOCATE</u>		Anchor Head I.D.: <u>848</u>		Bushing I.D.: <u>N/A</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR #00-E 016 8-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>9-15-04</u> Time: <u>011:30 AM</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>H35-49 TENDONS Butt. 3</u>	<u>X</u>				
Results Legend:					
NI - No Indications		RI - Recordable Indication		I.N. - Indication Number (if applicable)	
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL: <u>II</u>		DATE: <u>9-15-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

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ER-AA-335-018
Revision 2
Page 23 of 24

ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet. No.:		Exam Date: <u>9-15-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>H35-49</u>		Tendon End: <input type="checkbox"/> Shop <input checked="" type="checkbox"/> Field	
Location: Tunnel, Gallery <u>Buttress 3</u>		Elevation:		Bearing Plate I.D.: <u>COULD NOT LOCATE</u>	
Bearing Plate I.D. <u>COULD NOT LOCATE</u>		Anchor Head I.D. <u>848</u>		Bushing I.D. <u>N/A</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI 1-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR *06-E 016 8-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>9-15-04</u> Time: <u>11:30AM</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>H35-49</u> <u>FIELD END</u> <u>BUTT. 3</u> <u>POST LIFT-OFF</u>	<u>X</u>			<u>NO CHANGE FROM AS FOUND INSPECTION</u>	
Results Legend:					
NI - No Indications		RI - Recordable Indication		I.N. - Indication Number (if applicable)	
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL <u>II</u>		DATE: <u>9-15-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>				DATE: <u>27 FEB 05</u>	
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE:				DATE:	

A125/A459

ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet. No.:		Exam Date: <u>11-11-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>D-230</u>		Tendon End: <input checked="" type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery, Buttress: <u>DOVE</u>		Elevation: <u>440'</u>		Bearing Plate I.D.: <u>HONE FOUND</u>	
Bearing Plate I.D. <u>HONE FOUND</u>		Anchor Head I.D. <u>757</u>		Bushing I.D. <u>703</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI 1-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR *OL-E 008 8-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>11-11-04</u> Time: <u>10:30 A.M.</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI	TYPE		
<u>D-230</u> <u>SHOP END</u> <u>NEAR BUTT. # 5</u> <u>PRE LIFT-OFF</u>	<u>X</u>				
Results Legend: NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information : <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL <u>II</u>		DATE: <u>11-11-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

A1201/A459

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Revision 2
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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet. No.:		Exam Date: <u>11-16-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>D230</u>		Tendon End: <input checked="" type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery, Buttress: <u>DOME</u>		Elevation: <u>440</u>		Bearing Plate I.D.: <u>NONE FOUND</u>	
Bearing Plate I.D. <u>NONE FOUND</u>		Anchor Head I.D. <u>757</u>		Bushing I.D. <u>703</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input type="checkbox"/> As Found Exam		<input checked="" type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR #OC-E DUE 6-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>11-16-04</u> Time: <u>12:30 P.M.</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>D230 SHOP END NEAR BUTT.#5</u>	<u>X</u>			<u>NOTE: WHILE TENDON WAS DETENSIONED INSPECTION WAS PERFORMED TO ENSURE THERE WAS NO MISSING, BROKEN, AND/OR DAMAGED WIRES PROTRUDING FROM ANCHORHEAD. ✓ 11/16/04</u>	
<u>POST LIFT-OFF</u>		<u>AFTER DETENSIONING & RETENSIONING.</u>			
Results Legend: NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL <u>II</u>		DATE: <u>11-16-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE:				DATE:	

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ER-AA-335-018
Revision 2
Page 23 of 24

ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet No.:		Exam Date: <u>11-16-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>D230</u>		Tendon End: <input type="checkbox"/> Shop <input checked="" type="checkbox"/> Field	
Location: Tunnel, Gallery, Buttress: <u>DOME</u>		Elevation: <u>449</u>		Bearing Plate I.D.: <u>NONE FOUND</u>	
Bearing Plate I.D. <u>NONE FOUND</u>		Anchor Head I.D. <u>949</u>		Bushing I.D. <u>N/A</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input type="checkbox"/> As Found Exam		<input checked="" type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR #OC-E DUE 6-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>11-16-04</u> Time: <u>12:30 P.M.</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>V230 FIELD END NEAR BUTT.#3</u>	<u>X</u>			<u>NOTE: WHILE TENDON WAS DETENTIONED INSPECTION WAS PERFORMED TO ENSURE THERE WAS NO MISSING, BROKEN, AND/OR DAMAGED WIRES PROTRUDING FROM ANCHOR HEAD. 11-16-04</u>	
<u>POST LIFT-OFF AFTER DETENSIONING, & RETENSIONING.</u>					
Results Legend: NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information : <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL: <u>II</u>		DATE: <u>11-16-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

AR3/A45A

ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet. No.:		Exam Date: <u>11-11-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>D-230</u>		Tendon End: <input type="checkbox"/> Shop <input checked="" type="checkbox"/> Field	
Location: Tunnel, Gallery, Buttress: <u>DOME</u>		Elevation: <u>449</u>		Bearing Plate I.D.: <u>NONE FOUND</u>	
Bearing Plate I.D. <u>NONE FOUND</u>		Anchor Head I.D. <u>944</u>		Bushing I.D. <u>N/A</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam <input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned					
Design Drawing(s) <u>TMI-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR #02-E 006 8-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>11-11-04</u> Time: <u>10:30 A.M.</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>D-230</u> <u>FIELD END</u> <u>NEAR BOTT. #3</u> <u>PRE LIFT-OFF</u>	<u>X</u>				
Results Legend: NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information : <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL <u>II</u>		DATE: <u>11-11-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE:				DATE:	

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>THREE MICE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet. No.:		Exam Date: <u>11-5-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>H62-18</u>		Tendon End: <input checked="" type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery, <u>Buttress</u> : <u>6</u>		Elevation: <u>32E</u>		Bearing Plate I.D.: <u>None Found</u>	
Bearing Plate I.D. <u>None Found</u>		Anchor Head I.D. <u>1053</u>		Bushing I.D. <u>761</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type-Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR #OC-E DVE 8-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>11-5-04</u> Time: <u>12:30 P.M.</u>	
Special / Specific Instructions: <u>NEAR DISTANCE TEST CHART</u>					
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>H62-18</u> <u>SHOP / BUTT. 6</u>	<u>X</u>				
<u>PRE LIFT-OFF</u>					
Results Legend: NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL: <u>II</u>		DATE: <u>11-5-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 APR 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet. No.:		Exam Date: <u>11-8-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>H62-1E</u>		Tendon End: <input checked="" type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery <u>Buttress: 6</u>		Elevation: <u>32E</u>		Bearing Plate I.D.: <u>NONE FOUND</u>	
Bearing Plate I.D. <u>NONE FOUND</u>		Anchor Head I.D.: <u>1053</u>		Bushing I.D.: <u>761</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI-0016</u>		Visual Aids: <u>OPTICAL COMPARETOR #OC-E DUE 6-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>11-8-04</u> Time: <u>8:20 AM.</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>H62-1E</u> <u>SHOP / BUTT-6</u> <u>POST LIFT-OFF</u>	<u>X</u>				
Results Legend: NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information : <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL <u>II</u>		DATE: <u>11-8-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>				DATE: <u>27 FEB 05</u>	
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE:			DATE:		

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
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Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet. No.:		Exam Date: <u>11-2-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>H62-18</u>		Tendon End: <input type="checkbox"/> Shop <input checked="" type="checkbox"/> Field	
Location: Tunnel, Gallery, <u>Buttress</u> # <u>2</u>		Elevation: <u>328</u>		Bearing Plate I.D.: <u>NONE FOUND</u>	
Bearing Plate I.D. <u>NONE FOUND</u>		Anchor Head I.D. <u>948</u>		Bushing I.D. <u>H/A</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI 1-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR *00-E 016 8-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>11-2-04</u> Time: <u>10:00 A.M.</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>H62-18</u> <u>FIELD END</u> <u>BUTT. 2</u> <u>PRE LIFT-OFF</u>		<u>C</u>		<u>ONE PROTRUDING BUTTON HEAD</u> <u>AS MAPPED ENCLOSURE 40</u> <u>DATA SHEET 4 (1309-9.1 REV.18)</u> <u>DATED 11-2-04.</u> <u>W. 11-2-04</u>	
Results Legend: NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe): <u>SEE ENCLOSURE 40 DATA SHEET 4</u>					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL: <u>II</u>		DATE: <u>11-2-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
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Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u> Exam Data Sheet. No.:		Exam Date: <u>11-3-04</u>		
Work Order No(s): <u>R1801589</u>	Tendon Anchorage No.: <u>H62-1E</u>	Tendon End: <input type="checkbox"/> Shop <input checked="" type="checkbox"/> Field		
Location: Tunnel, Gallery, <u>Buttress</u> : <u>2</u>	Elevation: <u>328</u>	Bearing Plate I.D.: <u>NONE FOUND</u>		
Bearing Plate I.D. <u>NONE FOUND</u>	Anchor Head I.D. <u>948</u>	Bushing I.D. <u>N/A</u>		
Examination Procedure <u>ER-AA-335-018</u>	Rev. <u>2</u>	Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote		
<input checked="" type="checkbox"/> As Found Exam (<u>POST LIFT-OFF</u>) <input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned				
Design Drawing(s) <u>TMI-0016</u>	Visual Aids: <u>OPTICAL COMPARATOR #OC-E DUE 6-2-05</u>			
M&TE Used: <u>LIGHT METER</u>	UTC or Serial No. <u>0002552583</u>	Cal. Due Date: <u>7-30-05</u>		
Illumination Used <u>FLASHLIGHT</u>	Illumination Verified: Date: <u>11-3-04</u>	Time: <u>9:00 A.M.</u>		
Special / Specific Instructions: <u>NEAR DISTANCE TEST CHART</u>				
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)
	NI	RI TYPE	I.N.	
<u>H62-1E</u> <u>FIELD / BUTT. 2</u> <u>POST LIFT-OFF</u>		<u>C</u>		<u>ONE PROTRUDING BUTTON HEAD</u> <u>AS MAPPED ON</u> <u>ENCLOSURE 6 DATA</u> <u>SHEET 4 (1309-9.1 Rev. 1E)</u> <u>DATED 11-2-04</u> <u>4/11-3-04</u>
Results Legend: NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)				
Recordable Indication Type Codes:				
A. Missing Wires	H. Cracks	O. Other (Explain)		
B. Missing Button Heads	I. Pitting			
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage			
D. Broken Wires	K. Uneven Shim Stack			
E. Active Corrosion	L. Excessive Shim Gaps			
F. Other Corrosion	M. Gasket Seating Surface Damage			
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections			
Supplemental Information : <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe): <u>SEE ENCLOSURE 6 DATA SHEET 4</u>				
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL: <u>II</u>	DATE: <u>11-3-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>		
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____			DATE: _____	

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet No.:		Exam Date: <u>9-22-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>H62-26</u>		Tendon End: <input checked="" type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery, <u>Buttress</u> <u>6</u>		Elevation:		Bearing Plate I.D.: <u>COULD NOT LOCATE</u>	
Bearing Plate I.D. <u>COULD NOT LOCATE</u>		Anchor Head I.D. <u>837</u>		Bushing I.D. <u>924</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR *00-E AUG 8-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>9-22-04</u> Time: <u>11:00 AM</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>H62-26</u> <u>SHOP END</u> <u>BUTT. 6</u>	<u>X</u>				
Results Legend: NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL: <u>II</u>		DATE: <u>9-22-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet No.:		Exam Date: <u>9-22-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>H62-26</u>		Tendon End: <input checked="" type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery, <u>(Buttress) 6</u>		Elevation:		Bearing Plate I.D.: <u>COULD NOT LOCATE</u>	
Bearing Plate I.D. <u>COULD NOT LOCATE</u>		Anchor Head I.D. <u>837</u>		Bushing I.D. <u>924</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR #06-E 018 8-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>9-22-04</u> Time: <u>11:00 AM</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>H62-26</u> <u>SHOP END</u> <u>BUT. 6</u>	<u>X</u>			<u>NO CHANGE FROM AS FOUND INSPECTION</u>	
<u>POST LIFT-OFF</u>					
Results Legend: NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>David P. O'Hara</u>		LEVEL: <u>II</u>		DATE: <u>9-22-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet No.:		Exam Date:	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.:		Tendon End: <input type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery, Buttress:			Elevation:		Bearing Plate I.D.:
Bearing Plate I.D.:		Anchor Head I.D.:		Bushing I.D.:	
Examination Procedure <u>ER-AA-335-018</u>			Rev. <u>2</u>		Type Of Exam: <input type="checkbox"/> Direct <input type="checkbox"/> Remote
<input type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR #OC-E DUE 6-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date:	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<p>NOTE: VT-1 WAS NOT PERFORMED OR NOT DOCUMENTED PRIOR TO LIFT-OFF WHICH WAS PERFORMED 9-29-04.</p> <p><u>H62-26</u> <u>FIELD/BUTT. 2</u> <u>PRE LIFT-OFF</u></p> <p align="right"><u>4.11-2-04</u></p>					
<p>Results Legend: NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)</p>					
Recordable Indication Type Codes:					
A. Missing Wires		H. Cracks		O. Other (Explain)	
B. Missing Button Heads		I. Pitting			
C. Protruding / Unseated Wires		J. Nicks, Gouges, Mechanical Damage			
D. Broken Wires		K. Uneven Shim Stack			
E. Active Corrosion		L. Excessive Shim Gaps			
F. Other Corrosion		M. Gasket Seating Surface Damage			
G. Evidence Of Free Water (Quantify)		N. Surface Discontinuities, Deflections			
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE:			LEVEL:		DATE:
RESPONSIBLE ENGINEER SIGNATURE: <u>N/A</u>					DATE:
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE:				DATE:	

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet. No.:		Exam Date: <u>11-2-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>H62-26</u>		Tendon End: <input type="checkbox"/> Shop <input checked="" type="checkbox"/> Field	
Location: Tunnel, Gallery (<u>Buttress: 2</u>)		Elevation: <u>356'</u>		Bearing Plate I.D.: <u>NONE FOUND</u>	
Bearing Plate I.D. <u>NONE FOUND</u>		Anchor Head I.D. <u>571</u>		Bushing I.D. <u>N/A</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam (<u>POST LIFT-OFF</u>) <input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned					
Design Drawing(s) <u>TMI-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR *06-E AUG 8-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>11-2-04</u> Time: <u>10:00 A.M.</u>	
Special / Specific Instructions:		<u>NEAR-DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>H62-26</u> <u>FIELD END</u> <u>BUTT. 2</u>	<u>X</u>				
<u>POST LIFT-OFF</u>					
Results Legend: NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information : <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL <u>II</u>		DATE: <u>11-2-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

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Revision 2
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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
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Station: <i>THREE MILE ISLAND</i> Unit: <i>1</i>		Exam Data Sheet. No.:		Exam Date: <i>9-13-04</i>	
Work Order No(s): <i>R1801589</i>		Tendon Anchorage No.: <i>D-213</i>		Tendon End: <input checked="" type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery, Buttress: <i>NW</i>		Elevation:		Bearing Plate I.D.: <i>COULD NOT LOCATE</i>	
Bearing Plate I.D.: <i>COULD NOT LOCATE</i>		Anchor Head I.D.: <i>757-77/249-13-04</i>		Bushing I.D.: <i>1030</i>	
Examination Procedure: <i>ER-AA-335-018</i>		Rev. <i>2</i>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s): <i>TMI-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR #02-E 018 8-2-05</i>			
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>	
Illumination Used: <i>FLASHLIGHT</i>		Illumination Verified:		Date: <i>9-13-04</i> Time: <i>07:30 AM</i>	
Special / Specific Instructions:		<i>NEAR DISTANCE TEST CHART</i>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<i>D-213 SHOP END/NW</i>	<i>X</i>				
Results Legend:					
NI - No Indications		RI - Recordable Indication		I.N. - Indication Number (if applicable)	
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL: <i>II</i>		DATE: <i>9-13-04</i>	
RESPONSIBLE ENGINEER SIGNATURE: <i>[Signature]</i>		DATE: <i>27-FEB-05</i>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <i>THREE MILE ISLAND</i> Unit: <i>1</i>		Exam Data Sheet No.:		Exam Date: <i>9-13-04</i>	
Work Order No(s): <i>R1801589</i>		Tendon Anchorage No.: <i>D-213</i>		Tendon End: <input checked="" type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery, Buttress: <i>NW</i>		Elevation:		Bearing Plate I.D.: <i>COULD NOT LOCATE</i>	
Bearing Plate I.D.: <i>COULD NOT LOCATE</i>		Anchor Head I.D.: <i>771</i>		Bushing I.D.: <i>1050</i>	
Examination Procedure: <i>ER-AA-335-018</i>		Rev. <i>2</i>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s): <i>TMI-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR #02-E 016 8-2-05</i>			
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>	
Illumination Used: <i>FLASHLIGHT</i>		Illumination Verified:		Date: <i>9-13-04</i> Time: <i>11:00 AM</i>	
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>					
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<i>D-213</i> <i>SHOP END / NW</i>	<i>X</i>			<i>NO CHANGE FROM AS FOUND INSPECTION</i>	
<i>POST LIFT-OFF</i>					
Results Legend: NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <i>Daniel P. O'Brien</i>		LEVEL: <i>II</i>		DATE: <i>9-13-04</i>	
RESPONSIBLE ENGINEER SIGNATURE: <i>J. L. ...</i>		DATE: <i>27 FEB 05</i>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

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Revision 2
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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet. No.:		Exam Date: <u>9-11-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>D-213</u>		Tendon End: <input type="checkbox"/> Shop <input checked="" type="checkbox"/> Field	
Location: Tunnel, Gallery, Buttress: <u>SOUTH EAST</u>		Elevation:		Bearing Plate I.D. <u>COULD NOT LOCATE</u>	
Bearing Plate I.D. <u>COULD NOT LOCATE</u>		Anchor Head I.D. <u>947</u>		Bushing I.D. <u>N/A</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR #06-E ONE 8-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>9-11-04</u> Time: <u>07130 AH</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>D-213</u> <u>FIELD END/SE</u>	<u>X</u>				
Results Legend: NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires		H. Cracks		O. Other (Explain)	
B. Missing Button Heads		I. Pitting			
C. Protruding / Unseated Wires		J. Nicks, Gouges, Mechanical Damage			
D. Broken Wires		K. Uneven Shim Stack			
E. Active Corrosion		L. Excessive Shim Gaps			
F. Other Corrosion		M. Gasket Seating Surface Damage			
G. Evidence Of Free Water (Quantify)		N. Surface Discontinuities, Deflections			
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL: <u>II</u>		DATE: <u>9-11-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
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Station: <i>THREE MILE ISLAND</i> Unit: <i>1</i>		Exam Data Sheet No.:		Exam Date: <i>9-11-04</i>	
Work Order No(s): <i>R1801589</i>		Tendon Anchorage No.: <i>D-213</i>		Tendon End: <input type="checkbox"/> Shop <input checked="" type="checkbox"/> Field	
Location: Tunnel, Gallery, Buttress: <i>SE</i>		Elevation:		Bearing Plate I.D.: <i>COULD NOT LOCATE</i>	
Bearing Plate I.D.: <i>COULD NOT LOCATE</i>		Anchor Head I.D.: <i>947</i>		Bushing I.D.: <i>N/A</i>	
Examination Procedure: <i>ER-AA-335-018</i>		Rev. <i>2</i>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s): <i>TMI-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR #02-E DUE 8-2-05</i>			
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>	
Illumination Used: <i>FLASHLIGHT</i>		Illumination Verified:		Date: <i>9-11-04</i> Time: <i>7:30 AM</i>	
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>					
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<i>D-213 FIELD END/SE</i>	<i>X</i>			<i>NO CHANGE FROM AS FOUND</i>	
<i>POST LIFT-OFF</i>					
Results Legend: NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL: <i>II</i>		DATE: <i>9-11-04</i>	
RESPONSIBLE ENGINEER SIGNATURE: <i>[Signature]</i>		DATE: <i>7-7 FEB 05</i>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____ DATE: _____					

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
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Station: <i>THREE MILE ISLAND</i> Unit: <i>1</i>		Exam Data Sheet No.:		Exam Date: <i>9-14-04</i>	
Work Order No(s): <i>R1801589</i>		Tendon Anchorage No.: <i>D-225</i>		Tendon End: <input checked="" type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery, Buttress:		Elevation:		Bearing Plate I.D.: <i>COVER NOT LOCATED</i>	
Bearing Plate I.D.: <i>COVER NOT LOCATED</i>		Anchor Head I.D.: <i>765</i>		Bushing I.D.: <i>1137</i>	
Examination Procedure: <i>ER-AA-335-018</i>		Rev. <i>2</i>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s): <i>TMI-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR #02-E DUE 8-2-05</i>			
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>	
Illumination Used: <i>FLASHLIGHT</i>		Illumination Verified:		Date: <i>9-14-04</i> Time: <i>4:30 AM</i>	
Special / Specific Instructions:		<i>HEARD DISTANCE TEST CHART</i>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<i>D-225 SHOP END/NW</i>	<i>X</i>			<i>NO CHANGE FROM AS FOUND INSPECTION</i>	
<i>POST LIFT-OFF</i>					
Results Legend: NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <i>David P. O'Brien</i>		LEVEL: <i>IF</i>		DATE: <i>9-14-04</i>	
RESPONSIBLE ENGINEER SIGNATURE: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
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Station: <i>THREE MILE ISLAND</i> Unit: <i>1</i>		Exam Data Sheet No.:		Exam Date: <i>9-14-04</i>	
Work Order No(s): <i>R1801589</i>		Tendon Anchorage No.: <i>D-225</i>		Tendon End: <input checked="" type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery, Buttress:		Elevation:		Bearing Plate I.D. <i>COULD NOT LOCATE</i>	
Bearing Plate I.D. <i>COULD NOT LOCATE</i>		Anchor Head I.D. <i>765</i>		Bushing I.D. <i>1137</i>	
Examination Procedure <i>ER-AA-335-018</i>		Rev. <i>2</i>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <i>TMI 1-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR #06-E ONE 8-2-05</i>			
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>	
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified:		Date: <i>9-14-04</i> Time: <i>07:30 AM</i>	
Special / Specific Instructions:		<i>NEAR DISTANCE TEST CHART</i>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<i>D-225 SHOP END/NW</i>	<i>X</i>				
Results Legend:					
NI - No Indications		RI - Recordable Indication		I.N.- Indication Number (if applicable)	
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL: <i>II</i>		DATE: <i>9-14-04</i>	
RESPONSIBLE ENGINEER SIGNATURE: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____ DATE: _____					

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
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Station: <i>THREE MILE ISLAND</i> Unit: <i>1</i>		Exam Data Sheet. No.:		Exam Date: <i>9-14-04</i>	
Work Order No(s): <i>R1801589</i>		Tendon Anchorage No.: <i>D-225</i>		Tendon End: <input type="checkbox"/> Shop <input checked="" type="checkbox"/> Field	
Location: Tunnel, Gallery, Buttress:		Elevation:		Bearing Plate I.D. <i>COULD NOT LOCATE</i>	
Bearing Plate I.D. <i>COULD NOT LOCATE</i>		Anchor Head I.D. <i>684</i>		Bushing I.D. <i>N/A</i>	
Examination Procedure <i>ER-AA-335-018</i>		Rev. <i>2</i>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <i>TMI-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR #02-E ONE 8-2-05</i>			
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>	
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified:		Date: <i>9-14-04</i> Time: <i>7:30</i>	
Special / Specific Instructions:		<i>NEAR DISTANCE TEST CHART</i>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<i>D-225 FIELD END/SE</i>	<i>X</i>			<i>NO CHANGE FROM AS FOUND INSPECTION</i>	
<i>POST LIFT-OFF</i>					
Results Legend:					
NI - No Indications		RI - Recordable Indication		I.N.- Indication Number (if applicable)	
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL:		DATE: <i>9-14-04</i>	
RESPONSIBLE ENGINEER SIGNATURE: <i>[Signature]</i>				DATE: <i>27 FEB 05</i>	
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE:				DATE:	

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <i>THREE MILE ISLAND</i> Unit: <i>1</i>		Exam Data Sheet No.:		Exam Date: <i>9-14-04</i>	
Work Order No(s): <i>R1801589</i>		Tendon Anchorage No.: <i>D-225</i>		Tendon End: <input type="checkbox"/> Shop <input checked="" type="checkbox"/> Field	
Location: Tunnel, Gallery, Buttress:		Elevation:		Bearing Plate I.D.: <i>COULD NOT LOCATE</i>	
Bearing Plate I.D. <i>COULD NOT LOCATE</i>		Anchor Head I.D. <i>694</i>		Bushing I.D. <i>N/A</i>	
Examination Procedure <i>ER-AA-335-018</i>		Rev. <i>2</i>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <i>TMI 1-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR #00-E 016 8-2-05</i>			
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>	
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified:		Date: <i>9-14-04</i> Time: <i>07:30 AM</i>	
Special / Specific Instructions:		<i>NEAR DISTANCE TEST CHART</i>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<i>D-225 FIELD END / SW SE 2009-11-04</i>	<i>X</i>				
Results Legend:					
NI - No Indications		RI - Recordable Indication		I.N.- Indication Number (if applicable)	
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL <i>II</i>		DATE: <i>9-14-04</i>	
RESPONSIBLE ENGINEER SIGNATURE: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

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Revision 2
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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet. No.:		Exam Date: <u>11-5-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>H46-25</u>		Tendon End: <input checked="" type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery, <u>Buttress: 6</u>		Elevation: <u>350'</u>		Bearing Plate I.D.: <u>NONE</u>	
Bearing Plate I.D. <u>NONE FOUND</u>		Anchor Head I.D. <u>580</u>		Bushing I.D. <u>1252</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR #OC-E DUE 6-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>11-5-04</u> Time: <u>12:30 P.M.</u>	
Special / Specific Instructions: <u>NEAR DISTANCE TEST CHART</u>					
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>H 46-25</u> <u>SHOP / BUTT. 6</u>	<u>X</u>				
<u>PRE LIFT-OFF</u>					
Results Legend: NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input checked="" type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL <u>II</u>		DATE: <u>11-5-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

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Revision 2
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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet No.:		Exam Date: <u>11-10-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>H46-25</u>		Tendon End: <input checked="" type="checkbox"/> Shop <input type="checkbox"/> Field	
Location: Tunnel, Gallery, <u>(Buttress)</u> <u>6</u>		Elevation: <u>350</u>		Bearing Plate I.D.: <u>NONE FOUND</u>	
Bearing Plate I.D. <u>NONE FOUND</u>		Anchor Head I.D. <u>586</u>		Bushing I.D. <u>1252</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input type="checkbox"/> As Found Exam		<input checked="" type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR #OC-E DUE 6-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>11-10-04</u> Time: <u>11:00 AM</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>H46-25</u> <u>SHOP / BUTT. LD</u> <u>POST LIFT-OFF (AFTER DETENSIONING)</u> <u>PRE</u> <u>LN 11-5-04</u>	<u>X</u>			<u>NOTE: WHILE TENDON WAS DETENSIONED INSPECTION WAS PERFORMED TO ENSURE THERE WAS NO MISSING, BROKEN, AND/OR DAMAGED WIRES PROTRUDING FROM ANCHOR HEAD. 2. 11-10-04</u>	
Results Legend: NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL <u>II</u>		DATE: <u>11-10-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>THREE MICE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet. No.:		Exam Date: <u>11-8-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>H46-25</u>		Tendon End: <input type="checkbox"/> Shop <input checked="" type="checkbox"/> Field	
Location: Tunnel, Gallery, <u>Buttress</u> <u>4</u>		Elevation: <u>350</u>		Bearing Plate I.D.: <u>NONE FOUND</u>	
Bearing Plate I.D. <u>NONE FOUND</u>		Anchor Head I.D. <u>1009</u>		Bushing I.D. <u>N/A</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR #OC-E DUE 8-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>11-8-04</u> Time: <u>1:00 P.M.</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>H46-25</u> <u>FIELD / BUTT. 4</u> <u>4-</u> <u>11-8-04</u> <u>PRE LIFT-OFF</u>	<u>X</u>				
Results Legend: NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL: <u>II</u>		DATE: <u>11-8-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

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Revision 2

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ATTACHMENT 5

ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record

Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet No.:		Exam Date: <u>11-10-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>H46-25</u>		Tendon End: <input type="checkbox"/> Shop <input checked="" type="checkbox"/> Field	
Location: Tunnel, Gallery, <u>Buttress</u> <u>4</u>		Elevation: <u>350</u>		Bearing Plate I.D.: <u>NONE FOUND</u>	
Bearing Plate I.D. <u>NONE FOUND</u>		Anchor Head I.D. <u>1009</u>		Bushing I.D. <u>N/A</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input type="checkbox"/> As Found Exam		<input checked="" type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR #OC-E DUE 6-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified:		Date: <u>11-10-04</u> Time: <u>11:00 A.M.</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>H46-25</u> <u>FIELD / BUTT. 4</u>	<u>X</u>			<u>NOTE: WHILE TENDON WAS DETENSIONED INSPECTION WAS PERFORMED TO ENSURE THERE WAS NO MISSING, BROKEN, AND/OR DAMAGED WIRES PROTRUDING FROM ANCHOR HEAD.</u> <u>J. 11-10-04</u>	
<u>POST LIFT-OFF (AFTER DETENSIONING)</u>					
Results Legend: NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)					
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL: <u>II</u>		DATE: <u>11-10-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

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Revision 2
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ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet. No.:		Exam Date: <u>11-3-04</u>	
Work Order No(s): <u>R1801589</u>		Tendon Anchorage No.: <u>D342</u>		Tendon End: <input type="checkbox"/> Shop <input checked="" type="checkbox"/> Field	
Location: Tunnel, Gallery, Buttress: <u>DOME</u>		Elevation: <u>440</u>		Bearing Plate I.D.: <u>NONE FOUND</u>	
Bearing Plate I.D. <u>NONE FOUND</u>		Anchor Head I.D. <u>841</u>		Bushing I.D. <u>H/A</u>	
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam		<input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR #OC-E DVE 8-2-05</u>			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified: _____		Date: <u>11-3-04</u> Time: <u>12:30 P.M.</u>	
Special / Specific Instructions:		<u>NEAR DISTANCE TEST CHART</u>			
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)	
	NI	RI TYPE	I.N.		
<u>D342</u> <u>FIELD / NEAR</u> <u>BUTT. 4</u>	<u>X</u>			<u>NOTE: VISUAL ONLY ON</u> <u>D342 FIELD END, NO</u> <u>LIFT-OFF PERFORMED.</u> <u>21.</u> <u>11-3-04</u>	
Results Legend:					
NI - No Indications		RI - Recordable Indication		I.N. - Indication Number (if applicable)	
Recordable Indication Type Codes:					
A. Missing Wires	H. Cracks	O. Other (Explain)			
B. Missing Button Heads	I. Pitting				
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage				
D. Broken Wires	K. Uneven Shim Stack				
E. Active Corrosion	L. Excessive Shim Gaps				
F. Other Corrosion	M. Gasket Seating Surface Damage				
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections				
Supplemental Information: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):					
VISUAL EXAMINER SIGNATURE: _____		LEVEL: <u>II</u>		DATE: <u>11-3-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: _____		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: _____					
ANII REVIEW SIGNATURE: _____				DATE: _____	

Date Sheet 5
Tendon Anchorage Area Crack Inspection
Dome Tendons

Inspection Period 8TH

Tendon No.	Location	Remarks about Cracking Pattern	Cracks with width >0.01"		Date Insp.	Insp. By Contr. Foreman	Verify. By Cognizant QV Insp.
			Location	Width (IN.)			
1. <u>D-213</u>	<u>S/NW</u>	<u>SMALL STRESS CRACKS <0.010" WIDE</u>	<u>N/A</u>	<u>N/A</u>	<u>9-13-04</u>	<u>BAG</u>	<u>SA</u>
	<u>E/SE</u>	<u>SMALL STRESS CRACKS <0.010" WIDE</u>	<u>N/A</u>	<u>N/A</u>	<u>9-11-04</u>	<u>BAG</u>	<u>SA</u>
2. <u>D-225</u>	<u>S/NW</u>	<u>SMALL STRESS CRACKS <0.010" WIDE</u>	<u>N/A</u>	<u>N/A</u>	<u>9-14-04</u>	<u>BAG</u>	<u>XPO</u>
	<u>E/SW</u>	<u>NONE</u>	<u>N/A</u>	<u>N/A</u>	<u>9-14-04</u>	<u>BAG</u>	<u>XPO</u>
3. <u>D-230</u>	<u>S/NW</u>	<u>SMALL STRESS CRACKS <0.010" WIDE</u>	<u>N/A</u>	<u>N/A</u>	<u>11-11-04</u>	<u>BAG</u>	<u>LI</u>
	<u>E/SE</u>	<u>NONE</u>	<u>N/A</u>	<u>N/A</u>	<u>11-11-04</u>	<u>BAG</u>	<u>LI</u>
4. <u>D-342</u>	<u>E/SW</u>	<u>NONE</u>	<u>N/A</u>	<u>N/A</u>	<u>11-3-04</u>	<u>BAG</u>	<u>LI</u>
	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>			
5. _____	_____	_____	_____	_____	_____	_____	_____
6. _____	_____	_____	_____	_____	_____	_____	_____

NOTE: Location
Identify Tendon End (Shop or Field) and NW, NE, SW, SE

Cognizant Mech/Struct Engineer
Reviewed By: [Signature]

Date: 27 FEB 05

A150/A459

Date Sheet 5
Tendon Anchorage Area Crack Inspection
Dome Tendons

Inspection Period 8TH

Tendon No.	Location	Remarks about Cracking Pattern	Cracks with width >0.01"		Date Insp.	Insp. By Contr. Foreman	Verify. By Cognizant QV Insp.
			Location	Width (IN.)			
1. <u>D-213</u>	<u>S/NW</u>	<u>NO CHANGE FROM AS FOUND</u>	<u>N/A</u>	<u>N/A</u>	<u>9-13-04</u>	<u>PAG</u>	<u>SPD</u>
	<u>E/SE</u>	<u>NO CHANGE FROM AS FOUND</u>	<u>N/A</u>	<u>N/A</u>	<u>9-11-04</u>	<u>PAG</u>	<u>SPD</u>
2. <u>D-225</u>	<u>S/NW</u>	<u>NO CHANGE FROM AS FOUND</u>	<u>N/A</u>	<u>N/A</u>	<u>9-14-04</u>	<u>PAG</u>	<u>SPD</u>
	<u>E/SW</u>	<u>NO CHANGE FROM AS FOUND</u>	<u>N/A</u>	<u>N/A</u>	<u>9-14-04</u>	<u>PAG</u>	<u>SPD</u>
3. <u>D-230</u>	<u>S/NW</u>	<u>NO CHANGE FROM AS FOUND</u>	<u>N/A</u>	<u>N/A</u>	<u>11-16-04</u>	<u>PAG</u>	<u>SPD</u>
	<u>E/SE</u>	<u>NO CHANGE FROM AS FOUND</u>	<u>N/A</u>	<u>N/A</u>	<u>11-16-04</u>	<u>PAG</u>	<u>SPD</u>
4. <u>D-342</u>	<u>E/SW</u>	<u>NO LIFT-OFF PERFORMED</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>			
5.							
6.							

NOTE: Location

Identify Tendon End (Shop or Field) and NW, NE, SW, SE

Cognizant Mech/Struct Engineer

Reviewed By: [Signature]

Date: 27 Feb 05

A161/A459

PRIOR TO LIFT-OFF TEST
ENCLOSURE 6
Data Sheet 6
Tendon Anchorage Area Crack Inspection
Vertical Tendons

Inspection Period 8TH

Tendon No.	Location	Remarks about Cracking Pattern	Cracks with width >0.01"		Date Insp.	Insp. By Contr. Foreman	Verify. By Cognizant QV Insp.
			Location	Width (IN.)			
1. <u>V32</u>	<u>S/T</u>	<u>MONIC</u>	<u>N/A</u>	<u>N/A</u>	<u>8-31-04</u>	<u>BAG</u>	<u>DPD</u>
	<u>F/B</u>	<u>SMALL STRESS CRACKS <0.010" WIDE</u>	<u>N/A</u>	<u>N/A</u>	<u>9-2-04</u>	<u>BAG</u>	<u>DPD</u>
2. <u>V53</u>	<u>S/T</u>	<u>CRACK 2.3" LONG, <0.010" WIDE</u>	<u>N/A</u>	<u>N/A</u>	<u>8-31-04</u>	<u>BAG</u>	<u>DPD</u>
	<u>F/B</u>	<u>SMALL STRESS CRACKS <0.010" WIDE</u>	<u>N/A</u>	<u>N/A</u>	<u>9-2-04</u>	<u>BAG</u>	<u>DPD</u>
3. <u>V66</u>	<u>S/T</u>	<u>SMALL STRESS CRACKS <0.010" WIDE</u>	<u>N/A</u>	<u>N/A</u>	<u>8-31-04</u>	<u>BAG</u>	<u>DPD</u>
	<u>F/B</u>	<u>SMALL STRESS CRACKS <0.010" WIDE</u>	<u>N/A</u>	<u>N/A</u>	<u>9-2-04</u>	<u>BAG</u>	<u>DPD</u>
4. <u>V140</u>	<u>S/T</u>	<u>SMALL STRESS CRACKS <0.010" WIDE</u>	<u>N/A</u>	<u>N/A</u>	<u>8-31-04</u>	<u>BAG</u>	<u>DPD</u>
	<u>F/B</u>	<u>SMALL STRESS CRACKS <0.010" WIDE</u>	<u>N/A</u>	<u>N/A</u>	<u>9-2-04</u>	<u>BAG</u>	<u>DPD</u>
5. _____	_____	_____	_____	_____	_____	_____	_____
6. _____	_____	_____	_____	_____	_____	_____	_____
7. _____	_____	_____	_____	_____	_____	_____	_____

NOTE: Location
Identify Tendon End (Shop or Field) and
T or B - Top or Bottom of Vertical Tendon

Cognizant Mech/Struct Engineer

Reviewed By: [Signature]

Date: 27 FEB 05

A152/1459

AFTR LIFT-OFF TEST OR RETENSIONING

ENCLOSURE 6

Data Sheet 6

Tendon Anchorage Area Crack Inspection
Vertical Tendons

1301-9.1

Revision 18

Page 11 of 16

Inspection Period 9TH

Tendon No.	Location	Remarks about Cracking Pattern	Cracks with width >0.01" Location	Width (IN.)	Date Insp.	Insp. By Contr. Foreman	Verify. By Cognizant QV Insp.
1. <u>V32</u>	<u>S/T</u>	<u>NO CHANGE</u>	<u>n/a</u>	<u>n/a</u>	<u>9-7-04</u>	<u>FAG</u>	<u>SPO</u>
	<u>E/B</u>	<u>NO CHANGE</u>	<u>n/a</u>	<u>n/a</u>	<u>9-7-04</u>	<u>BAG</u>	<u>SPO</u>
2. <u>V53</u>	<u>S/T</u>	<u>NO CHANGE</u>	<u>n/a</u>	<u>n/a</u>	<u>9-7-04</u>	<u>FAG</u>	<u>SPO</u>
	<u>E/B</u>	<u>NO CHANGE</u>	<u>n/a</u>	<u>n/a</u>	<u>9-7-04</u>	<u>FAG</u>	<u>SPO</u>
3. <u>V66</u>	<u>S/T</u>	<u>NO CHANGE</u>	<u>n/a</u>	<u>n/a</u>	<u>9-3-04</u>	<u>FAG</u>	<u>SPO</u>
	<u>E/B</u>	<u>NO CHANGE</u>	<u>n/a</u>	<u>n/a</u>	<u>9-3-04</u>	<u>BAG</u>	<u>SPO</u>
4. <u>V140</u>	<u>S/T</u>	<u>NO CHANGE</u>	<u>n/a</u>	<u>n/a</u>	<u>9-9-04</u>	<u>FAG</u>	<u>SPO</u>
	<u>E/B</u>	<u>NO CHANGE</u>	<u>n/a</u>	<u>n/a</u>	<u>9-9-04</u>	<u>BAG</u>	<u>SPO</u>
5.							
6.							
7.							

NOTE: Location
Identify Tendon End (Shop or Field) and
T or B - Top or Bottom of Vertical Tendon

Cognizant Mech/Struct Engineer

Reviewed By: [Signature]

Date: 27 FEB 05

A153/A459

PRIOR TO LIFT-OFF TEST
ENCLOSURE 6
 Date Sheet 7
Tendon Anchorage Area Crack Inspection
Hoop Tendons

1301-9.1
 Revision 18
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Inspection Period 8TH

Tendon No.	Location	Remarks about Cracking Pattern	Cracks with width >0.01"		Date Insp.	Insp. By Contr. Foreman	Verify. By Cognizant QV Insp.
			Location	Width (IN.)			
1. <u>H35-49</u>	<u>S/5</u>	<u>SMALL STRESS CRACKS <0.010" WIDE</u>	<u>n/a</u>	<u>n/a</u>	<u>9-16-04</u>	<u>EAC</u>	<u>XPO</u>
	<u>F/3</u>	<u>SMALL STRESS CRACKS <0.010" WIDE</u>	<u>n/a</u>	<u>n/a</u>	<u>9-16-04</u>	<u>EAC</u>	<u>XPO</u>
2. <u>H62-26</u>	<u>S/6</u>	<u>SPALL - 12 X 2 X 1/4" DEPT</u>	<u>n/a</u>	<u>n/a</u>	<u>9-22-04</u>	<u>EAC</u>	<u>XPO</u>
	<u>F/2 NOT</u>	<u>PERFORMED PRIOR TO</u>	<u>LIFT-OFF TEST. W/</u>	<u>11-2-04</u>			
3. <u>H13-11</u>	<u>S/1</u>	<u>NONE FOUND</u>	<u>n/a</u>	<u>n/a</u>	<u>11-4-04</u>	<u>BAG</u>	<u>W.</u>
	<u>F/3</u>	<u>NONE FOUND</u>	<u>n/a</u>	<u>n/a</u>	<u>11-12-04</u>	<u>BAG</u>	<u>W.</u>
4. <u>H46-25</u>	<u>S/6</u>	<u>NONE FOUND</u>	<u>n/a</u>	<u>n/a</u>	<u>11-5-04</u>	<u>BAG</u>	<u>W.</u>
	<u>F/4</u>	<u>NONE FOUND</u>	<u>n/a</u>	<u>n/a</u>	<u>11-6-04</u>	<u>BAG</u>	<u>W.</u>
5. <u>H62-18</u>	<u>S/6</u>	<u>SMALL STRESS CRACKS <.010"</u>	<u>n/a</u>	<u>n/a</u>	<u>11-5-04</u>	<u>BAG</u>	<u>W.</u>
	<u>F/2</u>	<u>NONE FOUND</u>	<u>n/a</u>	<u>n/a</u>	<u>11-2-04</u>	<u>BAG</u>	<u>W.</u>
6. _____	_____	_____	_____	_____	_____	_____	_____
7. _____	_____	_____	_____	_____	_____	_____	_____
8. _____	_____	_____	_____	_____	_____	_____	_____
9. _____	_____	_____	_____	_____	_____	_____	_____
10. _____	_____	_____	_____	_____	_____	_____	_____

NOTE: Location
 Identify Tendon End (Shop or Field) and
 1 to 6 - Number of Butress Nearest to End of Tendon

Cognizant Mech/Struct Engineer
 Reviewed By: [Signature] Date: 27 FEB 05

A154/A459

AFTER LIFT-OFF TEST OR RETENSIONING
ENCLOSURE 6
Date Sheet 7

Tendon Anchorage Area Crack Inspection
Hoop Tendons

Inspection Period 8TH

Tendon No.	Location	Remarks about Cracking Pattern	Cracks with width >0.01"		Date Insp.	Insp. By Contr. Foreman	Verify. By Cognizant QV Insp.
			Location	Width (IN.)			
1. <u>H35-49</u>	<u>S/5</u>	<u>NO CHANGE FROM AS FOUND</u>	<u>N/A</u>	<u>N/A</u>	<u>9-16-04</u>	<u>BAG</u>	<u>SPD</u>
	<u>F/3</u>	<u>NO CHANGE FROM AS FOUND</u>	<u>N/A</u>	<u>N/A</u>	<u>9-15-04</u>	<u>BAG</u>	<u>SPD</u>
2. <u>H62-26</u>	<u>S/6</u>	<u>NO CHANGE FROM AS FOUND</u>	<u>N/A</u>	<u>N/A</u>	<u>2-23-04</u>	<u>BAG</u>	<u>SPD</u>
	<u>F/2</u>	<u>NONE FOUND</u>	<u>N/A</u>	<u>N/A</u>	<u>11-2-04</u>	<u>BAG</u>	<u>W.</u>
3. <u>H13-11</u>	<u>S/1</u>	<u>NO CHANGE FROM AS FOUND</u>	<u>N/A</u>	<u>N/A</u>	<u>11-20-04</u>	<u>BAG</u>	<u>W.</u>
	<u>F/3</u>	<u>NO CHANGE FROM AS FOUND</u>	<u>N/A</u>	<u>N/A</u>	<u>11-22-04</u>	<u>BAG</u>	<u>W.</u>
4. <u>H46-25</u>	<u>S/6</u>	<u>NO CHANGE FROM AS FOUND</u>	<u>N/A</u>	<u>N/A</u>	<u>11-10-04</u>	<u>BAG</u>	<u>W.</u>
	<u>F/4</u>	<u>NO CHANGE FROM AS FOUND</u>	<u>N/A</u>	<u>N/A</u>	<u>11-10-04</u>	<u>BAG</u>	<u>W.</u>
5. <u>H62-18</u>	<u>S/6</u>	<u>NO CHANGE FROM AS FOUND</u>	<u>N/A</u>	<u>N/A</u>	<u>11-8-04</u>	<u>BAG</u>	<u>W.</u>
	<u>F/2</u>	<u>NO CHANGE FROM AS FOUND</u>	<u>N/A</u>	<u>N/A</u>	<u>11-3-04</u>	<u>BAG</u>	<u>W.</u>
6. _____	_____	_____	_____	_____	_____	_____	_____
7. _____	_____	_____	_____	_____	_____	_____	_____
8. _____	_____	_____	_____	_____	_____	_____	_____
9. _____	_____	_____	_____	_____	_____	_____	_____
10. _____	_____	_____	_____	_____	_____	_____	_____

NOTE: Location
Identify Tendon End (Shop or Field) and
1 to 6 - Number of Butress Nearest to End of Tendon

Cognizant Mech/Struct Engineer
Reviewed By: _____

Date: 27 FEB 05

A150/A459

A1520/A459

ER-AA-335-018

Revision 2

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
Page 1 of 1

Station: <i>THREE MILE ISLAND</i>	Unit: <i>1</i>	Exam Data Sheet No.:	Exam Date: <i>8-31-04</i>	
System:	Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>	
Location: Building: <i>RB</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i> Azimuth/Radius:	
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C	Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>		
Design Drawing(s) <i>TMI1-0016</i>	Visual Aids: <i>OPTICAL COMPARATOR *DC-L BUS: 8-2-05, FEELER GAUGE SET *F49 BUS: 2-2-05</i>			
Surface: <i>ID</i> <input checked="" type="checkbox"/> <i>OD</i>	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>	
Illumination Used <i>FLASHLIGHT</i>	Illumination Verified: Date: <i>8-31-04</i> Time: <i>07:30 AM</i>			
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>V32</i> <i>SKOP/TOP</i> <i>2' BEYOND EDGE OF BEARING PLATE</i>	<i>X</i>			
Results Legend:				
NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)				
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts , Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL <i>II</i>	DATE: <i>8-31-04</i>	
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE:			DATE:	

A157/A459

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Revision 2
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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
Page 1 of 1

Station: <i>THREE MILE ISLAND</i>	Unit: <i>1</i>	Exam Data Sheet. No.:	Exam Date: <i>9-7-04</i>
System: Examination Procedure <i>ER-AA-335-018</i>		Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i> Azimuth/Radius:
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote Matl. Type: <i>CONCRETE</i>			
Design Drawing(s) <i>TMI1-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR "DC-E DUG: 8-2-05, FEELER GAUGE SET "F49 DUG: 2-2-05"</i>	
Surface: ID <input checked="" type="checkbox"/> OD	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>9-7-04</i>	Time: <i>7:30</i>

Special / Specific Instructions: *NEAR DISTANCE TEST CHART*

Component / Item Number and Description (e.g. E1N, E1D, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>V32 SHOP/TOP 2' BEYOND EDGE OF BEARING PLATE POST LIFT-OFF</i>	<i>X</i>			<i>NO CHANGE FROM AS FOUND INSPECTION</i>

Results Legend:
NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)

Recordable Indication Type Codes:

A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration
C. Exposed Metallic Items (Other)	I. Popouts , Voids, Honeycomb	O. Abrasion, Cavitation, Wear
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)

Supplemental Information : Yes No Sketch Photo Video Other (Describe):

VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>	LEVEL #	DATE: <i>9-7-04</i>
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject		
Comments: _____		

ANII REVIEW SIGNATURE: _____ DATE: _____

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Revision 2
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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
Page 1 of 1

Station: <i>THREE MILE ISLAND</i>		Unit: <i>1</i>		Exam Data Sheet. No.:		Exam Date: <i>9-2-04</i>	
System:		Examination Procedure <i>ER-AA-335-018</i>		Rev. <i>2</i>		Work Order No(s): <i>R1801589</i>	
Location: Building: <i>RB</i>		Elev.:		Col.: <i>N/A</i>		Row: <i>N/A</i>	
Azimuth/Radius:		Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote		Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR "DC-E" SER: 8-2-05, FEELER GAUGE SET "F49" SER: 2-2-05</i>					
Surface: ID <input checked="" type="checkbox"/> (OD)		Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO					
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>			
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified:		Date: <i>9-1-04</i>		Time: <i>10:00 AM</i>	
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>							
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)			
	NI	RI	I.N.				
<i>V32</i> <i>FIELD/BOTTOM</i> <i>2' BEYOND EDGE OF BEARING PLATE</i>			<i>A</i>	<i>SMALL-STRESS CRACKS <0.010" WIDE</i>			
Results Legend:							
NI - No Indications		RI - Recordable Indication		I.N.- Indication Number (if applicable)			
Recordable Indication Type Codes:							
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting					
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration					
C. Exposed Metallic Items (Other)	I. Popouts , Voids, Honeycomb	O. Abrasion, Cavitation, Wear					
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes					
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence					
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)					
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):							
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL <i>II</i>		DATE: <i>9-2-04</i>			
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>					
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject							
Comments: _____							
ANII REVIEW SIGNATURE:				DATE:			

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Revision 2
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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
Page 1 of 1

Station: <i>THREE MILE ISLAND</i>		Unit: <i>1</i>		Exam Data Sheet No.:		Exam Date: <i>8-31-04</i>	
System:		Examination Procedure <i>ER-AA-335-018</i>		Rev. <i>2</i>		Work Order No(s): <i>R1801589</i>	
Location: Building: <i>RB</i>		Elev.:		Col.: <i>N/A</i>		Row: <i>N/A</i>	
Azimuth/Radius:		Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote		Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR "DL-E" DWS: 8-2-05, FEELER GAUGE SET "F" #49 DWS: 2-2-05</i>					
Surface: ID <input checked="" type="checkbox"/> (OD)		Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO					
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>			
Illumination Used <i>FLASHLIGHT</i>				Illumination Verified: Date: <i>8-31-04</i> Time: <i>07:30AM</i>			
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>							
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)			
	NI	RI	I.N.				
<i>V53</i> <i>SHOP/TOP</i> <i>2' BEYOND EDGE OF BEARING PLATE</i>			<i>A</i>	<i>1 CRACK <0.010" WIDE, 23" LONG GOING UP TRENCH WALL 3" FROM EDGE OF BEARING PLATE</i>			
Results Legend:							
NI - No Indications		RI - Recordable Indication		I.N. - Indication Number (if applicable)			
Recordable Indication Type Codes:							
A. Cracks (Characterize and Size)		G. Settlements Or Deflections		M. Scaling / Dusting			
B. Exposed Reinforcing Steel		H. Degraded Patches or Repairs		N. Coating Deterioration			
C. Exposed Metallic Items (Other)		I. Popouts, Voids, Honeycomb		O. Abrasion, Cavitation, Wear			
D. Evidence Of Grease Leakage		J. Spalls		P. Air Voids / Bug Holes			
E. Evidence Of Moisture		K. Cold Joint Lines		Q. Efflorescence			
F. Leaching Or Chemical Attack		L. Corrosion Staining		R. Other (Explain)			
Supplemental Information: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):							
VISUAL EXAMINER SIGNATURE: <i>David P. O'Brien</i>				LEVEL <i>II</i>		DATE: <i>8-31-04</i>	
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>				DATE: <i>27 FEB 05</i>			
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject							
Comments: _____							
ANII REVIEW SIGNATURE:				DATE:			

A160/A459

ER-AA-335-018
Revision 2
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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
Page 1 of 1

Station: <i>THREE MILE ISLAND</i>	Unit: <i>1</i>	Exam Data Sheet. No.:	Exam Date: <i>9-7-04</i>
System: Examination Procedure <i>ER-AA-335-018</i>		Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i> Azimuth/Radius:
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote Matl. Type: <i>CONCRETE</i>			
Design Drawing(s) <i>TMI-0010</i>		Visual Aids: <i>OPTICAL COMPARATOR "DC-EDGE" P-2-05, FEELER GAUGE SET "F-49" DUC: 2-2-05</i>	
Surface: ID <input checked="" type="checkbox"/> OD		Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>	Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>9-7-04</i>	Time: <i>07:30 AM</i>
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>			

Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI	I.N.	
<i>V53</i> <i>SHOP / TOP</i> <i>2' BEYOND EDGE OF BEARING PLATE</i> <i>POST LIFT-OFF</i>	<i>X</i>			<i>NO CHANGE FROM AS FOUND INSPECTION</i>

Results Legend:
NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)

Recordable Indication Type Codes:

A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)

Supplemental Information: Yes No Sketch Photo Video Other (Describe):

VISUAL EXAMINER SIGNATURE: <i>David P. [Signature]</i>	LEVEL: <i>II</i>	DATE: <i>9-7-04</i>
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>	DATE: <i>27 FEB 05</i>	
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject		
Comments: _____		
ANII REVIEW SIGNATURE: _____		DATE: _____

A161/A459

ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
Page 1 of 1

Station: <i>THREE MILE ISLAND</i>	Unit: <i>1</i>	Exam Data Sheet No.:	Exam Date: <i>9-2-04</i>
System: Examination Procedure <i>ER-AA-335-018</i>		Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i> Azimuth/Radius:
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>
Design Drawing(s) <i>TMI1-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR "OC" DUE: 8-2-05, FEELER GAUGE SET "FG" DUE: 2-2-05</i>	
Surface: ID <input checked="" type="checkbox"/> (OD)	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>9-1-04</i>	Time: <i>07:30</i>

Special / Specific Instructions: *NEAR DISTANCE TEST CHART*

Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>V53</i> <i>FIELD/BOTTOM</i> <i>2' BEYOND EDGE OF BEARING PLATE</i>			<i>A</i>	<i>SMALL STRESS CRACK <D. 0.010" WIDE</i>

Results Legend:
NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)

- Recordable Indication Type Codes:**
- | | | |
|-----------------------------------|--------------------------------|-------------------------------|
| A. Cracks (Characterize and Size) | G. Settlements Or Deflections | M. Scaling / Dusting |
| B. Exposed Reinforcing Steel | H. Degraded Patches or Repairs | N. Coating Deterioration |
| C. Exposed Metallic Items (Other) | I. Popouts , Voids, Honeycomb | O. Abrasion, Cavitation, Wear |
| D. Evidence Of Grease Leakage | J. Spalls | P. Air Voids / Bug Holes |
| E. Evidence Of Moisture | K. Cold Joint Lines | Q. Efflorescence |
| F. Leaching Or Chemical Attack | L. Corrosion Staining | R. Other (Explain) |
- Supplemental Information : Yes No Sketch Photo Video Other (Describe):

VISUAL EXAMINER SIGNATURE: *Daniel P. O'Shea* LEVEL *II* DATE: *9-2-04*

RESPONSIBLE ENGINEER SIG.: *[Signature]* DATE: *27 FEB 05*

FINAL DISPOSITION BY RESPONSIBLE ENGINEER - Accept Reject

Comments: _____

ANII REVIEW SIGNATURE: _____ DATE: _____

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ER-AA-335-018

Revision 2

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
 Page 1 of 1

Station: <i>THREEMILE ISLAND</i>		Unit: <i>1</i>	Exam Data Sheet. No.:	Exam Date: <i>9-31-04</i>
System:		Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i>	Azimuth/Radius:
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI-0016</i>		Visual Aids: <i>DUAL COMPARATOR "DC-E" S/N: 8-2-85, FEISLER GAUGE SET "F-49" S/N: 2-2-05</i>		
Surface: ID <input checked="" type="checkbox"/> (OD)		Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002532583</i>		Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>9-31-04</i>		Time: <i>11:30 AM</i>
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>V66 SHOP/TOP 2' BEYOND EDGE OF BEARING PLATE</i>			<i>A</i>	<i>SMALL STRESS CRACKS < 0.010" WIDE</i>
Results Legend:				
NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)				
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <i>Daniel A. P. O'Hara</i>		LEVEL: <i>II</i>	DATE: <i>9-31-04</i>	
RESPONSIBLE ENGINEER SIG.: <i>Howard</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____				DATE: _____

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
 Page 1 of 1

Station: <i>THREE MILE ISLAND</i>	Unit: <i>1</i>	Exam Data Sheet. No.:	Exam Date: <i>9-3-04</i>
System:	Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i> Azimuth/Radius:
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C	Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI1-0016</i>	Visual Aids: <i>OPTICAL COMPARATOR "DC" E.DUG: 8-2-05, FEELER GAUGE SET "F" 49 DUG: 2-2-05</i>		
Surface: <input type="checkbox"/> ID <input checked="" type="checkbox"/> OD	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>	Illumination Verified:	Date: <i>9-3-04</i>	Time: <i>7:30 AM</i>

Special / Specific Instructions: *NEAR DISTANCE TEST CHART*

Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI	TYPE I.N.	
<i>V66</i> <i>SHOP/TOP</i> <i>2' BEYOND EDGE OF BEARING PLATE</i> <i>POST LIFT-OFF</i>	<i>X</i>			<i>NO CHANGE FROM AS FOUND INSPECTION</i>

Results Legend:

NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)

Recordable Indication Type Codes:

A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)

Supplemental Information: Yes No Sketch Photo Video Other (Describe):

VISUAL EXAMINER SIGNATURE: *[Signature]* LEVEL *II* DATE: *9-3-04*

RESPONSIBLE ENGINEER SIG.: *[Signature]* DATE: *27 FEB 05*

FINAL DISPOSITION BY RESPONSIBLE ENGINEER Accept Reject

Comments: _____

ANII REVIEW SIGNATURE: _____ DATE: _____

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
 Page 1 of 1

Station: <i>THREE MILE ISLAND</i>	Unit: <i>1</i>	Exam Data Sheet. No.:	Exam Date: <i>9-2-04</i>
System:	Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i> Azimuth/Radius:
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C	Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI1-0016</i>	Visual Aids: <i>OPTICAL COMPARATOR "DL-E" DUE: 8-2-05, FEELER GAUGE SET "7" 49 DUE: 2-2-05</i>		
Surface: <i>ID</i> <input checked="" type="checkbox"/> <i>OD</i>	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>	Illumination Verified:	Date: <i>9-2-04</i>	Time: <i>07:30 AM</i>

Special / Specific Instructions: *NEAR DISTANCE TEST CHART*

Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>V66</i> <i>FIELD/BOTTOM</i> <i>2' BEYOND EDGE OF BEARING PLATE</i>			<i>A</i>	<i>SMALL STRESS CRACKS <0.010" WIDE</i>

Results Legend:
 NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)

- Recordable Indication Type Codes:**
- | | | |
|-----------------------------------|--------------------------------|-------------------------------|
| A. Cracks (Characterize and Size) | G. Settlements Or Deflections | M. Scaling / Dusting |
| B. Exposed Reinforcing Steel | H. Degraded Patches or Repairs | N. Coating Deterioration |
| C. Exposed Metallic Items (Other) | I. Popouts , Voids, Honeycomb | O. Abrasion, Cavitation, Wear |
| D. Evidence Of Grease Leakage | J. Spalls | P. Air Voids / Bug Holes |
| E. Evidence Of Moisture | K. Cold Joint Lines | Q. Efflorescence |
| F. Leaching Or Chemical Attack | L. Corrosion Staining | R. Other (Explain) |
- Supplemental Information : Yes No Sketch Photo Video Other (Describe):

VISUAL EXAMINER SIGNATURE: *[Signature]* LEVEL *IE* DATE: *9-2-04*

RESPONSIBLE ENGINEER SIG.: *[Signature]* DATE: *27 FEB 05*

FINAL DISPOSITION BY RESPONSIBLE ENGINEER Accept Reject

Comments: _____

ANII REVIEW SIGNATURE: _____ DATE: _____

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
Page 1 of 1

Station: <i>THREE MILE ISLAND</i>		Unit: <i>1</i>	Exam Data Sheet No.:	Exam Date: <i>8-31-04</i>
System:		Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i>	Azimuth/Radius:
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR *DC-EDGE: 8-2-05 / FEELER GAUGE SET *F-49 DWS: 2-2-05</i>		
Surface: ID <input checked="" type="checkbox"/> (OD)	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>	
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified:	Date: <i>8-31-04</i>	Time: <i>11:30 AM</i>
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. E1N, E1D, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>V140 SHOP/TOP 2' BEYOND EDGE OF BEARING PLATE</i>			<i>A</i>	<i>SMALL STRESS CRACKS < 0.010" WIDE</i>
Results Legend:				
NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)				
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <i>David P. Oldham</i>		LEVEL <i>II</i>	DATE: <i>8-31-04</i>	
RESPONSIBLE ENGINEER SIG.: <i>David P. Oldham</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE:				DATE:

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
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Station: <i>THREEMILE ISLAND</i>	Unit: <i>1</i>	Exam Data Sheet. No.:	Exam Date: <i>9-9-04</i>
System:	Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i> Azimuth/Radius:
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C	Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI1-0010</i>	Visual Aids: <i>OPTICAL COMPARATOR "DC-E" SER: 8-2-05, FEELER GAUGE SET "F" 49 DUS: 2-2-05</i>		
Surface: ID: <input checked="" type="checkbox"/> (OD)	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>	Illumination Verified:	Date: <i>9-9-04</i>	Time: <i>12:30 AM</i>

Special / Specific Instructions: *NEAR DISTANCE TEST CHART*

Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>V140 SHOP / TOP 2' BEYOND EDGE OF BEARING PLATE RETENSION INSPECTION</i>			<i>A</i>	<i>SMALL STRESS CRACKS < 0.010" WIDE, NO CHANGE FROM AS FOUND INSPECTION</i>

Results Legend: NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)

- Recordable Indication Type Codes:
- | | | |
|-----------------------------------|--------------------------------|-------------------------------|
| A. Cracks (Characterize and Size) | G. Settlements Or Deflections | M. Scaling / Dusting |
| B. Exposed Reinforcing Steel | H. Degraded Patches or Repairs | N. Coating Deterioration |
| C. Exposed Metallic Items (Other) | I. Popouts, Voids, Honeycomb | O. Abrasion, Cavitation, Wear |
| D. Evidence Of Grease Leakage | J. Spalls | P. Air Voids / Bug Holes |
| E. Evidence Of Moisture | K. Cold Joint Lines | Q. Efflorescence |
| F. Leaching Or Chemical Attack | L. Corrosion Staining | R. Other (Explain) |
- Supplemental Information: Yes No Sketch Photo Video Other (Describe):

VISUAL EXAMINER SIGNATURE: *[Signature]* LEVEL *I* DATE: *9-9-04*

RESPONSIBLE ENGINEER SIG.: *[Signature]* DATE: *27 FEB 05*

FINAL DISPOSITION BY RESPONSIBLE ENGINEER Accept Reject

Comments: _____

ANII REVIEW SIGNATURE: _____ DATE: _____

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Revision 2
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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
Page 1 of 1

Station: <i>THREE MILE ISLAND</i>		Unit: <i>1</i>	Exam Data Sheet. No.:	Exam Date:
System:		Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i>	Azimuth/Radius:
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR "DC-E" DUE: 8-2-05, FEELER GAUGE SET "F49" DUE: 2-2-05</i>		
Surface: ID <input checked="" type="checkbox"/> OD		Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>9-2-04</i> Time: <i>10:00AM</i>		
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>V140 FIELD/BOTTOM 2' BEYOND EDGE OF BEARING PLATE</i>			<i>I</i>	<i>POPOUT 1 1/2" x 1" x 1/4" DEEP WITH EPOXY COATING</i>
Results Legend:				
NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)				
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts , Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information : <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Sketch <input checked="" type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL <i>II</i>	DATE: <i>9-2-04</i>	
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____				DATE: _____

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Revision 2
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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
Page 1 of 1

Station: <i>THREE MILE ISLAND</i>	Unit: <i>1</i>	Exam Data Sheet. No.:	Exam Date: <i>9-10-04</i>
System:	Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i> Azimuth/Radius:
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C	Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI-0016</i>	Visual Aids: <i>OPTICAL COMPARATOR "DC-E" SER: 8-2-05, FEELER GAUGE SET "F49" SER: 2-2-05</i>		
Surface: ID <input checked="" type="radio"/> (OD)	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>	Illumination Verified:	Date: <i>9-10-04</i>	Time: <i>07:30 AM</i>

Special / Specific Instructions: *NEAR DISTANCE TEST CHART*

Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>V140 FIELD/BOTTOM 2' BEYOND EDGE OF BEARING PLATE</i>			<i>I</i>	<i>POPOUT 1 1/2" x 1" x 1/4" DEEP WITH EPOXY PATCHING, NO CHANGE FROM AS FOUND INSPECTION,</i>

Results Legend:

NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)

Recordable Indication Type Codes:

A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)

Supplemental Information : Yes No Sketch Photo Video Other (Describe):

VISUAL EXAMINER SIGNATURE: *[Signature]* LEVEL *II* DATE: *9-10-04*

RESPONSIBLE ENGINEER SIG.: *[Signature]* DATE: *27 FEB 05*

FINAL DISPOSITION BY RESPONSIBLE ENGINEER Accept Reject

Comments: _____

ANII REVIEW SIGNATURE: _____ DATE: _____

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
 Page 1 of 1

Station: <i>THREE MILE ISLAND</i>		Unit: <i>1</i>	Exam Data Sheet. No.:	Exam Date: <i>11-4-04</i>
System: Examination Procedure <i>ER-AA-335-018</i>		Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>	
Location: Building: <i>RB</i>	Elev.: <i>312'</i>	Col.: <i>N/A</i>	Row: <i>N/A</i>	Azimuth/Radius: <i>0°</i>
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote		Matl. Type: <i>CONCRETE</i>
Design Drawing(s) <i>TMI-0016</i>		Visual Aids: <i>NATURAL COMPARATOR "06-5 DWS: 8-2-05, FEELER GAUGE SET "F49 DWS: 2-2-05</i>		
Surface: ID <input checked="" type="checkbox"/> (OD)	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>	
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>11-4-04</i>		Time: <i>10:30 A.M.</i>
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>H13-11 SHOP / BUTT. 1 2' BEYOND EDGE OF BEARING PLATE PRE LIFT-OFF</i>	<i>X</i>			
Results Legend:				
NI - No Indications		RI - Recordable Indication		I.N.- Indication Number (if applicable)
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL <i>II</i>	DATE: <i>11-4-04</i>	
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____				DATE: _____

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
Page 1 of 1

Station: <i>THREE MILE ISLAND</i>		Unit: <i>1</i>	Exam Data Sheet No.:	Exam Date: <i>11-20-04</i>
System:		Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.: <i>312'</i>	Col.: <i>N/A</i>	Row: <i>N/A</i>	Azimuth/Radius: <i>0°</i>
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR "OC" E.D.S. 8-2-05, FEELER GAUGE SET "F" 49 DUC: 2-2-05</i>		
Surface: ID <input checked="" type="checkbox"/> (OD)		Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>11-20-04</i> Time: <i>10:00 A.M.</i>		
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>H 13-11</i> <i>SHOP / BUTT. 1</i> <i>2' BEYOND EDGE OF BEARING PLATE</i> <i>POST LIFT-OFF</i>	<i>X</i>			
Results Legend:				
NI - No Indications		RI - Recordable Indication		I.N. - Indication Number (if applicable)
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL: <i>II</i>	DATE: <i>11-20-04</i>	
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____				DATE: _____

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Revision 2
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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
Page 1 of 1

Station: <i>THREEMILE ISLANDS</i>		Unit: <i>1</i>	Exam Data Sheet. No.:	Exam Date: <i>11-12-04</i>
System:		Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.: <i>312'</i>	Col.: <i>N/A</i>	Row: <i>N/A</i>	Azimuth/Radius: <i>135°</i>
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI1-0010</i>		Visual Aids: <i>OPTICAL COMPARATOR "DC-E DWS: P-2-05", FEELER GAGES SET "F49 DWS: 2-2-05"</i>		
Surface: ID <input checked="" type="checkbox"/> (OD)		Surface / Components Coated: <input checked="" type="checkbox"/> YES <input checked="" type="checkbox"/> NO <i>21. 11-12-04</i>		
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>11-12-04</i> Time: <i>6:00 A.M.</i>		
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>H13-11</i> <i>FIELD / BUTT. 3</i> <i>2' BEYOND EDGE OF BEARING PLATE</i> <i>PRE LIFT-OFF</i>	<input checked="" type="checkbox"/>			
Results Legend:				
NI - No Indications		RI - Recordable Indication		I.N. - Indication Number (if applicable)
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL <i>II</i>	DATE: <i>11-12-04</i>	
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____				DATE: _____

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
Page 1 of 1

Station: <i>THREE MILE ISLAND</i>		Unit: <i>1</i>	Exam Data Sheet. No.:	Exam Date: <i>11-22-04</i>
System:		Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.: <i>312</i>	Col.: <i>N/A</i>	Row: <i>N/A</i>	Azimuth/Radius: <i>135°</i>
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI-0010</i>		Visual Aids: <i>OPTICAL COMPARATOR "DC-E DKS 8-2-05" FEELER GAUGE SET "F-49 DKS: 2-2-05"</i>		
Surface: <i>ID</i> <input checked="" type="checkbox"/> <i>OD</i> <input type="checkbox"/>	Surface / Components Coated: <input checked="" type="checkbox"/> YES <input checked="" type="checkbox"/> NO		<i>4/11-22-04</i>	
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>	
Illumination Used: <i>FLASHLIGHT</i>		Illumination Verified:	Date: <i>11-22-04</i>	Time: <i>10:30 A.M.</i>
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>H13-11</i> <i>FIELD / BUTT. 3</i> <i>2' BEYOND EDGE OF BEARING PLATE</i> <i>POST LIFT-OFF</i>	<i>X</i>			
Results Legend:				
NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)				
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL: <i>II</i>	DATE: <i>11-22-04</i>	
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____				DATE: _____

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
Page 1 of 1

Station: <i>THREE MILE ISLAND</i>		Unit: <i>1</i>	Exam Data Sheet. No.:	Exam Date: <i>9-16-04</i>
System:		Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i>	Azimuth/Radius:
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI1-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR "DC-E DWS: 8-2-05, FEELER GAUGE SET "F49 DWS: 2-2-05"</i>		
Surface: <i>ID</i> <input checked="" type="checkbox"/> <i>OD</i>		Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>9-16-04</i> Time: <i>07:30 AM</i>		
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>H35-49 SHOP END BUTTRESS 5 2' BEYOND EDGE OF BEARING PLATE</i>	<i>X</i>			
Results Legend:				
NI - No Indications		RI - Recordable Indication		I.N.- Indication Number (if applicable)
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts , Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL: <i>II</i>	DATE: <i>9-16-04</i>	
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____				DATE: _____

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
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Station: <i>THREE MILE ISLAND</i>		Unit: <i>1</i>	Exam Data Sheet. No.:	Exam Date: <i>9-16-04</i>
System: Examination Procedure <i>ER-AA-335-018</i>		Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>	
Location: Building: <i>RB</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i>	Azimuth/Radius:
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C - <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR *OC-EDGE: 8-2-05 FEELER GAUGE SET *F49 DUG: 2-2-05</i>		
Surface: <i>ID</i> <input checked="" type="checkbox"/> <i>OD</i>	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>	
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified:	Date: <i>9-16-04</i>	Time: <i>7:30 AM</i>
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>1435-49</i> <i>SHOPEX</i> <i>2' BEYOND EDGE OF BEARING PLATE</i> <i>POST LIFT-OFF</i>	<i>X</i>			<i>NO CHANGE FROM AS FOUND INSPECTION</i>
Results Legend:				
NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)				
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <i>David P. O'Brien</i>		LEVEL: <i>II</i>	DATE: <i>9-16-04</i>	
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____			DATE: _____	

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
 Page 1 of 1

Station: <i>THREEMILE ISLAND</i>		Unit: <i>1</i>	Exam Data Sheet. No.:	Exam Date: <i>9-15-04</i>
System:		Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i>	Azimuth/Radius:
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR "01" E.D.W. 8-7-05, FEISLER GAUGE SET "7-49" DUG: 2-2-05</i>		
Surface: <input type="checkbox"/> ID <input checked="" type="checkbox"/> OD	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>	
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>9-15-04</i> Time: <i>11:30 AM</i>		
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>H35-49 FIELD END BUTTRESS 3 2' BEYOND EDGE OF BEARING PLATE</i>	<i>X</i>			
Results Legend:				
NI - No Indications		RI - Recordable Indication		I.N. - Indication Number (if applicable)
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts , Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL <i>II</i>	DATE: <i>9-15-04</i>	
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE:				DATE:

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 Revision 2
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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
 Page 1 of 1

Station: <i>THREE MILE ISLAND</i>	Unit: <i>1</i>	Exam Data Sheet. No.:	Exam Date: <i>9-15-04</i>
System:	Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i> Azimuth/Radius:
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C	Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI-0016</i>	Visual Aids: <i>OPTICAL COMPARATOR "DC-E" S/N: 8-2-95, FEELER GAUGE SET "F49" S/N: 2-2-05</i>		
Surface: ID <input checked="" type="checkbox"/> (OD)	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>	Illumination Verified: Date: <i>9-15-04</i>		Time: <i>11:30 AM</i>

Special / Specific Instructions: *NEAR DISTANCE TEST CHART*

Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>H.35-49</i> <i>FIELD CRACK</i> <i>Butt. 3</i> <i>2' BEYOND EDGE OF BEARING PLATE</i> <i>POST LIFT-OFF</i>	<i>X</i>			<i>NO CRACKS FROM AS FOUND INSPECTION</i>

Results Legend:

NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)

Recordable Indication Type Codes:

- | | | |
|-----------------------------------|--------------------------------|-------------------------------|
| A. Cracks (Characterize and Size) | G. Settlements Or Deflections | M. Scaling / Dusting |
| B. Exposed Reinforcing Steel | H. Degraded Patches or Repairs | N. Coating Deterioration |
| C. Exposed Metallic Items (Other) | I. Popouts, Voids, Honeycomb | O. Abrasion, Cavitation, Wear |
| D. Evidence Of Grease Leakage | J. Spalls | P. Air Voids / Bug Holes |
| E. Evidence Of Moisture | K. Cold Joint Lines | Q. Efflorescence |
| F. Leaching Or Chemical Attack | L. Corrosion Staining | R. Other (Explain) |

Supplemental Information: Yes No Sketch Photo Video Other (Describe):

VISUAL EXAMINER SIGNATURE: *[Signature]* LEVEL: *II* DATE: *9-15-04*

RESPONSIBLE ENGINEER SIG.: *[Signature]* DATE: *27 FEB 05*

FINAL DISPOSITION BY RESPONSIBLE ENGINEER Accept Reject

Comments: _____

ANII REVIEW SIGNATURE: _____ DATE: _____

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
Page 1 of 1

Station: <i>THREE MILE ISLAND</i>		Unit: <i>1</i>	Exam Data Sheet. No.:	Exam Date: <i>11-11-04</i>
System:		Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>		Elev.: <i>446</i>	Col.: <i>N/A</i>	Row: <i>N/A</i>
Azimuth/Radius: <i>278</i>				
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote		
Matl. Type: <i>CONCRETE</i>				
Design Drawing(s) <i>TMI1-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR *DC-E BUS: 8-2-05, FEELER GAUGE SET *F49 BUS: 2-2-05</i>		
Surface: ID <input checked="" type="checkbox"/> (OD)		Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>11-11-04</i> Time: <i>10:30 A.M.</i>		
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>D230 SHOP END NEAR BUTT. #5 2' BEYOND EDGE OF BEARING PLATE PRE LIFT-OFF</i>			<i>A</i>	<i>SEE ATTACHED VT-1C SKETCH SHEET. 2/ 11-11-04</i>
Results Legend:				
NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)				
Recordable Indication Type Codes:				
<input checked="" type="checkbox"/> A. Cracks (Characterize and Size)	<input type="checkbox"/> G. Settlements Or Deflections	<input type="checkbox"/> M. Scaling / Dusting		
<input type="checkbox"/> B. Exposed Reinforcing Steel	<input type="checkbox"/> H. Degraded Patches or Repairs	<input type="checkbox"/> N. Coating Deterioration		
<input type="checkbox"/> C. Exposed Metallic Items (Other)	<input type="checkbox"/> I. Popouts, Voids, Honeycomb	<input type="checkbox"/> O. Abrasion, Cavitation, Wear		
<input type="checkbox"/> D. Evidence Of Grease Leakage	<input type="checkbox"/> J. Spalls	<input type="checkbox"/> P. Air Voids / Bug Holes		
<input type="checkbox"/> E. Evidence Of Moisture	<input type="checkbox"/> K. Cold Joint Lines	<input type="checkbox"/> Q. Efflorescence		
<input type="checkbox"/> F. Leaching Or Chemical Attack	<input type="checkbox"/> L. Corrosion Staining	<input type="checkbox"/> R. Other (Explain)		
Supplemental Information: <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe): <i>SEE ATTACHED VT-1C SKETCH SHEET</i>				
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL: <i>II</i>	DATE: <i>11-11-04</i>	
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____			DATE: _____	

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
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Station: <i>THREE MILE ISLAND</i> Unit: <i>1</i> Exam Data Sheet No.:		Exam Date: <i>11-16-04</i>		
System: Examination Procedure <i>ER-AA-335-018</i> Rev. <i>2</i>		Work Order No(s): <i>R1801589</i>		
Location: Building: <i>RB</i> Elev.: <i>440</i> Col.: <i>N/A</i> Row: <i>N/A</i>		Azimuth/Radius: <i>270°</i>		
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote		
Design Drawing(s) <i>TMI-0016</i>		Matl. Type: <i>CONCRETE</i>		
Surface: ID <input checked="" type="checkbox"/> (OD)		Visual Aids: <i>OPTICAL COMPARATOR "DL-E" DWS: 8-2-05, FEELER GAUGE SET "F" 49 DWS: 2-2-05</i>		
M&TE Used: <i>LIGHT METER</i>		Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>		
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>11-16-04</i> Time: <i>12:30 P.M.</i>		
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>D-230 SHOP END NEAR BOTT. #5 2' BEYOND EDGE OF BEARING PLATE</i>			<i>A</i>	<i>NO CHANGE AFTER DETENSIONING & RETENSIONING TENDON, 4/11-16-04</i>
<i>POST LIFT-OFF AFTER DETENSIONING & RETENSIONING</i>				
Results Legend:				
NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)				
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVED II DATE: <i>11-16-04</i>		
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____				DATE: _____

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
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Station: <i>THREE MILE ISLAND</i>		Unit: <i>1</i>	Exam Data Sheet. No.:	Exam Date: <i>11-11-04</i>
System:		Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.: <i>449</i>	Col.: <i>N/A</i>	Row: <i>N/A</i>	Azimuth/Radius: <i>120°</i>
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR "DL-E" SER: 8-2-05, FEELER GAUGE SET "F" 49 DUS: 2-2-05</i>		
Surface: <i>ID</i> <input checked="" type="checkbox"/> <i>OD</i>	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>	
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>11-11-04</i> Time: <i>10:30 A.M.</i>		
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>V230 FIELD END HEAR BUTT #3 2' BEYOND EDGE OF BEARING PLATE PRE LIFT-OFF</i>	<i>X</i>			
Results Legend:				
NI - No Indications		RI - Recordable Indication		I.N.- Indication Number (if applicable)
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL <i>II</i>	DATE: <i>11-11-04</i>	
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____				DATE: _____

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
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Station: <i>THREE MILE ISLAND</i> Unit: <i>1</i> Exam Data Sheet. No.:		Exam Date: <i>11-16-04</i>		
System: Examination Procedure <i>ER-AA-335-018</i> Rev. <i>2</i>		Work Order No(s): <i>R1801589</i>		
Location: Building: <i>RB</i> Elev.: <i>449</i> Col.: <i>N/A</i> Row: <i>N/A</i>		Azimuth/Radius: <i>120°</i>		
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote Matl. Type: <i>CONCRETE</i>		
Design Drawing(s) <i>TMI-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR #DC-E INC: 8-2-05, FEELER GAUGE SET #F49 DWS: 2-2-05</i>		
Surface: ID <input checked="" type="checkbox"/> (OD)		Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552383</i> Cal. Due Date: <i>7-30-05</i>		
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>11-16-04</i> Time: <i>12:30 P.M.</i>		
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>D-230 FIELD END NEAR BUTT #3 2' BEYOND EDGE OF BEARING PLATE POST LIFT-OFF AFTER DETENSIONING & RETENSIONING</i>	<i>X</i>			
Results Legend:				
NI - No Indications		RI - Recordable Indication		I.N. - Indication Number (if applicable)
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL <i>II</i>		DATE: <i>11-16-04</i>
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____				DATE: _____

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ASME IWL (Class CC) Containment Concrete Visual Examination Record
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Station: <i>THREE MILE ISLAND</i>		Unit: <i>1</i>	Exam Data Sheet. No.:	Exam Date: <i>11-5-04</i>
System: Examination Procedure <i>ER-AA-335-018</i>		Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>	
Location: Building: <i>RB</i>	Elev.: <i>328</i>	Col.: <i>N/A</i>	Row: <i>N/A</i>	Azimuth/Radius: <i>315°</i>
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMII-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR "OC-E" S/N: 8-205, FEELER GAUGE SET "F-49" S/N: 2-2-05</i>		
Surface: ID <input checked="" type="checkbox"/> (OD)		Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002532583</i>		Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>11-5-04</i> Time: <i>12:30 P.M.</i>		
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI	TYPE I.N.	
<i>H62-18</i> <i>SHOP / BUTT. LG</i> <i>2' BEYOND EDGE OF BEARING PLATE</i> <i>PRE-LIFT - OFF</i>			<i>A</i>	
Results Legend: NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)				
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL: <i>II</i>	DATE: <i>11-5-04</i>	
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____				DATE: _____

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
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Station: <i>THREE MILE ISLAND</i>		Unit: <i>1</i>	Exam Data Sheet. No.:	Exam Date: <i>11-8-04</i>
System:		Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location:	Building: <i>RB</i>	Elev.: <i>328</i>	Col.: <i>N/A</i>	Row: <i>N/A</i> Azimuth/Radius: <i>315°</i>
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote		Matl. Type: <i>CONCRETE</i>
Design Drawing(s) <i>TMI-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR "DC-E DWS: 8-2-05, FEELER GAUGE SET "F-49 DWS: 2-2-05"</i>		
Surface: <input type="checkbox"/> ID <input checked="" type="checkbox"/> OD		Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>11-8-04</i> Time: <i>8:20 A.M.</i>		
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>H62-18 SHOP/BUTT-6 2' BEYOND EDGE OF BEARING PLATE POST LIFT-OFF</i>			<i>A</i>	<i>NO CHANGE FROM INFO REPORTED ON ATT. 6 DATED 11-5-04. PRE LIFT-OFF EXAM. 4 11-8-04</i>
Results Legend:				
NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)				
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information : <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL: <i>II</i>	DATE: <i>11-8-04</i>	
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER: <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____				DATE: _____

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
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Station: <i>THREE MILE ISLAND</i>		Unit: <i>1</i>	Exam Data Sheet No.:	Exam Date: <i>11-2-04</i>
System:		Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.: <i>328'</i>	Col.: <i>N/A</i>	Row: <i>N/A</i>	Azimuth/Radius: <i>90°</i>
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI1-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR "DC-EDGE" 8-2-05, FEELER GAUGE SET "F49" DWS: 2-2-05</i>		
Surface: ID <input checked="" type="checkbox"/> OD	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>	
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>11-2-04</i> Time: <i>10:00 A.M.</i>		
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>H62-18 FIELD END BUTT. 2 2' BEYOND EDGE OF BEARING PLATE PRE LIFT-OFF</i>	<i>X</i>			
Results Legend:				
NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)				
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information : <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL <i>II</i>	DATE: <i>11-2-04</i>	
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____				DATE: _____

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
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Station: <i>THREE MILE ISLAND</i>		Unit: <i>1</i>	Exam Data Sheet. No.:	Exam Date: <i>11-3-04</i>
System: Examination Procedure <i>ER-AA-335-018</i>		Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>	
Location: Building: <i>RB</i>	Elev.: <i>328</i>	Col.: <i>N/A</i>	Row: <i>N/A</i>	Azimuth/Radius: <i>90°</i>
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote		Matl. Type: <i>CONCRETE</i>
Design Drawing(s) <i>TMI1-0010</i>		Visual Aids: <i>OPTICAL COMPARATOR *DL-E DWS: 8-2-05, FEELER GAUGE SET *F49 DWS: 2-2-05</i>		
Surface: <input type="checkbox"/> ID <input checked="" type="checkbox"/> OD		Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>11-3-04</i> Time: <i>9:00 A.M.</i>		
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>H62-18</i> <i>FIELD / BOTT. 2</i> <i>2' BEYOND EDGE OF BEARING PLATE</i> <i>POST LIFT-OFF</i>	<i>X</i>			
Results Legend:				
NI - No Indications		RI - Recordable Indication		I.N. - Indication Number (if applicable)
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input checked="" type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL: <i>II</i>	DATE: <i>11-3-04</i>	
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____				DATE: _____

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
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Station: <i>THREE MILE ISLAND</i>		Unit: <i>1</i>	Exam Data Sheet No.:	Exam Date: <i>9-22-04</i>
System:		Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i>	Azimuth/Radius:
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI1-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR "DC-EDGE" 5-2-05, FEELER GAUGE SET "F49" DWS: 2-2-05</i>		
Surface: ID <input checked="" type="checkbox"/> OD	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>	
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified:	Date: <i>9-22-04</i>	Time: <i>11:00 AM</i>
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>H 62-26</i> <i>SHOP END</i> <i>BUTT 6</i> <i>2' BEYOND EDGE OF BEARING PLATE</i>		<i>J</i>		<i>SPALL BELOW BEARING PLATE (1/2"), 12" X 2" X 1/4" DEEP.</i>
Results Legend:				
NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)				
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL: <i>II</i>	DATE: <i>9-22-04</i>	
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____				DATE: _____

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
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Station: <i>THREE MILE ISLAND</i>	Unit: <i>1</i>	Exam Data Sheet No.:	Exam Date: <i>9-22-04</i>
System: Examination Procedure <i>ER-AA-335-018</i>		Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i> Azimuth/Radius:
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote Matl. Type: <i>CONCRETE</i>			
Design Drawing(s) <i>TMI1-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR "DC" E.D.W.: 8-2-05, FEELER GAUGE SET "F49" D.W.: 2-2-05</i>	
Surface: ID <input checked="" type="checkbox"/> (OD)	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>0002552383</i>		Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>9-22-04</i>	Time: <i>11:00 AM</i>

Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>H62-26</i> <i>SHOP END</i> <i>BOTT. 6</i> <i>2' BEYOND EDGE OF BEARING PLATE</i> <i>POST LIFT-OFF</i>	<i>X</i>			<i>NO CHANGE FROM AS FOUND INSPECTION</i>

Results Legend:
NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)

A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration
C. Exposed Metallic Items (Other)	I. Popouts , Voids, Honeycomb	O. Abrasion, Cavitation, Wear
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)

Supplemental Information : Yes No Sketch Photo Video Other (Describe):

VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>	LEVEL <i>II</i>	DATE: <i>9-22-04</i>
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject		
Comments: _____		
ANII REVIEW SIGNATURE: _____		DATE: _____

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
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Station: <i>THREE MILE ISLAND</i>		Unit: <i>1</i>	Exam Data Sheet No.:	Exam Date:
System:		Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i>	Azimuth/Radius:
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote		Matl. Type: <i>CONCRETE</i>
Design Drawing(s) <i>TMI-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR "OC-E" DWS: 8-2-05, FEELER GAUGE SET "F" 49 DWS: 2-2-05</i>		
Surface: <input type="checkbox"/> ID <input checked="" type="checkbox"/> OD		Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: _____		Date: _____
Time: _____		Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>		
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>H 62-26 FIELD / BUTT. 2 2' BEYOND EDGE OF BEARING PLATE PRE LIFT-OFF</i>				<i>NOTE: VT-1C WAS NOT PERFORMED OR NOT DOCUMENTED PRIOR TO LIFT-OFF WHICH WAS PERFORMED 9-29-04. 2. 11-2-04</i>
Results Legend:				
NI - No Indications		RI - Recordable Indication		I.N. - Indication Number (if applicable)
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: _____		LEVEL	DATE: _____	
RESPONSIBLE ENGINEER SIG.: <i>N/A</i>			DATE: _____	
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____		DATE: _____		

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
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Station: <i>THREE MILE ISLAND</i>		Unit: <i>1</i>	Exam Data Sheet No.:	Exam Date: <i>11-2-04</i>
System: Examination Procedure <i>ER-AA-335-018</i>		Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>	
Location: Building: <i>RB</i>	Elev.: <i>356'</i>	Col.: <i>N/A</i>	Row: <i>N/A</i>	Azimuth/Radius: <i>90°</i>
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI-0010</i>		Visual Aids: <i>OPTICAL COMPARATOR "DC-EDGE" 8-1-05 FEELER GAUGE SET "F49" DUG: 2-2-05</i>		
Surface: ID <input checked="" type="checkbox"/> (OD)		Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>11-2-04</i> Time: <i>10:00 A.M.</i>		
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. E1N, E1D, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI	I.N.	
<i>H62-2C FIELD END BUTT. 2 2' BEYOND EDGE OF BEARING PLATE POST LIFT-OFF</i>	<i>X</i>			
Results Legend:				
NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)				
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL: <i>II</i>	DATE: <i>11-2-04</i>	
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE:				DATE:

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
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Station: <i>THREE MILE ISLAND</i>	Unit: <i>1</i>	Exam Data Sheet No.:	Exam Date: <i>9-13-04</i>
System: Examination Procedure <i>ER-AA-335-018</i>		Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i> Azimuth/Radius:
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>
Design Drawing(s) <i>TMI-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR "DC-EDGE" 8-2-05 FEELER GAUGE SET "F49" DWS: 2-2-05</i>	
Surface: ID <input checked="" type="checkbox"/> (OD)	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>9-13-04</i> Time: <i>07:30 AM</i>	

Special / Specific Instructions: *NEAR DISTANCE TEST CHART*

Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>D-213 SHOPEND 2' BEYOND EDGE OF BEARING PLATE</i>			<i>A</i>	<i>SMALL STRESS CRACKS < 0.010" WIDE</i>

Results Legend:

NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)

A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)

Supplemental Information: Yes No Sketch Photo Video Other (Describe):

VISUAL EXAMINER SIGNATURE: *David P. O'Brien* LEVEL *II* DATE: *9-13-04*

RESPONSIBLE ENGINEER SIG.: *Joseph J. [Signature]* DATE: *27 FEB 05*

FINAL DISPOSITION BY RESPONSIBLE ENGINEER Accept Reject

Comments: _____

ANII REVIEW SIGNATURE: _____ DATE: _____

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ASME IWL (Class CC) Containment Concrete Visual Examination Record
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Station: <i>THREE MILE ISLAND</i>		Unit: <i>1</i>	Exam Data Sheet. No.:	Exam Date: <i>9-13-04</i>
System:		Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i>	Azimuth/Radius:
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR *DC-EDGE: P-2-D5, FEELER GAUGE SET *F49 DUS: 2-2-05</i>		
Surface: ID <input checked="" type="checkbox"/> (OD)		Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>9-13-04</i>		Time: <i>11:00 AM</i>
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>D-213 SHOREWALL 2' BEYOND EDGE OF BEARING PLATE POST LIFT-OFF</i>	<i>X</i>			<i>NO CHANGE FROM AS FOUND INSPECTION</i>
Results Legend:				
NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)				
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL: <i>II</i>	DATE: <i>9-13-04</i>	
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____				DATE: _____

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
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Station: <i>THREE MILE ISLAND</i>		Unit: <i>1</i>	Exam Data Sheet No.:	Exam Date: <i>9-11-04</i>
System: Examination Procedure <i>ER-AA-335-018</i>		Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>	
Location: Building: <i>RB</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i>	Azimuth/Radius:
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR "OC-E" DUC: 8-2-05, FEELER GAUGE SET "F49" DUC: 2-2-05</i>		
Surface: ID <input checked="" type="checkbox"/> (OD)	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>	
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>9-11-04</i>		Time: <i>07:30 AM</i>
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>D-213 FIELD END SOUTHWEST 2' BEYOND EDGE OF BEARING PLATE</i>	<i>X</i> <i>210 9-11-04</i>		<i>A</i>	<i>SMALL STRESS CRACKS <0.010" WIDE</i>
Results Legend:				
NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)				
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL: <i>II</i>	DATE: <i>9-11-04</i>	
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____				DATE: _____

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
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Station: <i>THREE MILE ISLAND</i>	Unit: <i>1</i>	Exam Data Sheet No.:	Exam Date: <i>9-11-04</i>
System:	Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i> Azimuth/Radius:
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C	Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI-0010</i>	Visual Aids: <i>OPTICAL COMPARATOR "DC-EDGE" 8-2-05 FEELER GAUGE SET "F49" 8-2-05</i>		
Surface: ID <input checked="" type="checkbox"/> OD	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>	Illumination Verified: Date: <i>9-11-04</i>		Time: <i>7:30 AM</i>
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>			

Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>S-213 FIELD ENDS 2' BEYOND EDGE OF BEARING PLATE POST LIFT-OFF</i>	<i>X</i>			<i>NO CHANGE FROM AS FOUND INSPECTION</i>

Results Legend:
 NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)

Recordable Indication Type Codes:

A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)

Supplemental Information: Yes No Sketch Photo Video Other (Describe):

VISUAL EXAMINER SIGNATURE: *David P. DeWitt* LEVEL *II* DATE: *9-11-04*

RESPONSIBLE ENGINEER SIG.: *[Signature]* DATE: *27 FEB 05*

FINAL DISPOSITION BY RESPONSIBLE ENGINEER Accept Reject

Comments: _____

ANII REVIEW SIGNATURE: _____ DATE: _____

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ER-AA-335-018

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
 Page 1 of 1

Station: <i>THREE MILE ISLAND</i>	Unit: <i>1</i>	Exam Data Sheet No.:	Exam Date: <i>9-14-04</i>
System: Examination Procedure <i>ER-AA-335-018</i>		Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i> Azimuth/Radius:
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>
Design Drawing(s) <i>TMI-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR "OC" E DWS: 8-2-05, FEELER GAUGE SET "F" 49 DWS: 2-2-05</i>	
Surface: ID <input checked="" type="checkbox"/> (OD)	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Date: <i>9-14-04</i> Time: <i>07:30 AM</i>

Special / Specific Instructions: *NEAR DISTANCE TEST CHART*

Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>D-225</i> <i>SHOP END / NW</i> <i>2' BEYOND EDGE OF BEARING PLATE</i>			<i>A</i>	<i>SMALL STRESS CRACKS <0.010" WIDE.</i>

Results Legend:
 NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)

- Recordable Indication Type Codes:**
- | | | |
|-----------------------------------|--------------------------------|-------------------------------|
| A. Cracks (Characterize and Size) | G. Settlements Or Deflections | M. Scaling / Dusting |
| B. Exposed Reinforcing Steel | H. Degraded Patches or Repairs | N. Coating Deterioration |
| C. Exposed Metallic Items (Other) | I. Popouts, Voids, Honeycomb | O. Abrasion, Cavitation, Wear |
| D. Evidence Of Grease Leakage | J. Spalls | P. Air Voids / Bug Holes |
| E. Evidence Of Moisture | K. Cold Joint Lines | Q. Efflorescence |
| F. Leaching Or Chemical Attack | L. Corrosion Staining | R. Other (Explain) |
- Supplemental Information: Yes No Sketch Photo Video Other (Describe):

VISUAL EXAMINER SIGNATURE: *[Signature]* LEVEL *II* DATE: *9-14-04*

RESPONSIBLE ENGINEER SIG.: *[Signature]* DATE: *27 FEB 05*

FINAL DISPOSITION BY RESPONSIBLE ENGINEER Accept Reject

Comments: _____

ANII REVIEW SIGNATURE: _____ DATE: _____

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ER-AA-335-018

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
 Page 1 of 1

Station: <i>THREE MILE ISLAND</i>	Unit: <i>1</i>	Exam Data Sheet. No.:	Exam Date: <i>9-14-04</i>
System:	Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i> Azimuth/Radius:
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C - <input type="checkbox"/> VT-3C	Type Of Exam: <input checked="" type="checkbox"/> Direct	<input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>
Design Drawing(s) <i>TMI1-0016</i>	Visual Aids: <i>OPTICAL COMPARATOR #DC-E DUG: 8-2-05, FEELER GAUGE SET #F-49 DUG: 2-2-05</i>		
Surface: ID <input checked="" type="checkbox"/> (OD)	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>0002552583</i>	Cal. Due Date: <i>7-30-05</i>	
Illumination Used <i>FLASHLIGHT</i>	Illumination Verified:	Date: <i>9-14-04</i>	Time: <i>7:30 AM</i>

Special / Specific Instructions: *NEAR DISTANCE TEST CHART*

Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>D-225</i> <i>SHOP END / NW</i> <i>2' BEYOND EDGE OF BEARING PLATE</i> <i>POST LIFT-OFF</i>	<i>X</i>			<i>NO CHANGE FROM AS FOUND INSPECTION</i>

Results Legend:
 NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)

- Recordable Indication Type Codes:**
- | | | |
|-----------------------------------|--------------------------------|-------------------------------|
| A. Cracks (Characterize and Size) | G. Settlements Or Deflections | M. Scaling / Dusting |
| B. Exposed Reinforcing Steel | H. Degraded Patches or Repairs | N. Coating Deterioration |
| C. Exposed Metallic Items (Other) | I. Popouts, Voids, Honeycomb | O. Abrasion, Cavitation, Wear |
| D. Evidence Of Grease Leakage | J. Spalls | P. Air Voids / Bug Holes |
| E. Evidence Of Moisture | K. Cold Joint Lines | Q. Efflorescence |
| F. Leaching Or Chemical Attack | L. Corrosion Staining | R. Other (Explain) |
- Supplemental Information: Yes No Sketch Photo Video Other (Describe):

VISUAL EXAMINER SIGNATURE: *[Signature]* LEVEL *II* DATE: *9-14-04*

RESPONSIBLE ENGINEER SIG.: *[Signature]* DATE: *27 FEB 05*

FINAL DISPOSITION BY RESPONSIBLE ENGINEER Accept Reject

Comments: _____

ANII REVIEW SIGNATURE: _____ DATE: _____

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
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Station: <i>THREE MILE ISLAND</i>	Unit: <i>1</i>	Exam Data Sheet No.:	Exam Date: <i>9-14-04</i>
System: Examination Procedure <i>ER-AA-335-018</i>		Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i> Azimuth/Radius:
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote Matl. Type: <i>CONCRETE</i>			
Design Drawing(s) <i>TMI-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR "DC-5" DUE: 8-2-05, FEELER GAUGE SET "F-49" DUE: 2-2-05</i>	
Surface: ID <input checked="" type="checkbox"/> OD		Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>	Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>9-14-04</i>	Time: <i>07:30AM</i>

Special / Specific Instructions: *NEAR DISTANCE TEST CHART*

Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI	TYPE	
<i>D-225</i> <i>FIELD END / SW</i> <i>2' BEYOND EDGE OF BEARING PLATE</i>	X			

Results Legend:
NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)

- Recordable Indication Type Codes:
- | | | |
|-----------------------------------|--------------------------------|-------------------------------|
| A. Cracks (Characterize and Size) | G. Settlements Or Deflections | M. Scaling / Dusting |
| B. Exposed Reinforcing Steel | H. Degraded Patches or Repairs | N. Coating Deterioration |
| C. Exposed Metallic Items (Other) | I. Popouts, Voids, Honeycomb | O. Abrasion, Cavitation, Wear |
| D. Evidence Of Grease Leakage | J. Spalls | P. Air Voids / Bug Holes |
| E. Evidence Of Moisture | K. Cold Joint Lines | Q. Efflorescence |
| F. Leaching Or Chemical Attack | L. Corrosion Staining | R. Other (Explain) |
- Supplemental Information : Yes No Sketch Photo Video Other (Describe):

VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>	LEVEL: <i>II</i>	DATE: <i>9-14-04</i>
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>
FINAL DISPOSITION BY RESPONSIBLE ENGINEER: <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject		
Comments: _____		
ANII REVIEW SIGNATURE: _____		DATE: _____

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
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Station: <i>THREE MILE ISLAND</i> Unit: <i>1</i> Exam Data Sheet. No.:		Exam Date: <i>9-14-04</i>		
System: Examination Procedure <i>ER-AA-335-018</i> Rev. <i>2</i>		Work Order No(s): <i>R1801589</i>		
Location: Building: <i>RB</i> Elev.:		Col.: <i>N/A</i> Row: <i>N/A</i> Azimuth/Radius:		
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote Matl. Type: <i>CONCRETE</i>				
Design Drawing(s) <i>TMI-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR *DC-E-ONE: 8-2-05, FEELER GAUGE SET 7F49 DUS: 2-2-05</i>		
Surface: ID <input checked="" type="checkbox"/> (OD)		Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i> Cal. Due Date: <i>7-30-05</i>		
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>9-14-04</i> Time: <i>7:30 AM</i>		
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>0225 FIELD END / SW 2' BEYOND EDGE OF BEARING PLATE POST LIFT-OFF</i>	<i>X</i>			<i>NO CHANGE FROM AS FOUND INSPECTION</i>
Results Legend:				
NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)				
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information : <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL: <i>II</i>	DATE: <i>9-14-04</i>	
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____			DATE: _____	

A197/A459

ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
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Station: <i>THREE MILE ISLANDS</i>		Unit: <i>1</i>	Exam Data Sheet. No.:	Exam Date: <i>11-5-04</i>
System: Examination Procedure <i>ER-AA-335-018</i>		Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>	
Location: Building: <i>RB</i>	Elev.: <i>350'</i>	Col.: <i>N/A</i>	Row: <i>N/A</i>	Azimuth/Radius: <i>315°</i>
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote		Matl. Type: <i>CONCRETE</i>
Design Drawing(s) <i>TMI-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR "DC-EDGE" 8-2-05 FEELER GAUGE SET "F49" DUG: 2-2-05</i>		
Surface: <i>ID</i> <input checked="" type="checkbox"/> <i>OD</i>	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>	
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>11-5-04</i>		Time: <i>12:30 P.M.</i>
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>H 46-2S</i> <i>SHOP / BUTT. L</i> <i>2' BEYOND EDGE OF BEARING PLATE</i> <i>PRE LIFT-OFF</i>	<i>X</i>			
Results Legend:				
NI - No Indications		RI - Recordable Indication		I.N. - Indication Number (if applicable)
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL: <i>II</i>	DATE: <i>11-5-04</i>	
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____				DATE: _____

APB/A459

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
Page 1 of 1

Station: <i>THREE MILE ISLAND</i>	Unit: <i>1</i>	Exam Data Sheet No.:	Exam Date: <i>11-10-04</i>
System:	Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.: <i>350'</i>	Col.: <i>N/A</i>	Row: <i>N/A</i> Azimuth/Radius: <i>315°</i>
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C	Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI-0016</i>	Visual Aids: <i>OPTICAL COMPARATOR "DC-EDGE" 8-2-05, FEELER GAUGE SET "F-49" DWS: 2-2-05</i>		
Surface: ID <input checked="" type="checkbox"/> OD	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>
Illumination Used <i>FLASHLIGHT</i>		Illumination Verified:	Date: <i>11-10-04</i> Time: <i>11:00 A.M.</i>

Special / Specific Instructions: *NEAR DISTANCE TEST CHART*

Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>H 46-25</i> <i>SHOP / BUTT. LG</i> <i>2' BEYOND EDGE OF BEARING PLATE</i> <i>POST LIFT - OFF (AFTER DETENSIONING)</i>	<i>X</i>			

Results Legend:
NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)

- Recordable Indication Type Codes:
- | | | |
|-----------------------------------|--------------------------------|-------------------------------|
| A. Cracks (Characterize and Size) | G. Settlements Or Deflections | M. Scaling / Dusting |
| B. Exposed Reinforcing Steel | H. Degraded Patches or Repairs | N. Coating Deterioration |
| C. Exposed Metallic Items (Other) | I. Popouts, Voids, Honeycomb | O. Abrasion, Cavitation, Wear |
| D. Evidence Of Grease Leakage | J. Spalls | P. Air Voids / Bug Holes |
| E. Evidence Of Moisture | K. Cold Joint Lines | Q. Efflorescence |
| F. Leaching Or Chemical Attack | L. Corrosion Staining | R. Other (Explain) |
- Supplemental Information: Yes No Sketch Photo Video Other (Describe):

VISUAL EXAMINER SIGNATURE: *[Signature]* LEVEL *II* DATE: *11-10-04*

RESPONSIBLE ENGINEER SIG.: *[Signature]* DATE: *27 FEB 05*

FINAL DISPOSITION BY RESPONSIBLE ENGINEER Accept Reject

Comments: _____

ANII REVIEW SIGNATURE: _____ DATE: _____

A199/A459

ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
Page 1 of 1

Station: <i>THREE MILE ISLAND</i>	Unit: <i>1</i>	Exam Data Sheet. No.:	Exam Date: <i>11-8-04</i>
System:	Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.: <i>350</i>	Col.: <i>N/A</i>	Row: <i>N/A</i> Azimuth/Radius: <i>180°</i>
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C	Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI-0010</i>	Visual Aids: <i>OPTICAL COMPARATOR "DC-E" DWS: 8-2-05, FEELER GAUGE SET "F-49" DWS: 2-2-05</i>		
Surface: <input type="checkbox"/> ID <input checked="" type="checkbox"/> OD	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>0002552583</i>	Cal. Due Date: <i>7-30-05</i>	
Illumination Used: <i>FLASHLIGHT</i>	Illumination Verified:	Date: <i>11-8-04</i>	Time: <i>1:00 P.M.</i>

Special / Specific Instructions: *NEAR DISTANCE TEST CHART*

Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>H46-25</i> <i>FIELD / BOTT. 4</i> <i>2' BEYOND EDGE OF BEARING PLATE</i> <i>PRE LIFT - OFF</i>	X			

Results Legend:

NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)

Recordable Indication Type Codes:

A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)

Supplemental Information: Yes No Sketch Photo Video Other (Describe):

VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>	LEVEL: <i>II</i>	DATE: <i>11-8-04</i>
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>	DATE: <i>7-7 FOR 05</i>	
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject		
Comments: _____		
ANII REVIEW SIGNATURE: _____	DATE: _____	

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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
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Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u> Exam Data Sheet. No.:		Exam Date: <u>11-10-04</u>		
System: Examination Procedure <u>ER-AA-335-018</u> Rev. <u>2</u>		Work Order No(s): <u>R1801589</u>		
Location: Building: <u>RB</u> Elev.: <u>350</u> Col.: <u>N/A</u> Row: <u>N/A</u>		Azimuth/Radius: <u>180°</u>		
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote Matl. Type: <u>CONCRETE</u>				
Design Drawing(s) <u>TMI-0016</u>		Visual Aids: <u>OPTICAL COMPARATOR "DC-E" DWS: 8-2-05, REELER GAUGE SET "F" 49 DWS: 2-2-05</u>		
Surface: <u>ID</u> <u>(OD)</u>		Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u> Cal. Due Date: <u>7-30-05</u>		
Illumination Used <u>FLASHLIGHT</u>		Illumination Verified: Date: <u>11-10-04</u> Time: <u>11:00 A.M.</u>		
Special / Specific Instructions: <u>NEAR DISTANCE TEST CHART</u>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<u>H46-25</u> <u>FIELD / BUTT. 4</u> <u>2' BEYOND EDGE OF BEARING PLATE</u>	<u>X</u>			
<u>POST LIFT - OFF (AFTER DETENSIONING)</u>				
Results Legend:				
NI - No Indications		RI - Recordable Indication		I.N. - Indication Number (if applicable)
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL: <u>II</u>	DATE: <u>11-10-04</u>	
RESPONSIBLE ENGINEER SIG.: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____				DATE: _____

A201/A459

ER-AA-335-018

Revision 2

Page 24 of 24

ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
 Page 1 of 1

Station: <i>THREE MILE ISLAND</i>		Unit: <i>1</i>	Exam Data Sheet No.:	Exam Date: <i>11-3-04</i>
System:		Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>
Location: Building: <i>RB</i>	Elev.: <i>446</i>	Col.: <i>N/A</i>	Row: <i>N/A</i>	Azimuth/Radius: <i>150°</i>
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI1-0016</i>		Visual Aids: <i>OPTICAL COMPARATOR "DC-E" DUG: 8-2-05, FEELER GAUGE SET "F" 49 DUG: 2-2-05</i>		
Surface: <input type="checkbox"/> ID <input checked="" type="checkbox"/> OD		Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>
Illumination Used: <i>FLASHLIGHT</i>		Illumination Verified: Date: <i>11-3-04</i> Time: <i>1:00 P.M.</i>		
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>D342</i> <i>FIELD / HEAR</i> <i>BUTT. 4</i> <i>2' BEYOND EDGE OF BEARING PLATE</i>	<i>X</i>			<i>NOTE: VISUAL ONLY ON</i> <i>D342 FIELD END,</i> <i>NO LIFT-OFF PERFORMED</i> <i>d.</i> <i>11-3-04</i>
Results Legend:				
NI - No Indications		RI - Recordable Indication		I.N. - Indication Number (if applicable)
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Sketch <input type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe):				
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL: <i>II</i>	DATE: <i>11-3-04</i>	
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____				DATE: _____

ENCLOSURE 6

Date Sheet 8
Crack Growth Inspection
Dome Tendons

Inspection Period: 8th

Tendon No.	Location	Remarks about Cracking Pattern	Cracks with width >0.01"		Date Insp.	Insp. By Contr. Foreman	Verify. By Cognizant QV Insp.
			Location	Width (IN.)			
1. D-103	NE END	No CHANGE	N/A	N/A	12-4-04	EAG	EF.
2. D-118	SW END	No CHANGE	*	*	12-4-04	EAG	EF.
3. D-203	NE END	No CHANGE	*	*	12-4-04	EAG	EF.
4. D-218	SE END	No CHANGE	N/A	N/A	12-4-04	EAG	EF.
5. D-225	NW END	No CHANGE	*	*	12-4-04	EAG	EF.
6. D-249	SE END	No CHANGE	N/A	N/A	12-4-04	EAG	EF.
7. D-313	SE END	No CHANGE	N/A	N/A	12-4-04	EAG	EF.
8. D-329	SW END	No CHANGE	N/A	N/A	12-4-04	EAG	EF.
9. D-334	NW END	No CHANGE	N/A	N/A	12-4-04	EAG	EF.
10. N/A	N/A	N/A	N/A	N/A	N/A	N/A	EF.
11. N/A	N/A	N/A	N/A	N/A	N/A	N/A	EF.
12. N/A	N/A	N/A	N/A	N/A	N/A	N/A	EF.

NOTE: Location

Identify Tendon End (Shop or Field) and NW, NE, SW, SE

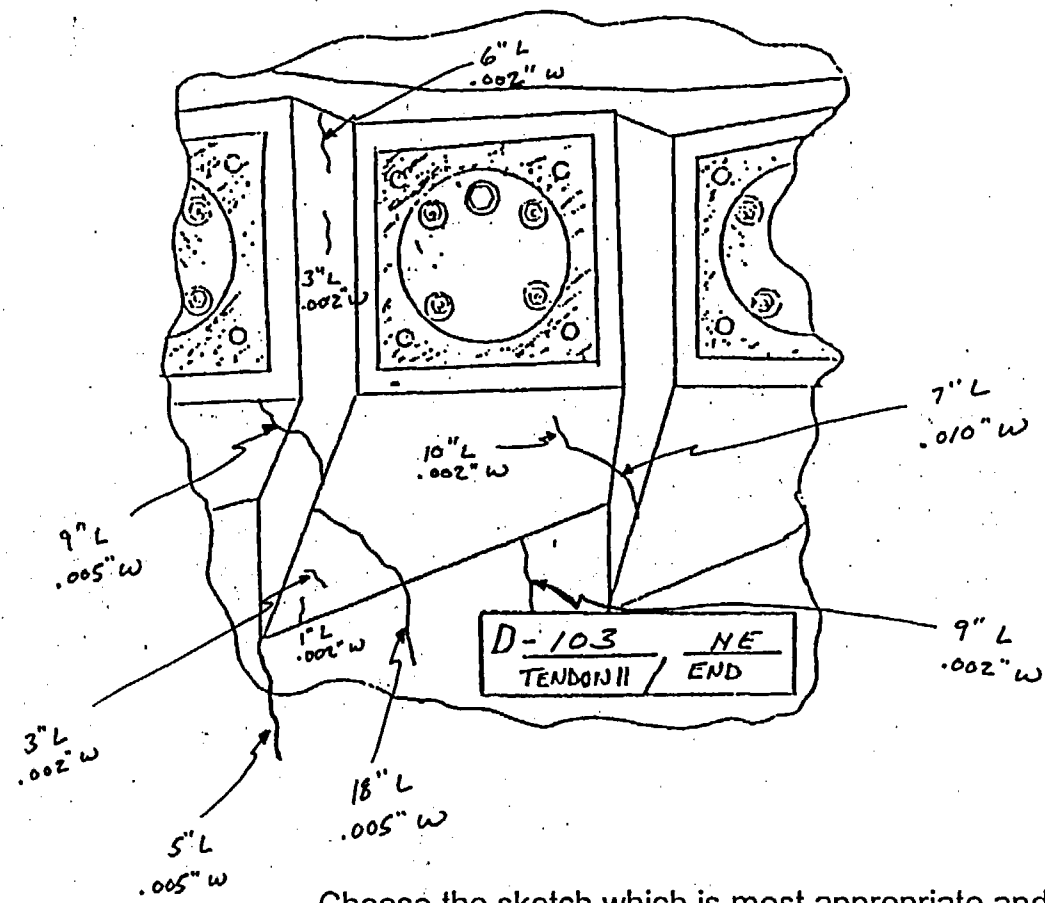
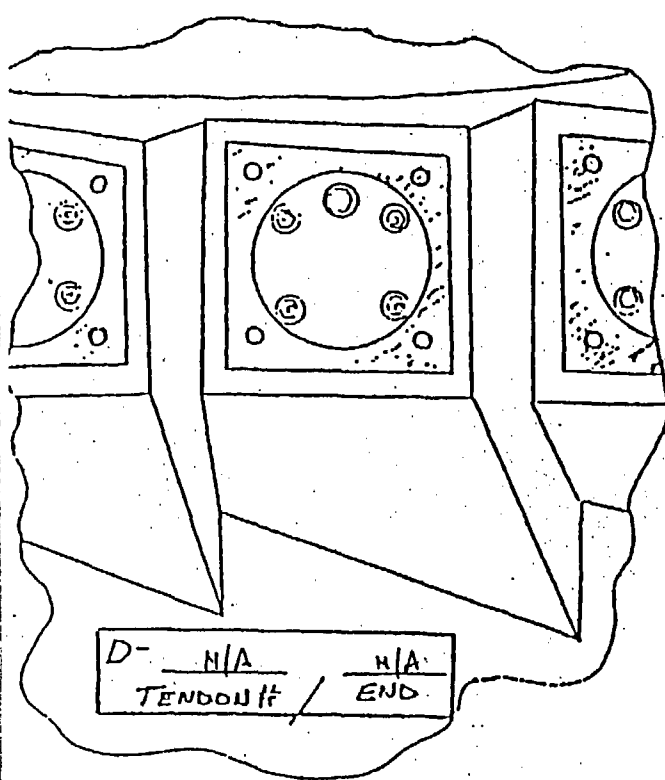
Cognizant Mech/Struct Engineer Reviewed By: [Signature]

Date: 27 FEB 05

* SEE ATTACHED ENCLOSURE 6 DATA SHEET 9 FOR LOCATION & WIDTHS.

A009/A159

ENCLOSURE 6
DATA SHEET 9
Crack Growth Inspections



Choose the sketch which is most appropriate and plot the observed cracks.

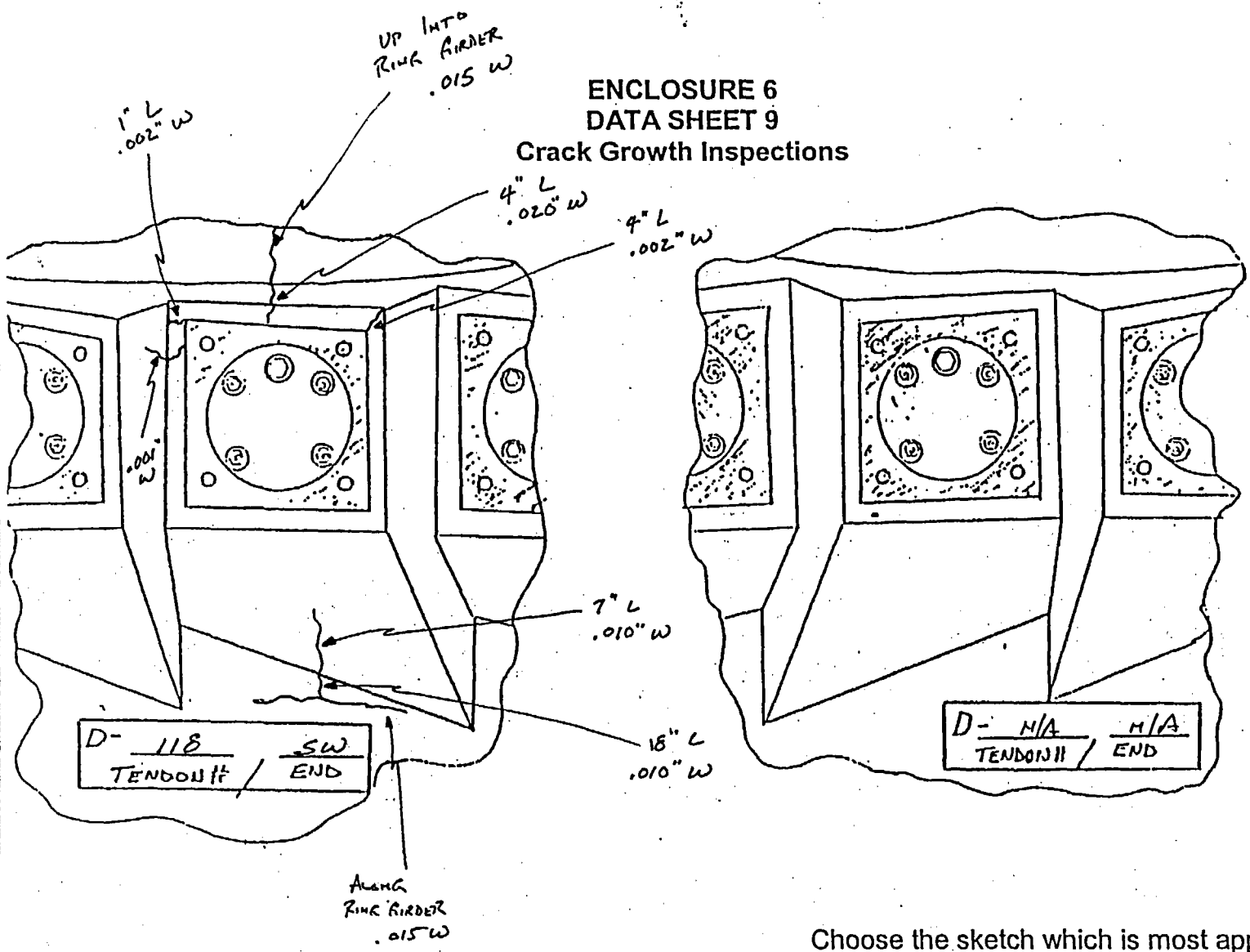
INSPECTED BY CONTRACTOR [Signature] DATE 12-4-04

VERIFIED BY COGNIZANT QV INSPECTOR [Signature] DATE 12-4-04

REVIEWED BY COGNIZANT MECH/STRUCT ENGINEER [Signature] DATE 27 FEB 05

A203/A459

ENCLOSURE 6
DATA SHEET 9
Crack Growth Inspections



L = LONG
W = WIDE

Choose the sketch which is most appropriate and plot the observed cracks.

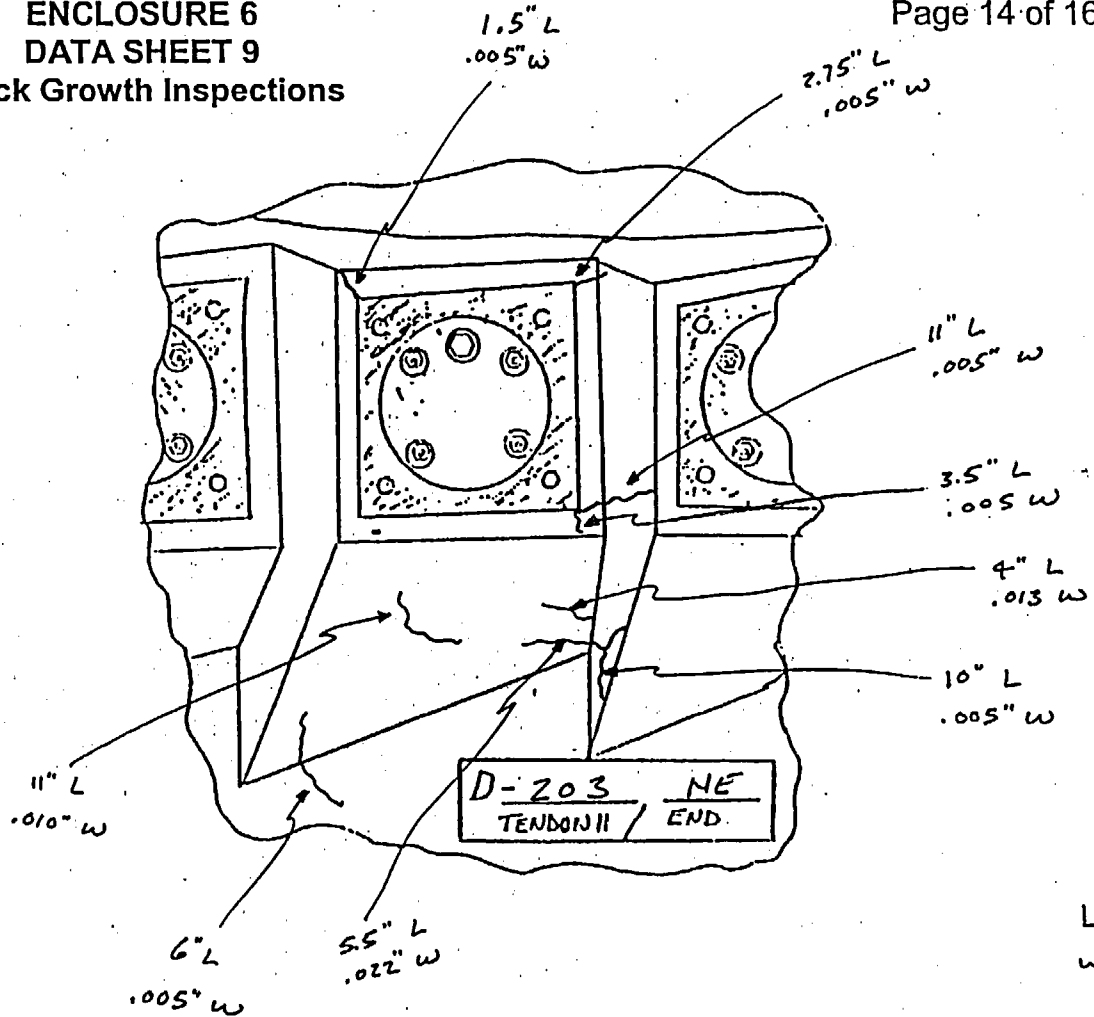
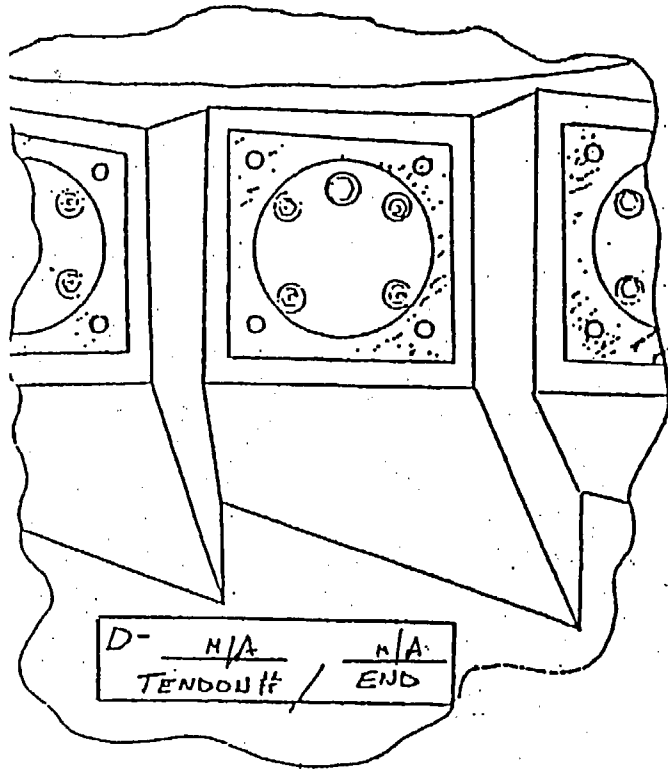
INSPECTED BY CONTRACTOR *[Signature]* DATE 12/4/04

VERIFIED BY COGNIZANT QV INSPECTOR *[Signature]* DATE 12-4-04

REVIEWED BY COGNIZANT MECH/STRUCT ENGINEER *[Signature]* DATE 27 FEB 05

A604/A459

ENCLOSURE 6
DATA SHEET 9
Crack Growth Inspections



Choose the sketch which is most appropriate and plot the observed cracks.

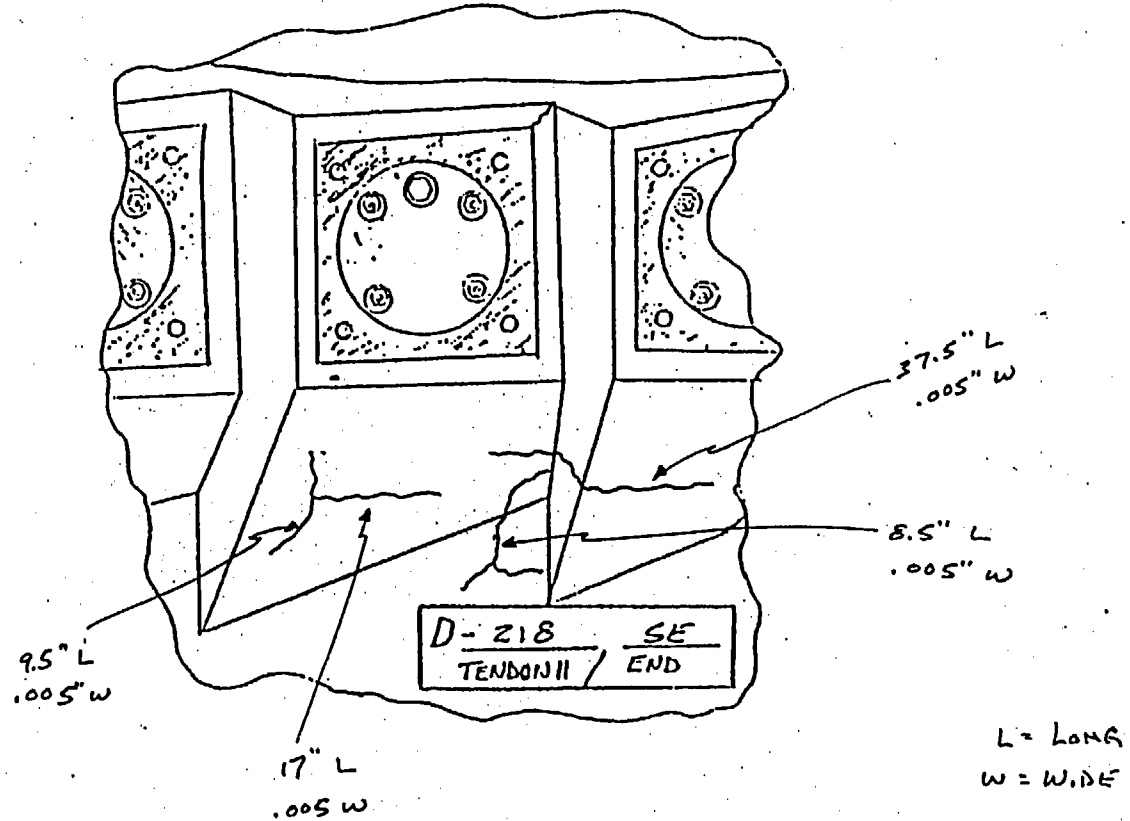
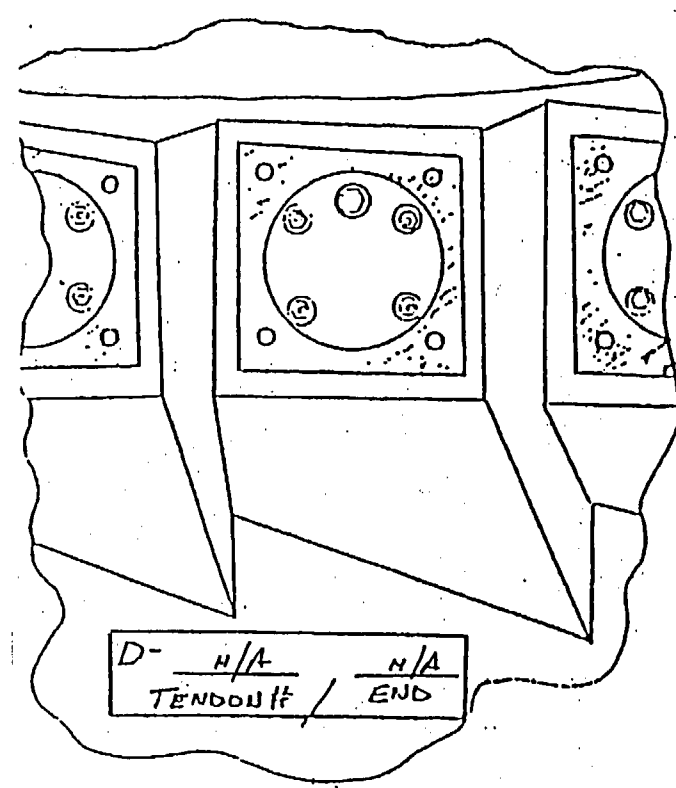
INSPECTED BY CONTRACTOR [Signature] DATE 12/4/04

VERIFIED BY COGNIZANT QV INSPECTOR [Signature] DATE 12-4-04

REVIEWED BY COGNIZANT MECH/STRUCT ENGINEER [Signature] DATE 27 FEB 05

A006/A459

ENCLOSURE 6
DATA SHEET 9
Crack Growth Inspections



Choose the sketch which is most appropriate and plot the observed cracks.

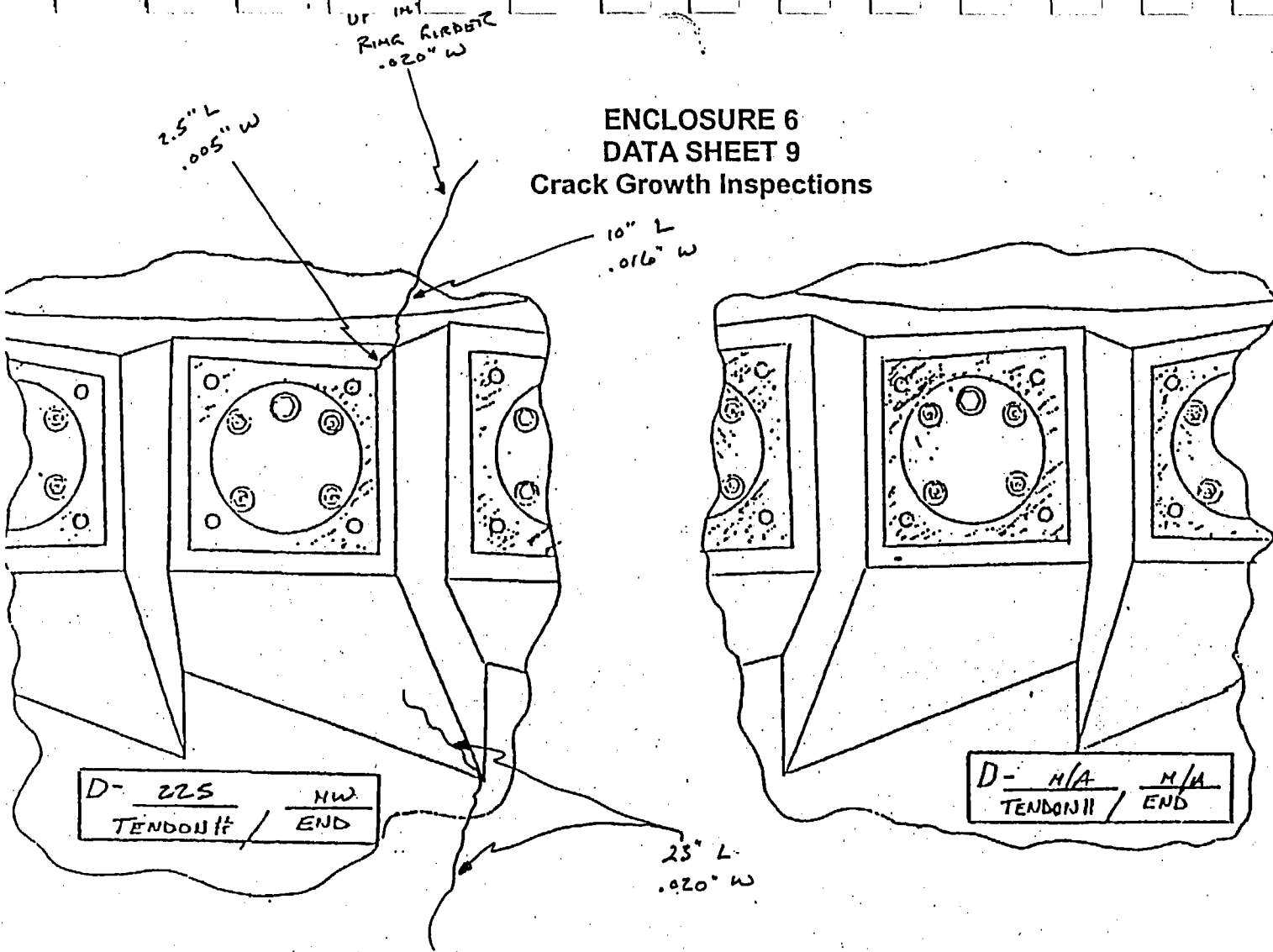
INSPECTED BY CONTRACTOR [Signature] DATE 12/4/04

VERIFIED BY COGNIZANT QV INSPECTOR [Signature] DATE 12-4-04

REVIEWED BY COGNIZANT MECH/STRUCT ENGINEER [Signature] DATE 27 FEB 05

A2006/14459

ENCLOSURE 6
DATA SHEET 9
Crack Growth Inspections



Choose the sketch which is most appropriate and plot the observed cracks.

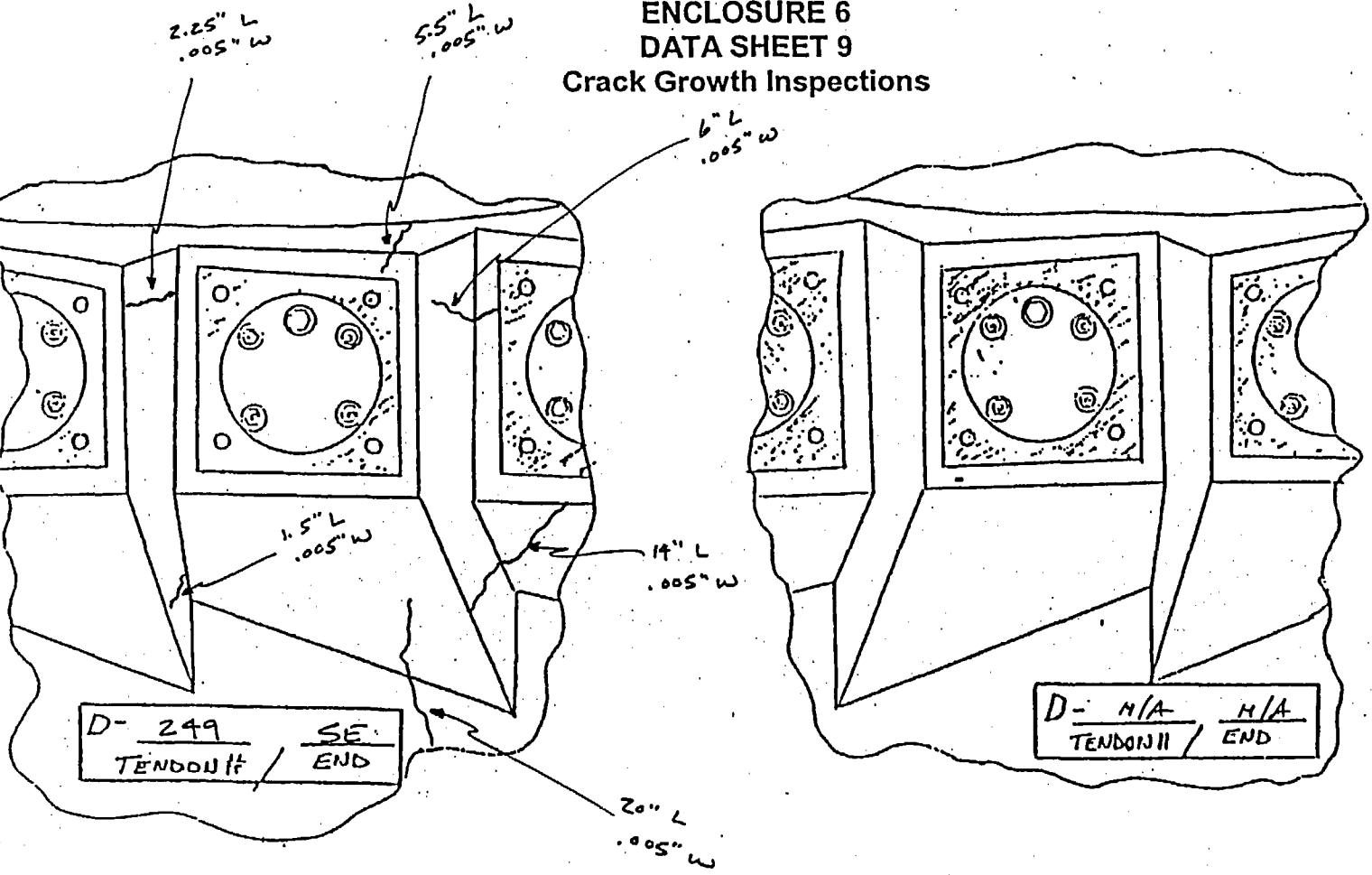
INSPECTED BY CONTRACTOR [Signature] DATE 12/4/04

VERIFIED BY COGNIZANT QV INSPECTOR [Signature] DATE 12-4-04

REVIEWED BY COGNIZANT MECH/STRUCT ENGINEER [Signature] DATE 27 FEB 05

1301/4459

ENCLOSURE 6
 DATA SHEET 9
 Crack Growth Inspections



L = LENGTH
 W = WIDTH

Choose the sketch which is most appropriate and plot the observed cracks.

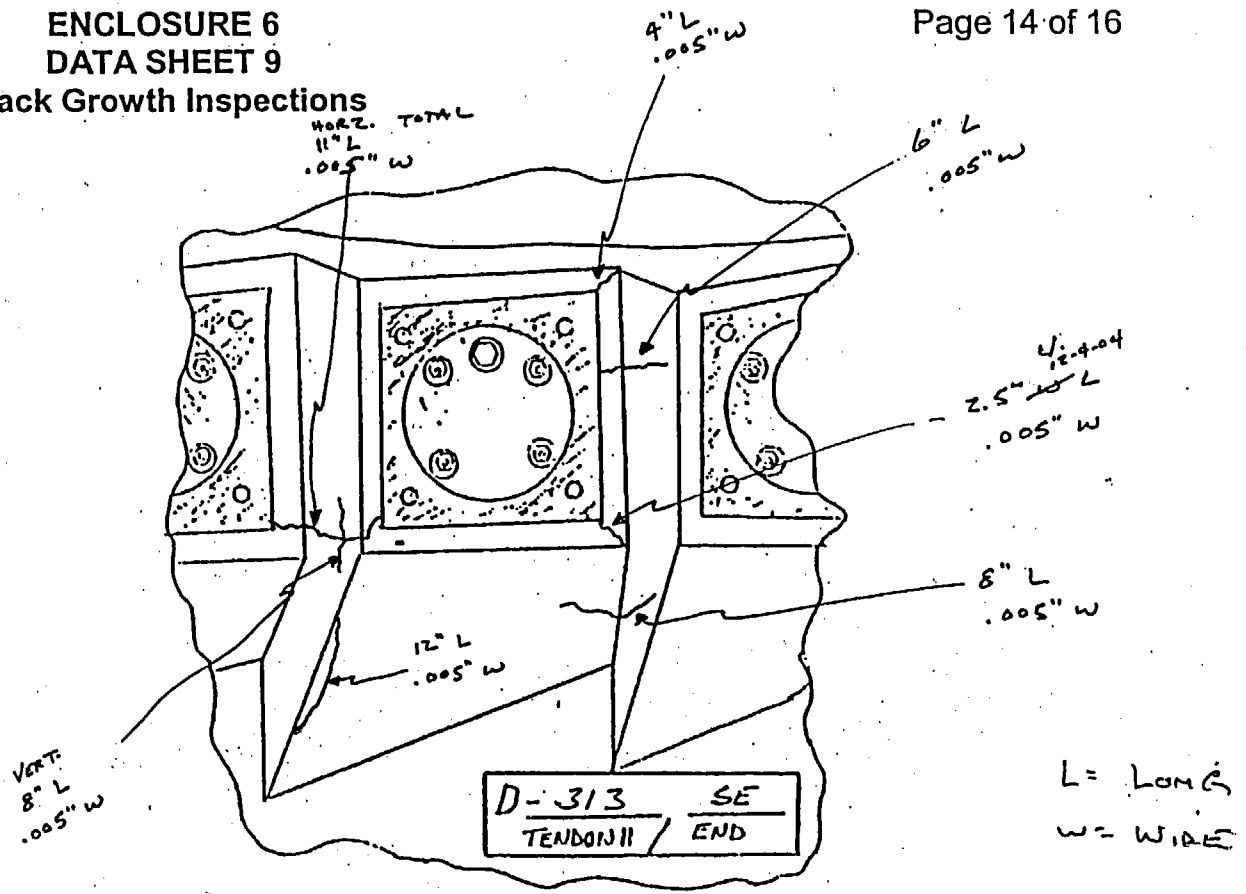
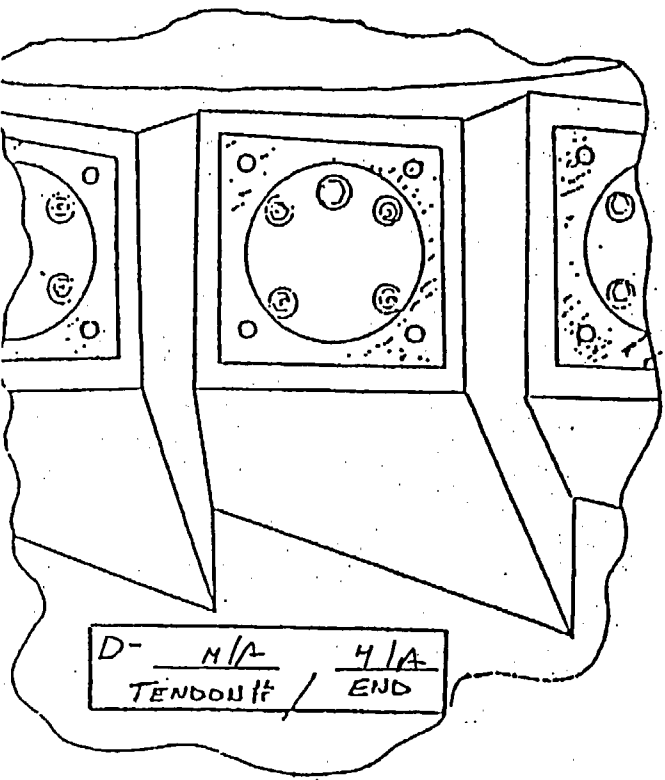
INSPECTED BY CONTRACTOR *[Signature]* DATE 12/4/09

VERIFIED BY COGNIZANT QV INSPECTOR *[Signature]* DATE 12-4-09

REVIEWED BY COGNIZANT MECH/STRUCT ENGINEER *[Signature]* DATE 27 FEB 05

A200/4459

ENCLOSURE 6
DATA SHEET 9
Crack Growth Inspections



Choose the sketch which is most appropriate and plot the observed cracks.

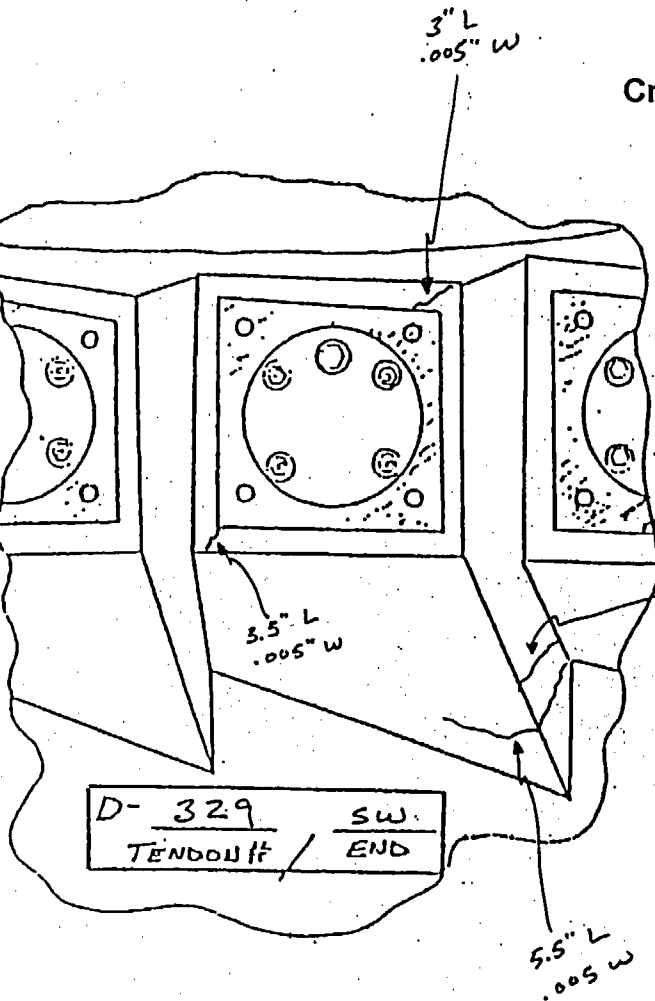
INSPECTED BY CONTRACTOR *[Signature]* DATE 12/4/04

VERIFIED BY COGNIZANT QV INSPECTOR *[Signature]* DATE 12-4-04

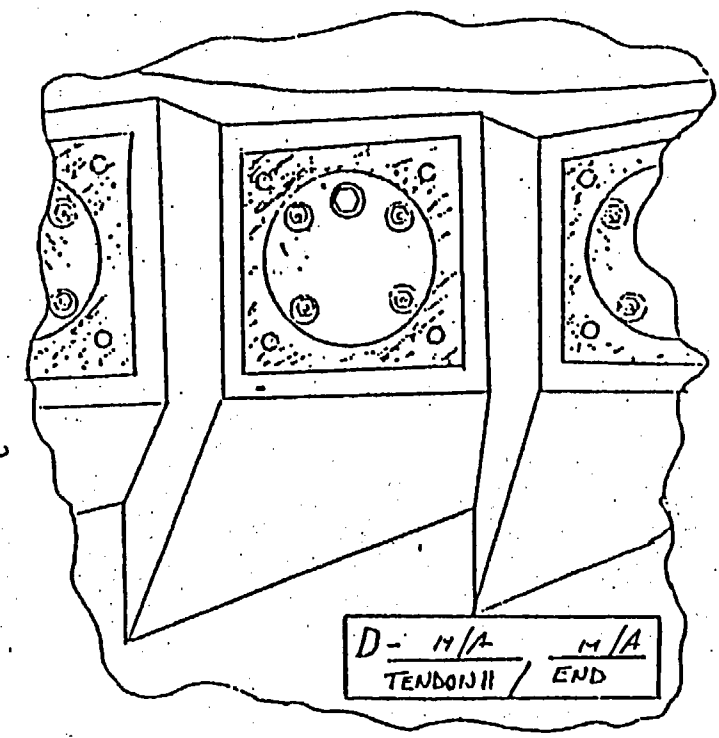
REVIEWED BY COGNIZANT MECH/STRUCT ENGINEER *[Signature]* DATE 27 FEB 05

A204/4459

ENCLOSURE 6
DATA SHEET 9
Crack Growth Inspections



1.75" L
.005" W



L = Length
W = Width

AA10/ARSA

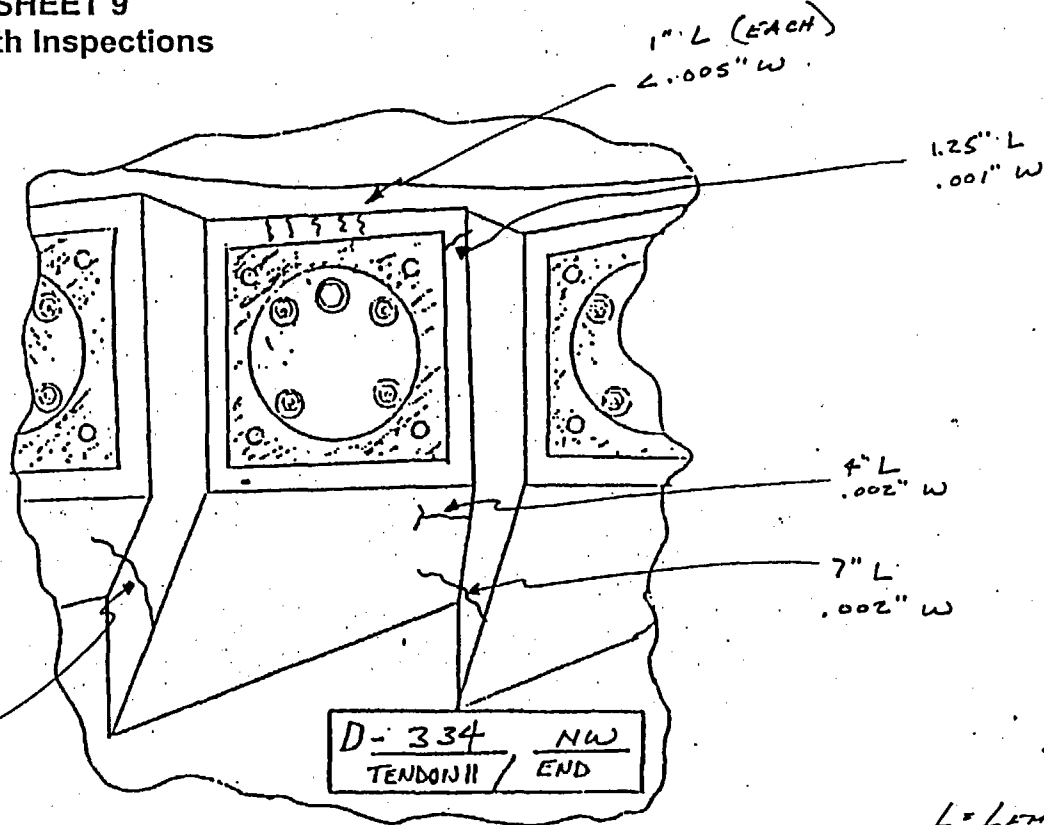
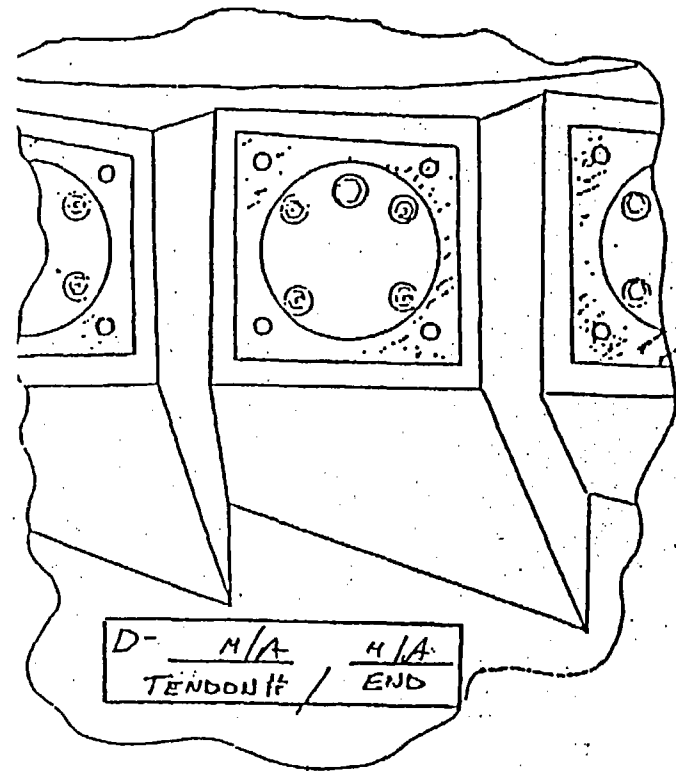
Choose the sketch which is most appropriate and plot the observed cracks.

INSPECTED BY CONTRACTOR *[Signature]* DATE 12/4/04

VERIFIED BY COGNIZANT QV INSPECTOR *[Signature]* DATE 12-4-04

REVIEWED BY COGNIZANT MECH/STRUCT ENGINEER *[Signature]* DATE 27 FEB 05

ENCLOSURE 6
DATA SHEET 9
Crack Growth Inspections



L = LENGTH
W = WIDTH

APR 14 11 59 AM '05

Choose the sketch which is most appropriate and plot the observed cracks.

INSPECTED BY CONTRACTOR *[Signature]* DATE 12/24/04

VERIFIED BY COGNIZANT QV INSPECTOR *[Signature]* DATE 12.4.04

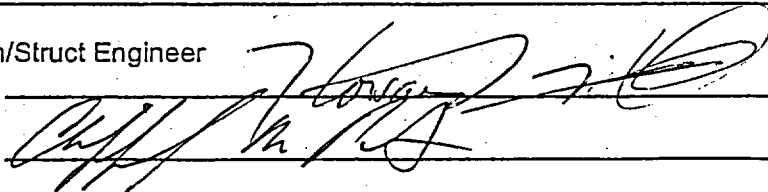
REVIEWED BY COGNIZANT MECH/STRUCT ENGINEER *[Signature]* DATE 27 FEB 05

A012/A459

Mat Foundation in Tendon Gallery

- 1) No Cracks $> .015"$ in Tendon Gallery on Mat Foundation; As Reported During The 25th Year Surveillance There is Leaching and Signs of Efflorescence Where Inner and Outer Walls SEE PIC'S of Tendon Gallery Meet The Mat. 83, 84, 85, 86, & 87
- 2) As Previously Reported During The 7th Period Inspection, Ref. Page A214 of 424, A215 of 424 & A216 of 424 of Attached Report, There is Three Areas of Exposed Metal/Rebar at V89, V143, & V149. Per ER-AA-335-018 Rev. 2 These Areas Require A VT-1 Exam. See Attached Exam Data Sheets No.: 6, 7, & 8

Cognizant Mech/Struct Engineer
Reviewed By:



Date: 27 FEB 05

Performed By:



Date: 12-6-04

A73/A457

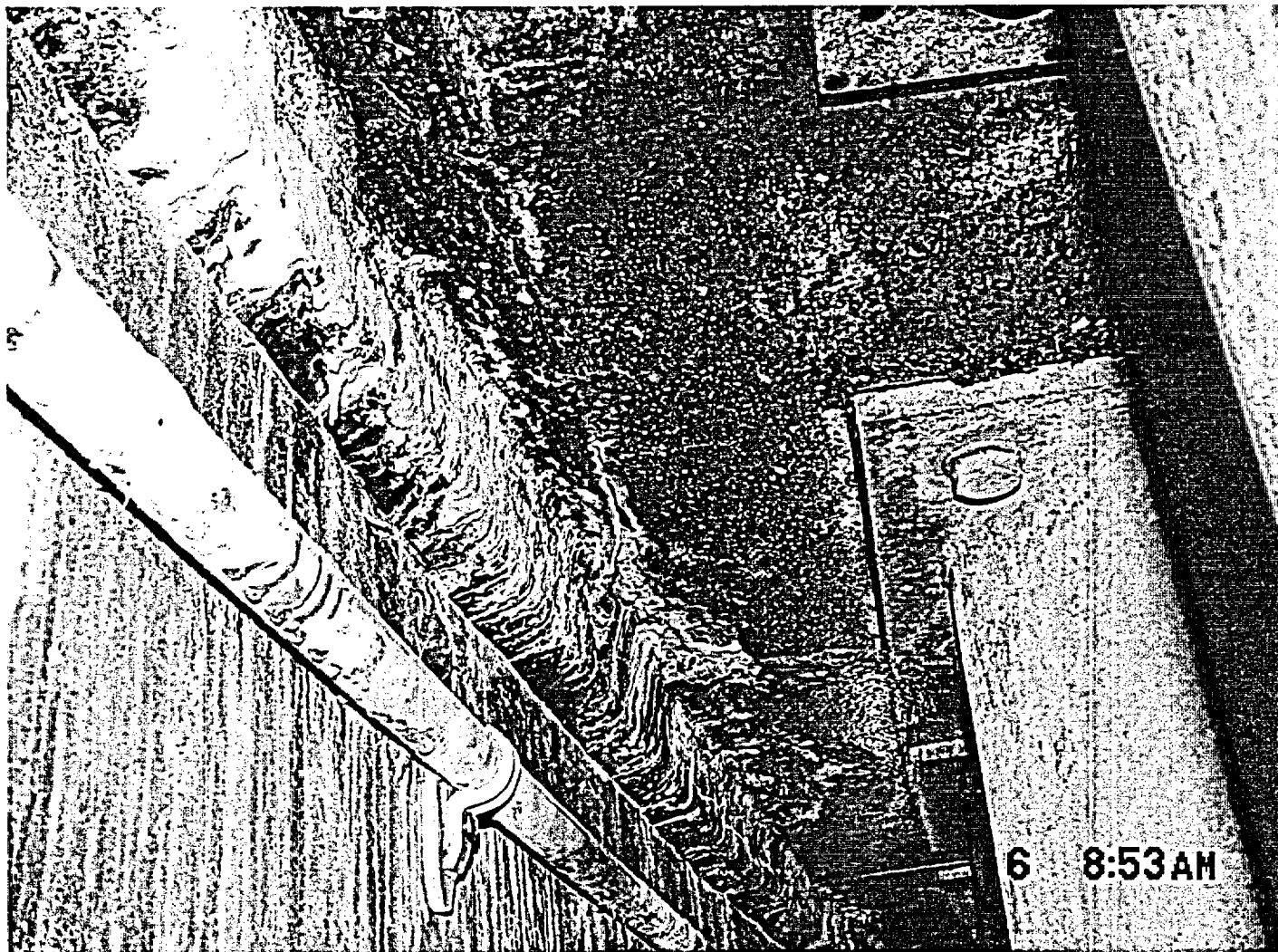
PICTURE 83

SUPPLEMENTAL INFORMATION FOR PROCEDURE 1301-9.1
ENCLOSURE 6 DATA SHEET 10



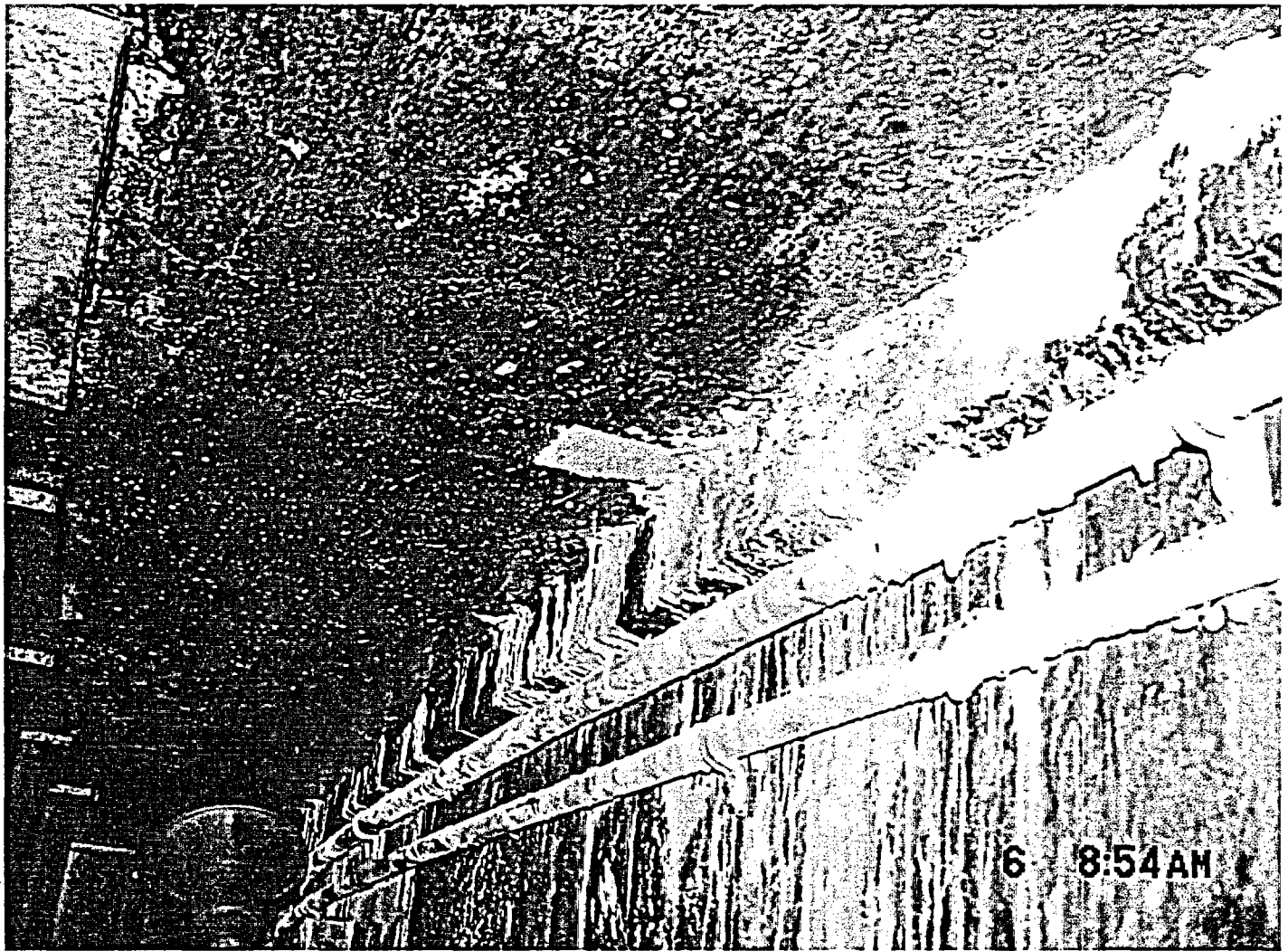
A214/A455

PICTURE 84
SUPPLEMENTAL INFORMATION FOR PROCEDURE 1301-9.1
ENCLOSURE 6 DATA SHEET 10



1225/0459

PICTURE 85
SUPPLEMENTAL INFORMATION FOR PROCEDURE 1301-9.1
ENCLOSURE 6 DATA SHEET 10



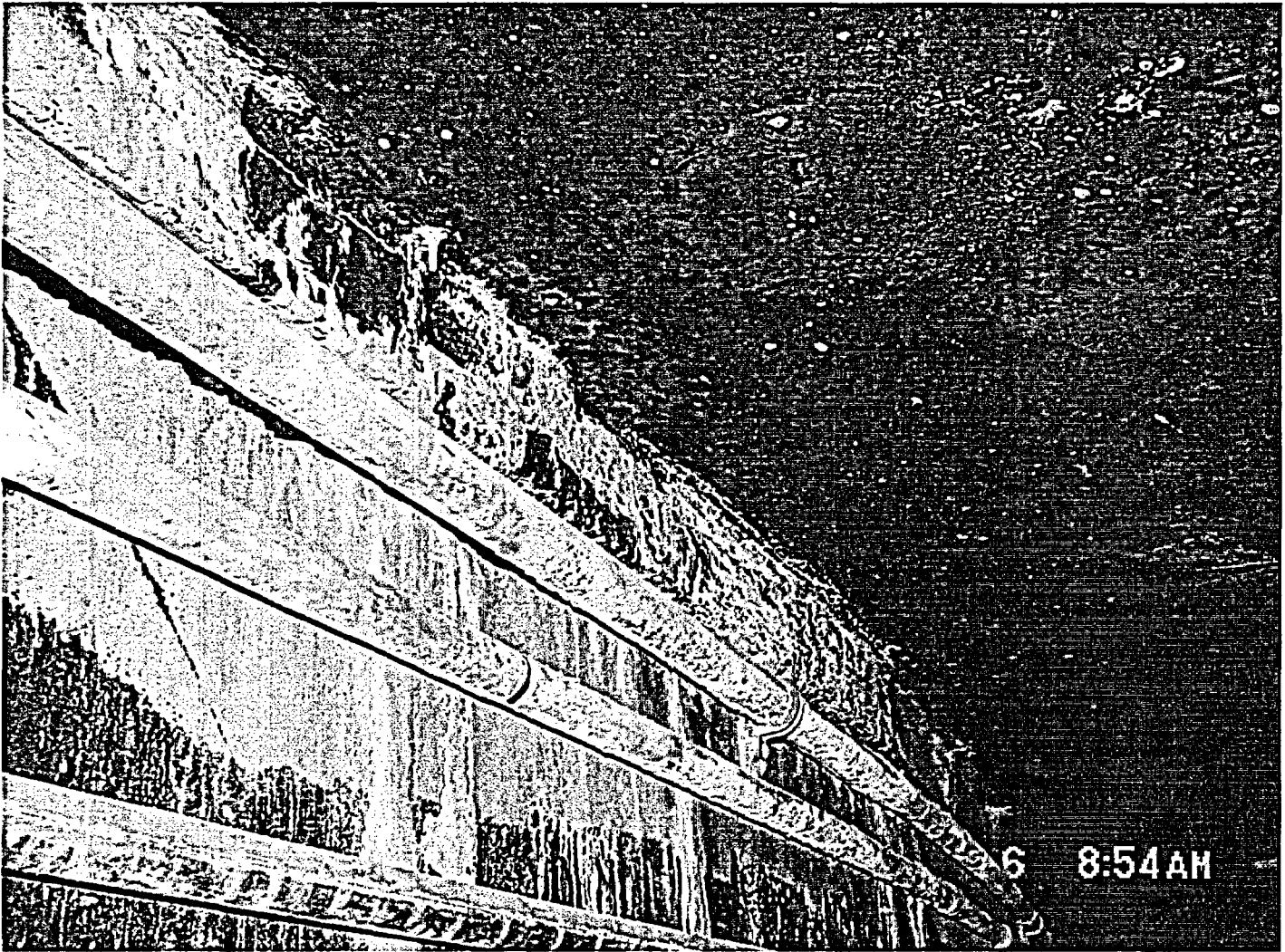
A216/A459

PICTURE 86
SUPPLEMENTAL INFORMATION FOR PROCEDURE 1301-9.1
ENCLOSURE 6 DATA SHEET 10



A27/A459

PICTURE 87
SUPPLEMENTAL INFORMATION FOR PROCEDURE 1301-9.1
ENCLOSURE 6 DATA SHEET 10



Tendon Grease Caps

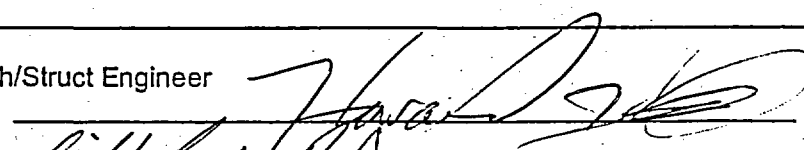
TOP VERTICAL CAPS: NO SIGNS OF ACTIVE GREASE
LEAKS OR GREASE CAP DEFORMATION

BOTTOM VERTICAL CAPS: THERE IS OIL DROPLETS ON
AND AROUND GREASE CAPS, BUT THERE IS NO
SIGNS OF ACTIVE GREASE LEAKS OR GREASE CAP
DEFORMATION.

DOME TENDON GREASE CAPS: THE FOLLOWING DOME
TENDON GREASE CAPS SHOW SIGNS OF OIL RESIDUE
ON WALL DIRECTLY UNDER GREASE CAP. D115 NE,
D201 NW, D246 SW, D334 NW, D336 NW.
THE OIL STREAKS WERE CLEANED FROM THE WALL
AND THERE IS NO SIGNS OF ACTIVE GREASE
LEAKS OR GREASE CAP DEFORMATION.

BUTTRESS No. 1: NO SIGNS OF ACTIVE GREASE
LEAKS OR GREASE CAP DEFORMATION.

Cognizant Mech/Struct Engineer

Reviewed By: 

Date: 27 FEB 05

Performed By: 

Date: 12-4-04

A019/A459

Tendon Grease Caps

BUTTRESS No. 2: No SIGNS OF ACTIVE GREASE LEAKS
OR GREASE CAP DEFORMATION.

BUTTRESS No. 3: No SIGNS OF ACTIVE GREASE LEAKS
OR GREASE CAP DEFORMATION.

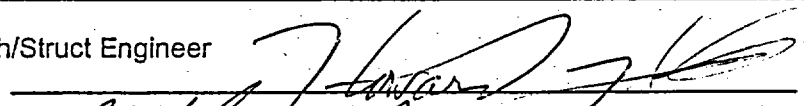
BUTTRESS No. 4: No SIGNS OF ACTIVE GREASE LEAKS
OR GREASE CAP DEFORMATION.

BUTTRESS No. 5: No SIGNS OF ACTIVE GREASE LEAKS
OR GREASE CAP DEFORMATION.

BUTTRESS No. 6: No SIGNS OF ACTIVE GREASE LEAKS
OR GREASE CAP DEFORMATION.

Cognizant Mech/Struct Engineer

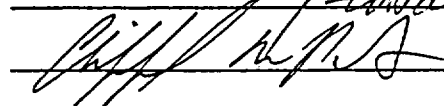
Reviewed By:



Date:

27 FEB 05

Performed By:



Date:

12-4-04

Buttress 1 to 2

1) ELEVATION 305 OF TURBINE BUILDING UPTO CEILING

APPROX. ELEV. 405 VT-3C INSPECTION WAS PERFORMED WITH NO SIGNS OF CONCRETE DEGRADATION FOUND.

2) ELEVATION 295 OF INTERMEDIATE BUILDING UPTO

CEILING APPROX. ELEV. 365' VT-3C WAS PERFORMED WITH NO SIGNS OF CONCRETE DEGRADATION FOUND.

3) UPPER ACCESS LEVEL TO TENDON GALLERY, AS PREVIOUSLY REPORTED DURING 25th YEAR SURVEILLANCE VERT. CRACKS <.015" WIDE ON CONTAINMENT WALL SHOW SIGNS OF ACTIVE GREASE LEAKS AND IS BEING MONITORED

AS PART OF REPETITIVE TASK # 9641. THESE CRACKS STILL SHOW SIGNS OF ACTIVE GREASE LEAKS IN OIL FORM. THIS CONDITION EXIST THROUGHOUT AND THIS INFO WILL NOT BE REPORTED ON THE NEXT FIVE ^{4.}~~NEXT FIVE~~ ₁₁₋₃₀₋₀₄

^{4.}₁₁₋₃₀₋₀₄ THE FOLLOWING REPORTS, BUTTRESS 2 TO 3, 3 TO 4, ETC.

4) OUTSIDE AREA - NO CRACKS >.015" AND NO SIGNS OFF CONCRETE DEGRADATION.

Cognizant Mech/Struct Engineer

Reviewed By:

[Signature]

Date:

27 FEB 05

Performed By:

[Signature]

Date:

12-3-04

A001/A459

Buttress 2 to 3

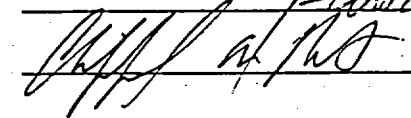
1) ELEVATION 305 OF TURBINE BUILDING UPTO CEILING
APPROX. 405' ELEV. VT-3C WAS PERFORMED WITH
NO SIGNS OF CONCRETE DEGRADATION FOUND.

2) OUTSIDE AREA - NO CRACK > .015". AS REPORTED
DURING THE 25th YEAR SURVEILLANCE, EMBED PLATES
THAT SUPPORT HANGERS FOR DRAIN PIPES COMING
OFF THE TOP OF CONTAINMENT ARE POPPING (GROUT)
OUT IN VARIOUS LOCATIONS. SEE PIC'S 50, 51, 52, & 53.

Cognizant Mech/Struct Engineer

Reviewed By: 

Date: 27 FEB 05

Performed By: 

Date: 12-3-04

A222/A459

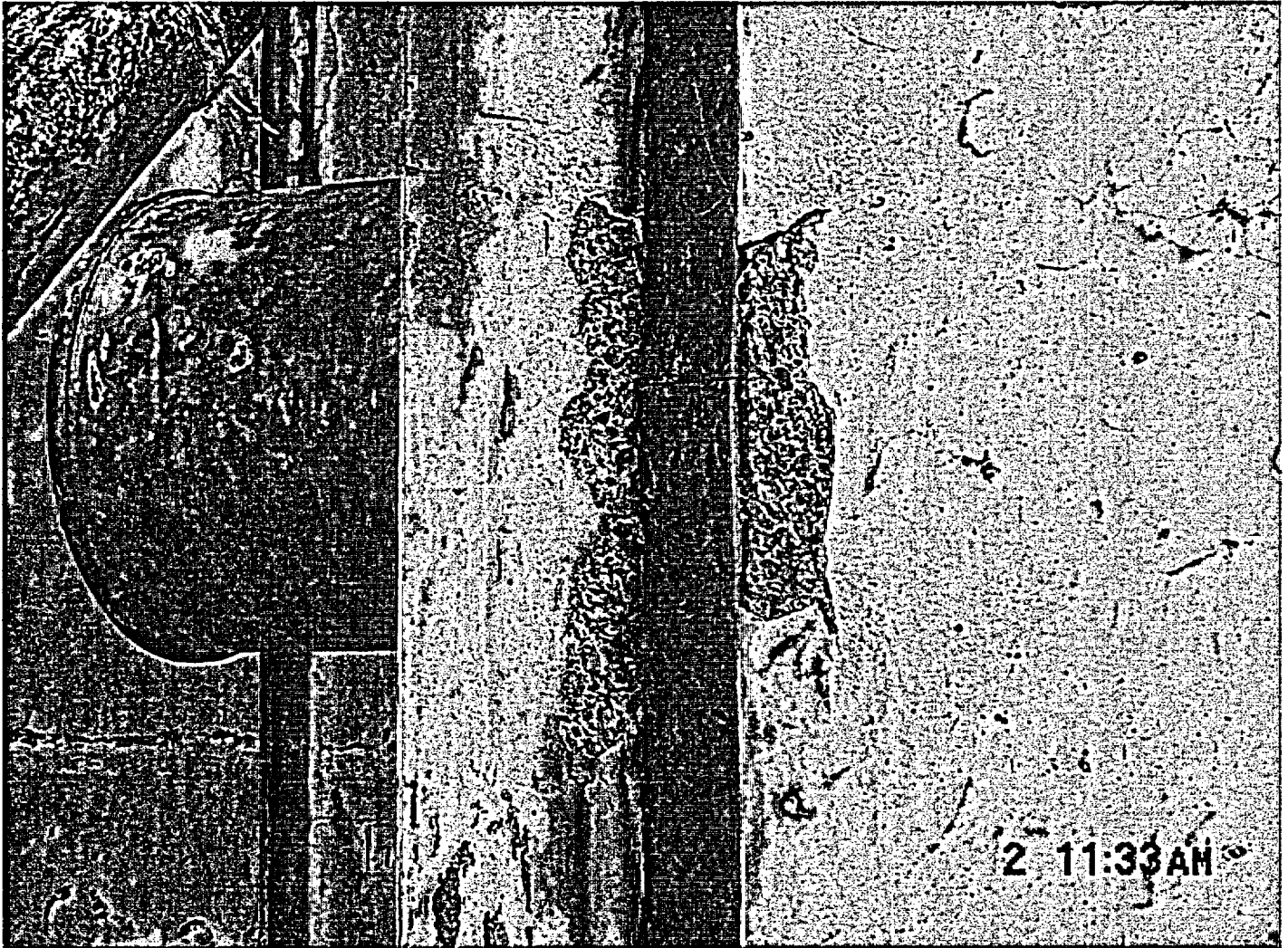
PICTURE 50

SUPPLEMENTAL INFORMATION FOR PROCEDURE 1301-9.1
ENCLOSURE 6 DATA SHEET 10



PICTURE 51

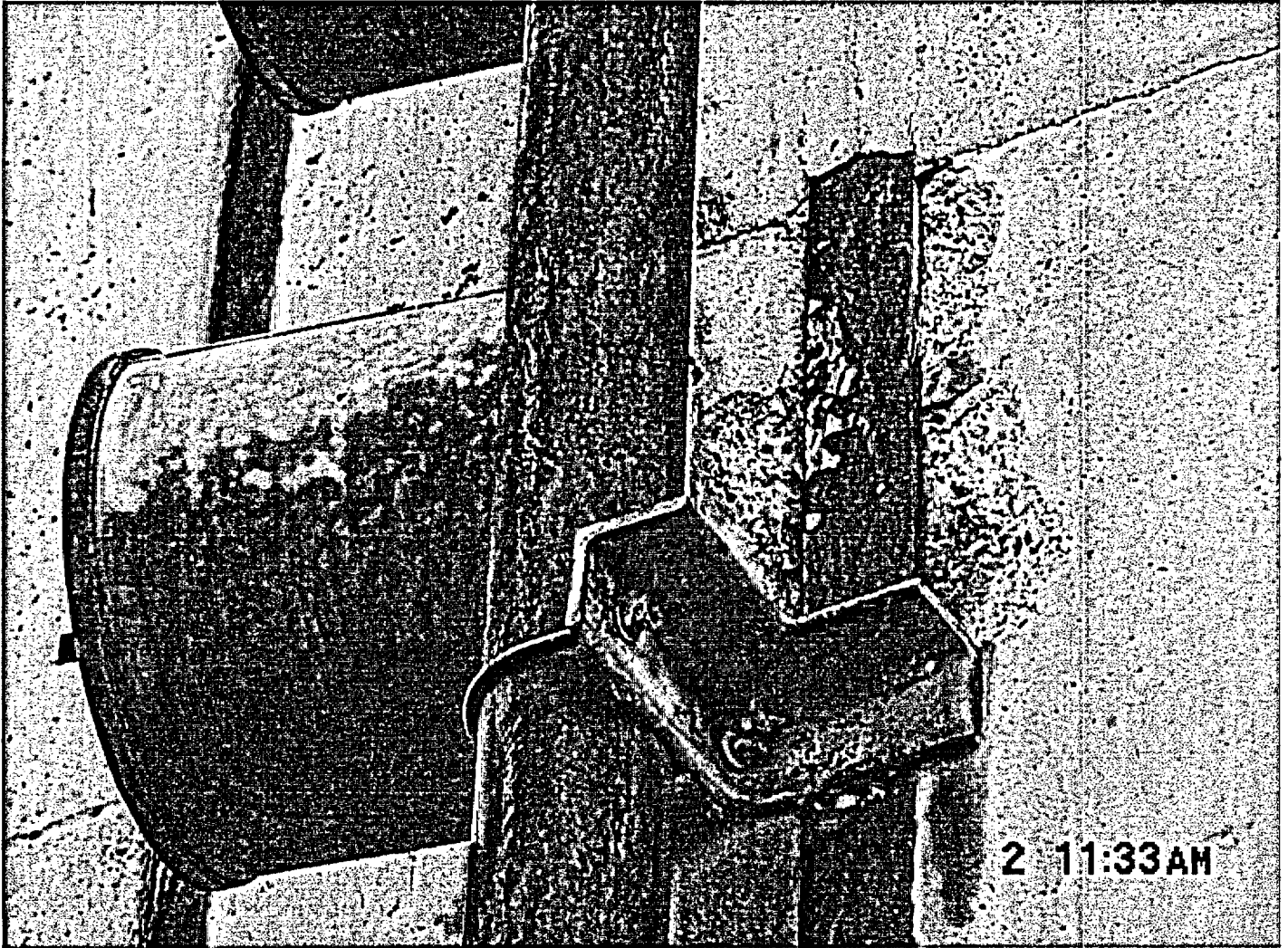
SUPPLEMENTAL INFORMATION FOR PROCEDURE 1301-9.1
ENCLOSURE 6 DATA SHEET 10



A224/A459

PICTURE 52

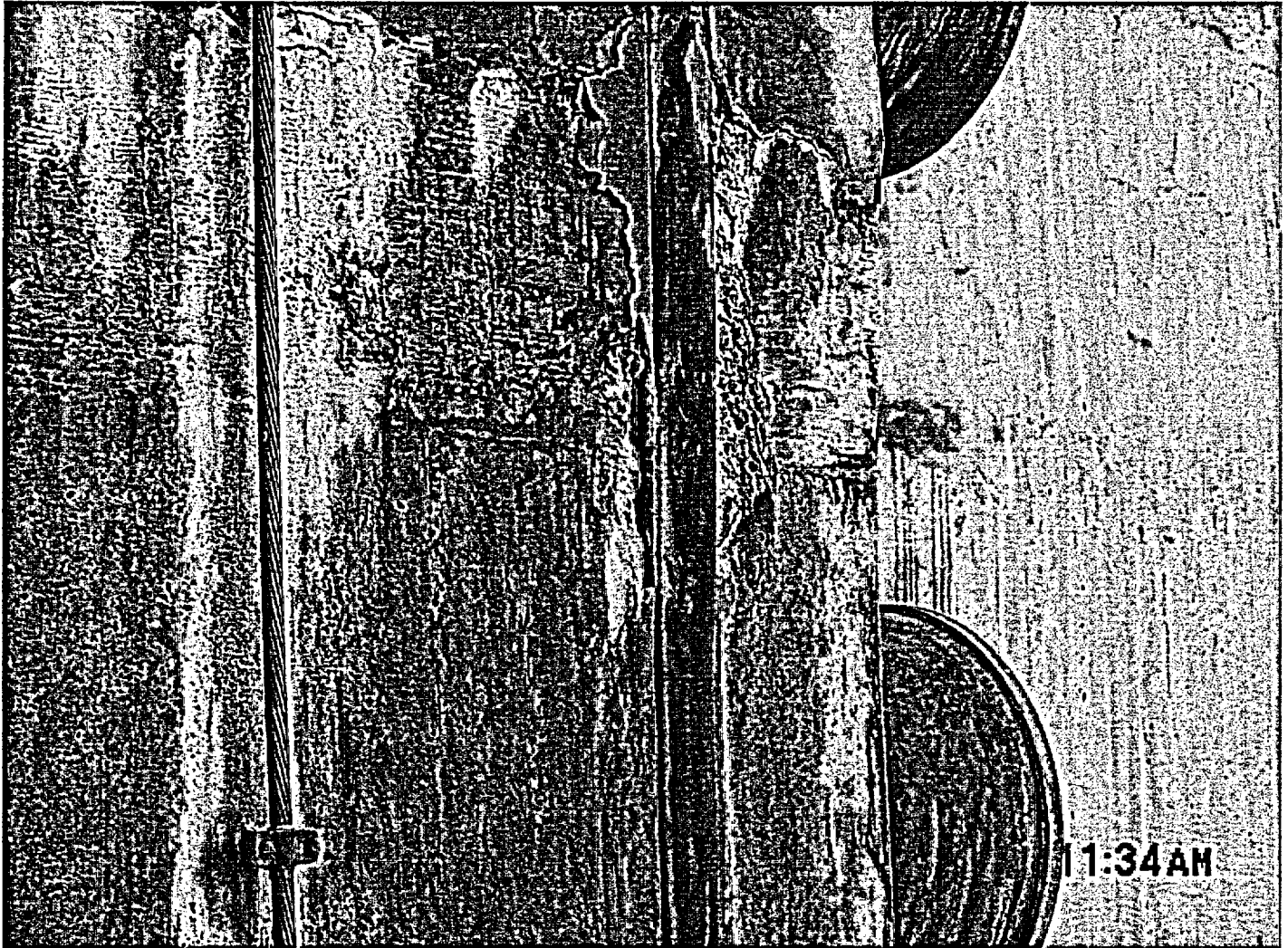
SUPPLEMENTAL INFORMATION FOR PROCEDURE 1301-9.1
ENCLOSURE 6 DATA SHEET 10



A225/A459

PICTURE 53

SUPPLEMENTAL INFORMATION FOR PROCEDURE 1301-9.1
ENCLOSURE 6 DATA SHEET 10



Buttress 3 to 4

1) ELEVATION 305 TURBINE BUILDING UP TO CEILING
APPROX. 405' ELEV. VT-3C WAS PERFORMED WITH
NO SIGNS OF CONCRETE DEGRADATION FOUND.

2) ELEVATION 281 AND 305 FUEL HANDLING

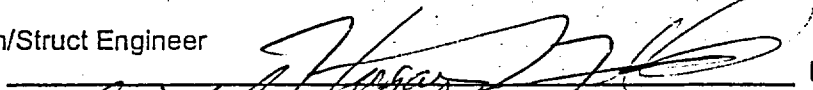
BUILDING VT-3C INSPECTION WAS PERFORMED AND
NO SIGNS OF CONCRETE DEGRADATION WAS FOUND.

3) JOINT SPALLS W/ ONE AREA OF EXPOSED
CORRODED METAL THAT WAS REPORTED DURING THE
25th YEAR SURVEILLANCE WAS REINSPECTED AND REMAINS
UNCHANGED. REF. PAGE A 213 OF 424 OF ATTACHED
REPORT.

4) THE AREA IDENTIFIED AS "CRACKS FOUND OVER THE
FHB ROOF BETWEEN BUTTRESSES 3 & 4 (T.R. 136,
SEC. 4.1)" VT-1C WAS PERFORMED AND THE
AREA HAS REMAINED STABLE W/ NO ACTIVE
DEGRADATION MECHANISM. SEE ATTACHED EXAM DATA
SHEET NO. : 4

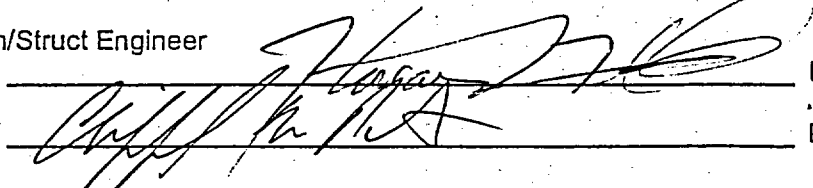
5) DURING THE 7th PERIOD INSPECTION THERE WAS
AREAS OF GROUT NEXT TO THE EMBEDDED STRIP IR^S
THAT SUPPORT DRAIN PIPES THAT COME FROM TOP OF
CONTAINMENT THAT WAS POPPING OUT THESE AREAS
REMAIN UNCHANGED.

Cognizant Mech/Struct Engineer
Reviewed By:



Date: 27 FEB 05

Performed By:



Date: 12-3-04

A0027/A459

Buttress 4 to 5

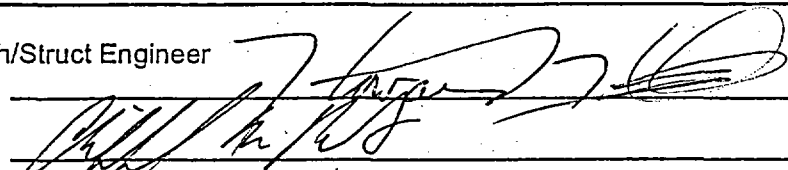
1) ELEVATION 281 AND 305 AUXILIARY BUILDING
PERFORMED VT-3C INSPECTION AND FOUND NO
SIGNS OF CONCRETE DEGRADATION.

2) AREA BETWEEN BUTTRESSES 4 & 5 APPROX. 36'
DOWN FROM BOTTOM OF RING GIRDER AND APPROX. 6'

TO THE RIGHT OF BUTTRESS 5 AS REPORTED
DURING THE 7TH PERIOD INSPECTION, REF. PAGE
A224 OF 424 OF ATTACHED REPORT, WAS
REINSPECTED DURING THE 8TH PERIOD INSPECTION
AND WAS FOUND TO BE STABLE W/ NO SIGNS
OF ACTIVE DEGRADATION MECHANISM.

Cognizant Mech/Struct Engineer

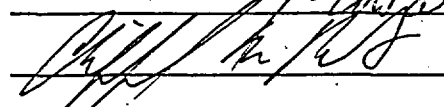
Reviewed By:



Date:

27 FEB 05

Performed By:



Date:

12-4-04

General Containment Inspection Results

Buttress 5 to 6

1) As PREVIOUSLY REPORTED DURING THE 25th YEAR SURVEILLANCE A SECTION OF GROUT APPROX. 2' X 5' HAS FALLEN OFF @ LOCATION 12' UP FROM TOP OF EQUIPMENT HATCH ROOF. SEE PICS 54, 55, & 56.

Cognizant Mech/Struct Engineer

Reviewed By: 

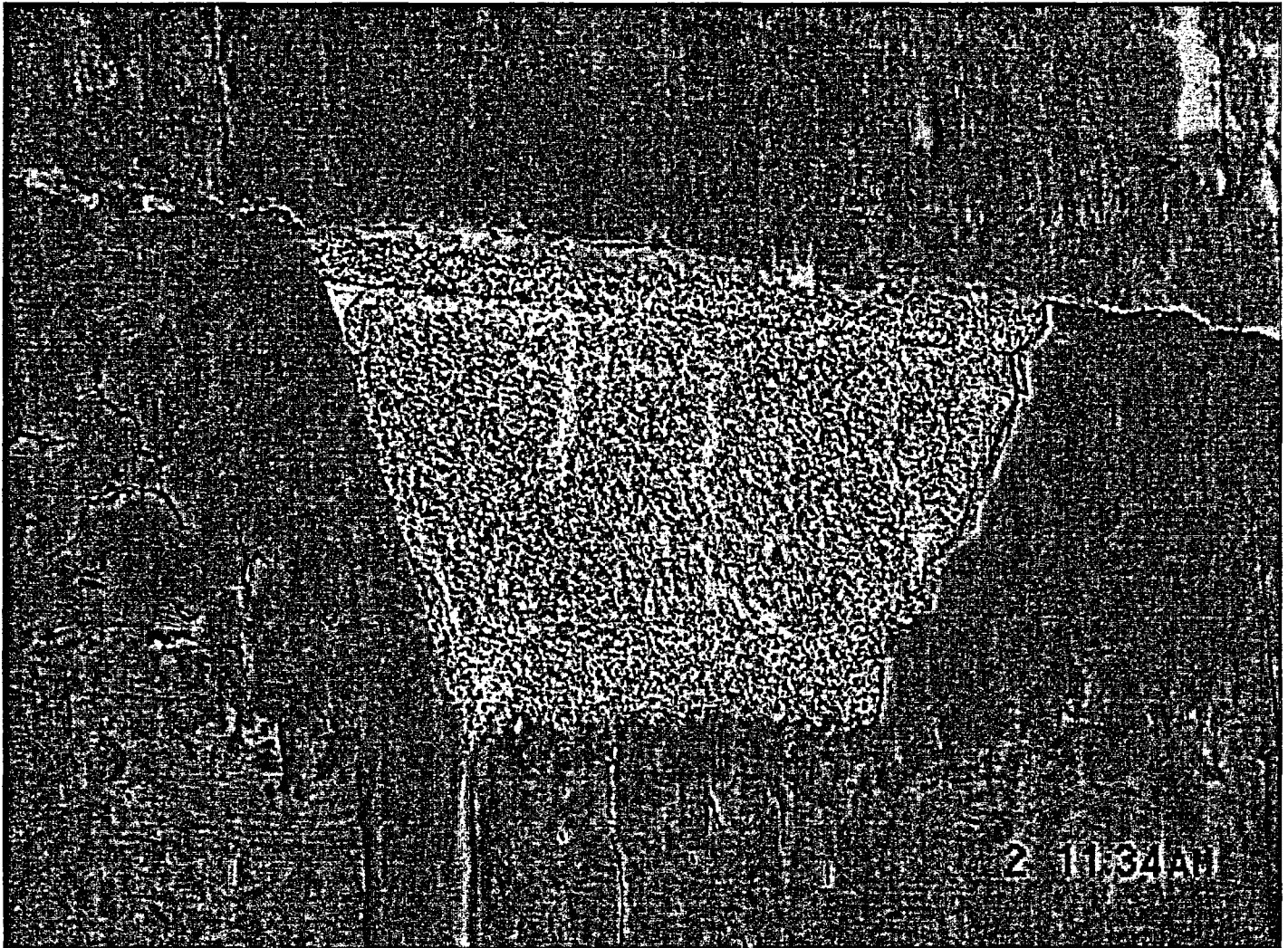
Date: 27 Feb 05

Performed By: 

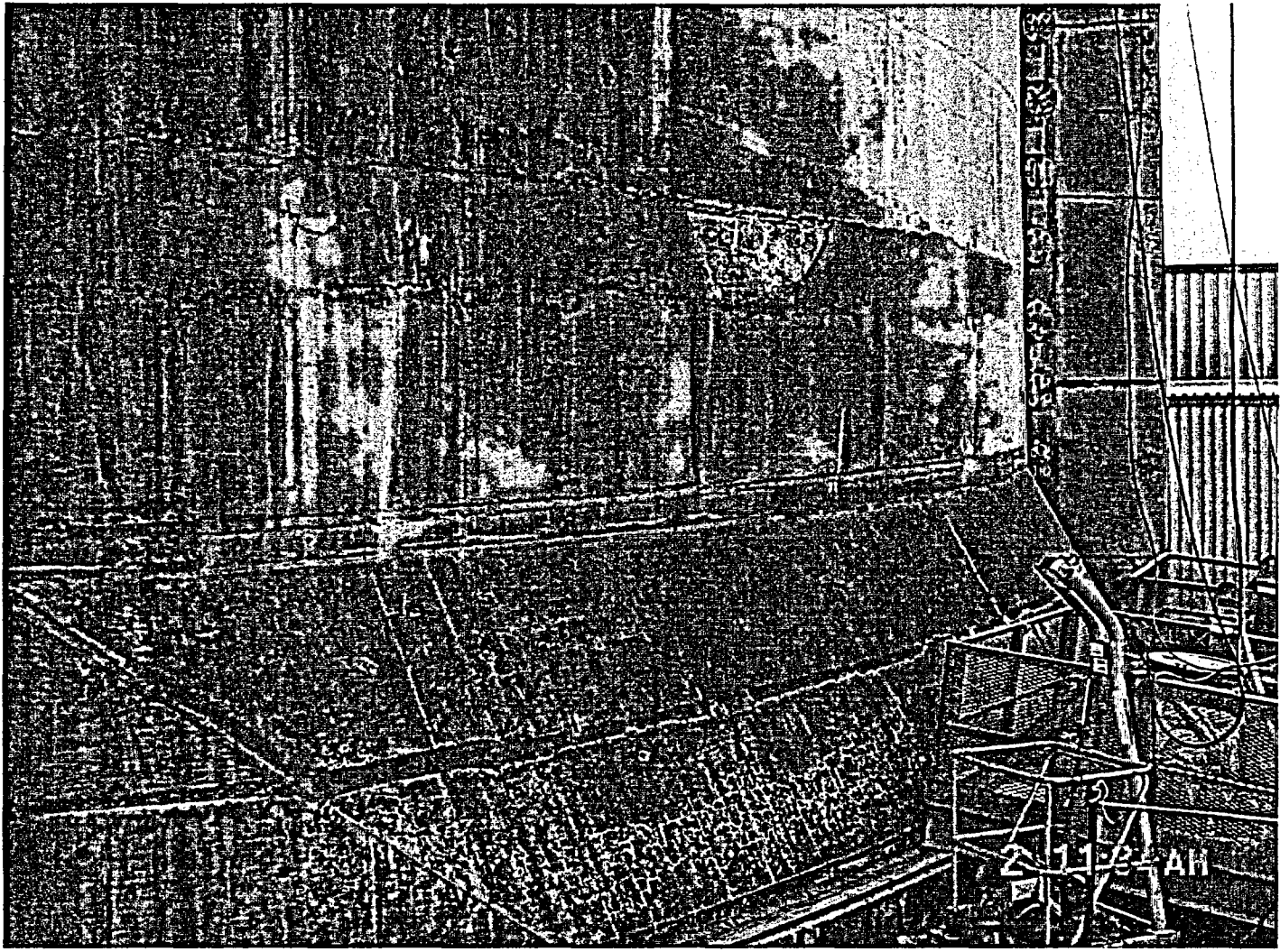
Date: 12-4-04

PICTURE 54

SUPPLEMENTAL INFORMATION FOR PROCEDURE 1301-9.1
ENCLOSURE 6 DATA SHEET 10

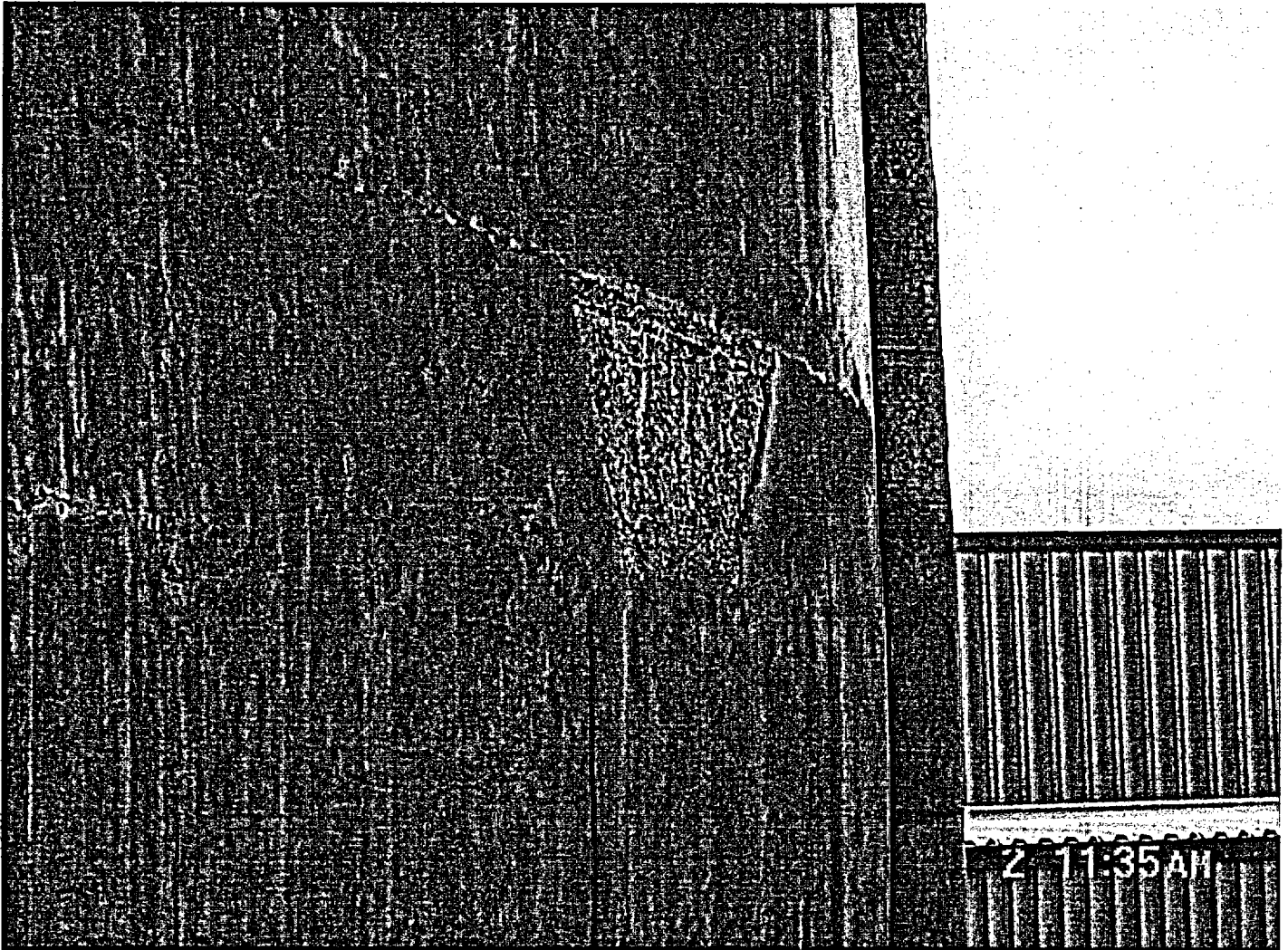


PICTURE 55
SUPPLEMENTAL INFORMATION FOR PROCEDURE 1301-9.1
ENCLOSURE 6 DATA SHEET 10



A231/A459

PICTURE 56
SUPPLEMENTAL INFORMATION FOR PROCEDURE 1301-9.1
ENCLOSURE 6 DATA SHEET 10



A232/A459

Buttress 6 to 1

- 1) ELEVATION 295 UPTO CEILING OF INTERMEDIATE BUILDING VT-3C INSPECTION WAS PERFORMED WITH NO SIGNS OF CONCRETE DEGRADATION FOUND.
- 2) CRACK ADJACENT TO BEARING R AT TENDON END H64-33 THAT WAS REPORTED DURING THE 7TH PERIOD INSPECTION, REF. PAGE A224 OF 424 OF ATTACHED REPORT. WAS REEXAMINED DURING THE 8TH PERIOD INSPECTION AND WAS FOUND TO BE STABLE W/NO SIGNS OF ACTIVE DEGRADATION MECHANISM.
- 3) "CRACK @ H46-37 @ 0.013" WIDE W/IN 2' OF BASE PLATE EDGE (T.R 136, SEC 4.7)" WAS REEXAMINED DURING 8TH PERIOD INSPECTION AND FOUND TO BE STABLE W/NO SIGNS OF ACTIVE DEGRADATION MECHANISM.

Cognizant Mech/Struct Engineer

Reviewed By: _____

Date: _____

27 FEB 05

Performed By: _____

Date: _____

12.4.04

Dome Area

General Containment Inspection Results

1) THREE EMBEDDED STRIP IR'S ON WEST SIDE OF DOME THAT RUN FROM VENT STACK TO E (TOP) OF CONTAINMENT SHOW EFFLORESCENCE AND MOISTURE COMING FROM UNDERNEATH. SEE ATTACHED EXAM DATA SHEET No. : 1

2) GROUT POPPING OUT IN TWO LOCATIONS. SEE ATTACHED EXAM DATA SHEET No. : 2

3) TOP VERTICAL TENDON BEARING IR'S SHOW SIGNS OF COATING DETERIORATION IN VARIOUS LOCATIONS. SEE ATTACHED EXAM DATA SHEET No. : 3

NOTES: ITEMS IDENTIFIED DURING THE 7TH PERIOD INSPECTION ON THE DOME INCLUDE,

- HANDRAIL EMBEDS W/GROUT PATCHES CHIPPED AND CRACKED.

- BROKEN OUT PIECE OF CONCRETE NEXT TO RAIN TRENCH ON WEST SIDE OF DOME

- SPALL AREA AT BOTTOM OF INSIDE WALL OF VERT. TENDON TRENCH, BETWEEN TENDONS V144 & V145

ALL REMAIN UNCHANGED.

Cognizant Mech/Struct Engineer

Reviewed By:

Date:

27 FEB 05

Performed By:

Date:

11-29-04

1) GROUT OVERLAY REPAIR AREAS ON RING GIRDER HAVE FALLEN OFF IN VARIOUS LOCATIONS AS REPORTED DURING THE 7th PERIOD INSPECTION. (T.R. 136, SEC. 4.3) THESE AREAS REMAIN UNCHANGED. ROOF LEVELS & GROUND BELOW THE RING GIRDER

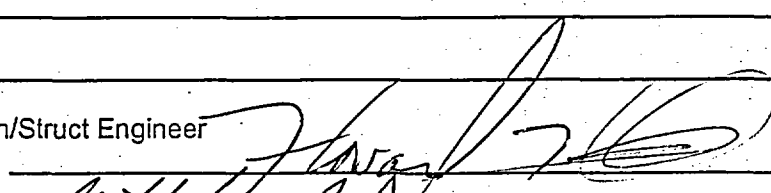
WAS INSPECTED FOR LOOSE GROUT MATERIAL THAT WOULD GIVE INDICATION OF ACTIVE DEGRADATION, NONE WAS FOUND.

2) AS PREVIOUSLY REPORTED DURING 7th PERIOD INSPECTION " (T.R. 136, SEC 4.2) SE QUAD ABOVE RING GIRDER - GROUT COVER COMING OFF & UNDERLYING

REBAR EXPOSED" REBAR WAS REEXAMINED, SEE ATTACHED VT-1 REPORT AS REQUIRED PER ER-AA-335-018 REV. 2 PARA 4.8.1 (SEE ATTACHED EXAM DATA SHEET No.: 5

3) AS REPORTED DURING THE 7th PERIOD INSPECTION "CONSTRUCTION JOINT ABOVE RING GIRDER BETWEEN

D320 NE & 321 NE - CRACK @ .018 WIDE (T.R. 136, SEC. 4.5)" WAS REEXAMINED DURING THE 8th PERIOD INSPECTION AND FOUND TO BE STABLE W/ NO ACTIVE DEGRADATION MECHANISM.

Cognizant Mech/Struct Engineer
Reviewed By: 

Date: 27 FEB 05

Performed By: 

Date: 12-4-04

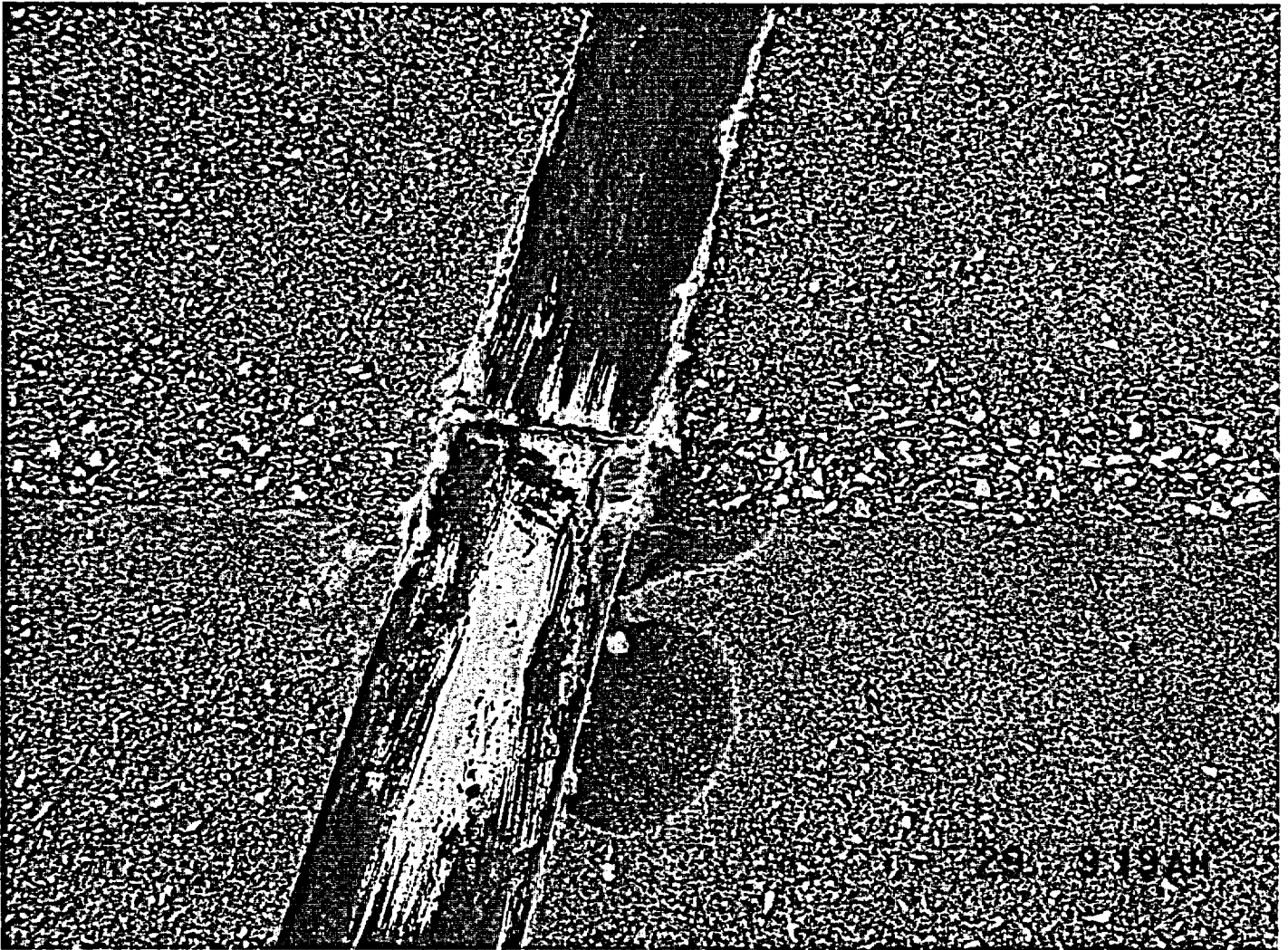
A235/A459

ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u> Exam Data Sheet. No.: <u>1</u> Exam Date: <u>11-29-04</u>																										
System: Examination Procedure <u>ER-AA-335-018</u> Rev. <u>2</u> Work Order No(s): <u>R1801589</u>																										
Location: Building: <u>CONTAINMENT</u> Elev.: <u>456'</u> Col.: <u>N/A</u> Row: <u>N/A</u> Azimuth/Radius: <u>270°</u>																										
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote Matl. Type: <u>CONCRETE</u>																										
Design Drawing(s) <u>TMI-0016</u> Visual Aids: <u>N/A</u>																										
Surface: ID <u>(OD)</u> Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO																										
M&TE Used: <u>LIGHT METER</u> UTC or Serial No. <u>0002552583</u> Cal. Due Date: <u>7-30-2005</u>																										
Illumination Used <u>NONE</u> Illumination Verified: Date: <u>11-29-04</u> Time: <u>8:00 A.M.</u>																										
Special / Specific Instructions: <u>NEAR VISION DISTANCE CHART</u>																										
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS	Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)																								
<u>CONTAINMENT BUILDING</u> <u>TOP OF CONTAINMENT</u> <u>(DOME)</u>	<u>R/E.</u>	<u>THREE EMBEDDED STRIP IR'S</u> <u>ON WEST SIDE OF DOME THAT</u> <u>RUN FROM VENT STACK TO</u> <u>E TOP OF CONTAINMENT SHOW</u> <u>EFFLORESCENCE AND MOISTURE</u> <u>COMING FROM UNDERNEATH.</u>																								
Results Legend:																										
<table style="width:100%; border: none;"> <tr> <td style="width:33%;">NI - No Indications</td> <td style="width:33%;">RI - Recordable Indication</td> <td style="width:33%;">I.N. - Indication Number (if applicable)</td> </tr> <tr> <td colspan="3">Recordable Indication Type Codes:</td> </tr> <tr> <td>A. Cracks (Characterize and Size)</td> <td>G. Settlements Or Deflections</td> <td>M. Scaling / Dusting</td> </tr> <tr> <td>B. Exposed Reinforcing Steel</td> <td>H. Degraded Patches or Repairs</td> <td>N. Coating Deterioration</td> </tr> <tr> <td>C. Exposed Metallic Items (Other)</td> <td>I. Popouts, Voids, Honeycomb</td> <td>O. Abrasion, Cavitation, Wear</td> </tr> <tr> <td>D. Evidence Of Grease Leakage</td> <td>J. Spalls</td> <td>P. Air Voids / Bug Holes</td> </tr> <tr> <td>E. Evidence Of Moisture</td> <td>K. Cold Joint Lines</td> <td>Q. Efflorescence</td> </tr> <tr> <td>F. Leaching Or Chemical Attack</td> <td>L. Corrosion Staining</td> <td>R. Other (Explain) <u>SEE PICS</u></td> </tr> </table>			NI - No Indications	RI - Recordable Indication	I.N. - Indication Number (if applicable)	Recordable Indication Type Codes:			A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting	B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration	C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear	D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes	E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence	F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain) <u>SEE PICS</u>
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E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence																								
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain) <u>SEE PICS</u>																								
Supplemental Information: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input checked="" type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe): <u>29, 30, 31, 33, 38, 42</u>																										
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u> LEVEL: <u>II</u> DATE: <u>11-29-04</u>																										
RESPONSIBLE ENGINEER SIG.: <u>[Signature]</u> DATE: <u>27 FEB 05</u>																										
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject																										
Comments: <u>SEAL AND REPAIR</u>																										
ANII REVIEW SIGNATURE:		DATE:																								

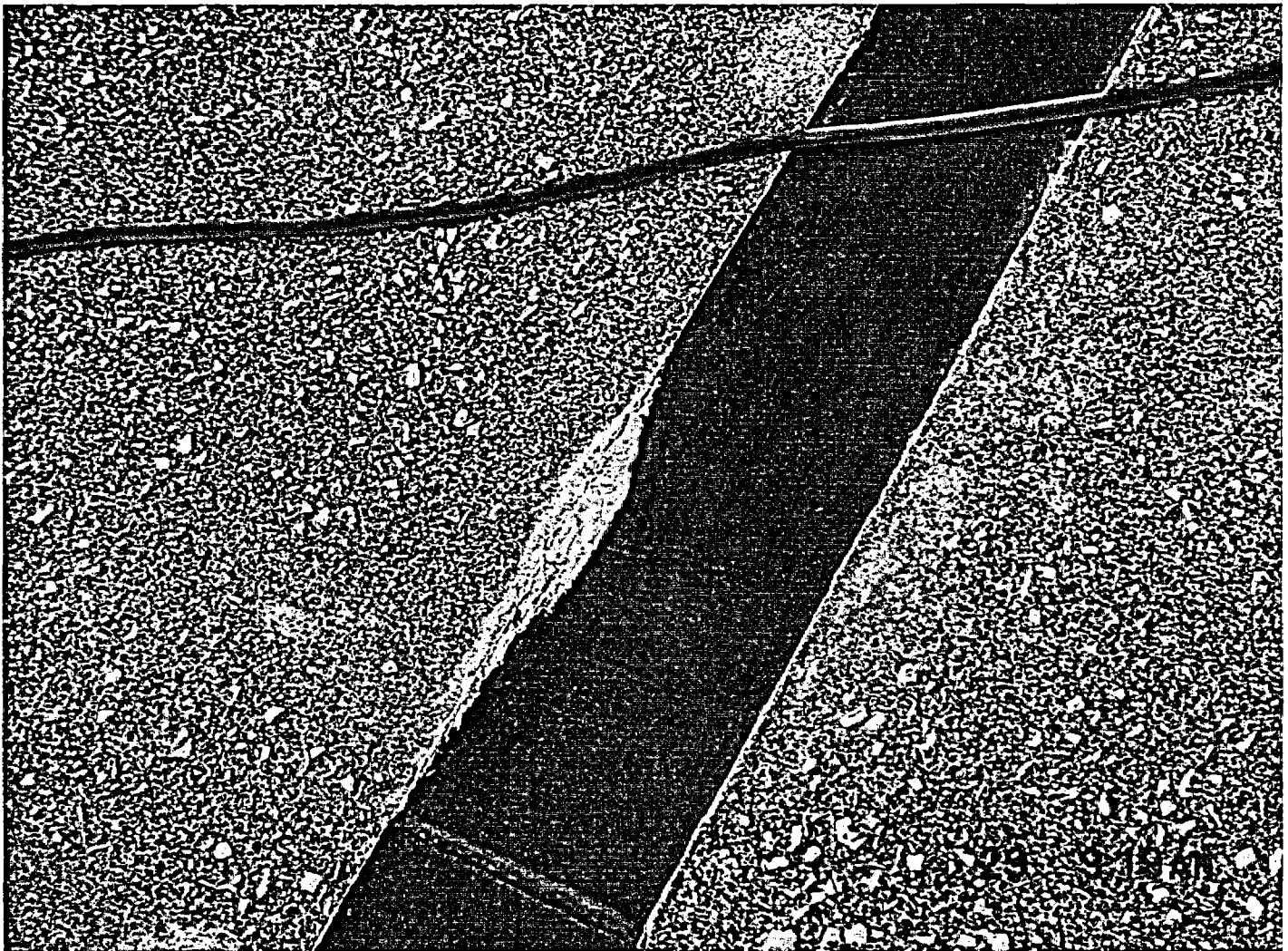
12 21
12 21-6-04
OF

PICTURE 29



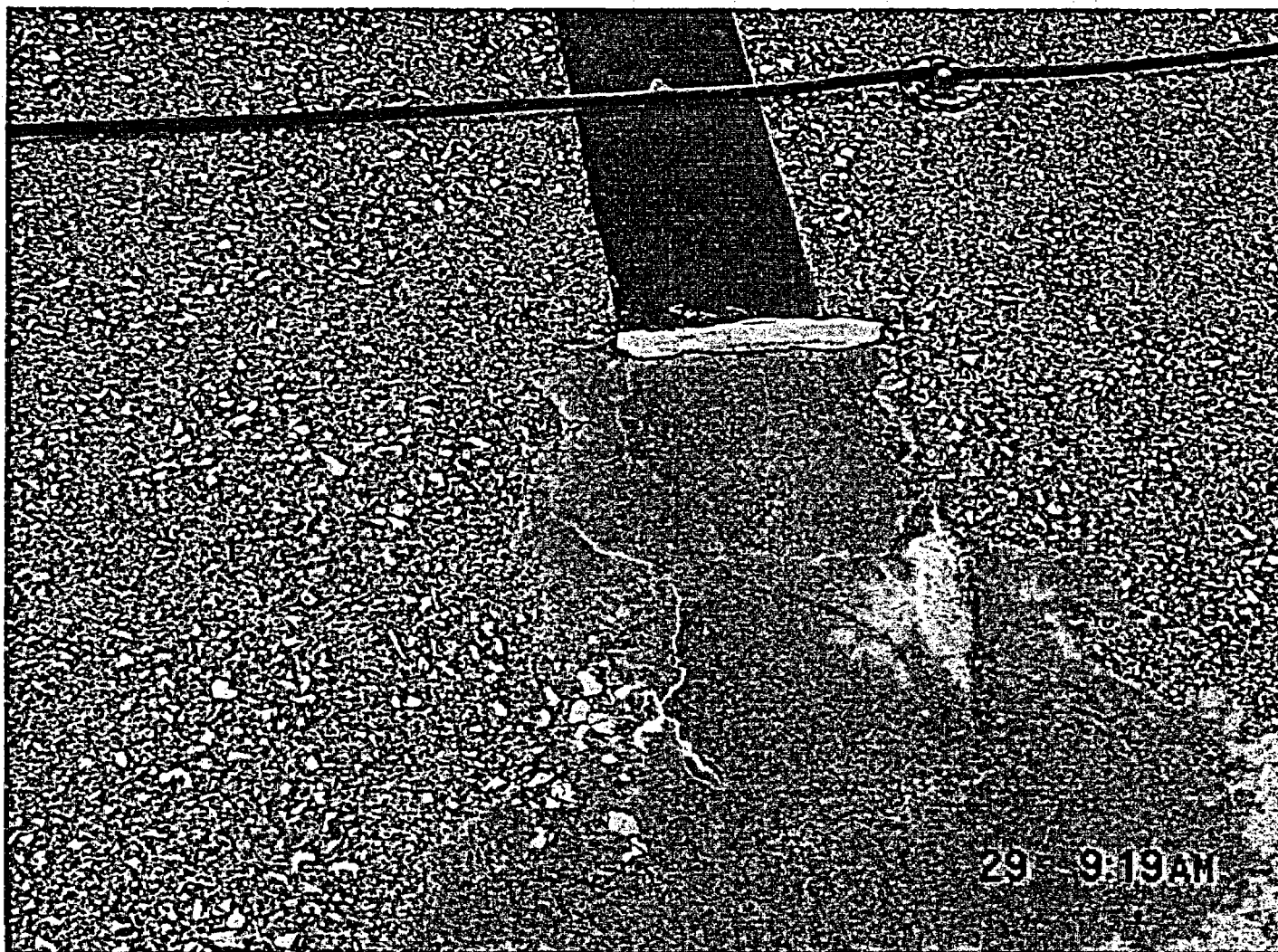
PICTURE 30

SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



PICTURE 31

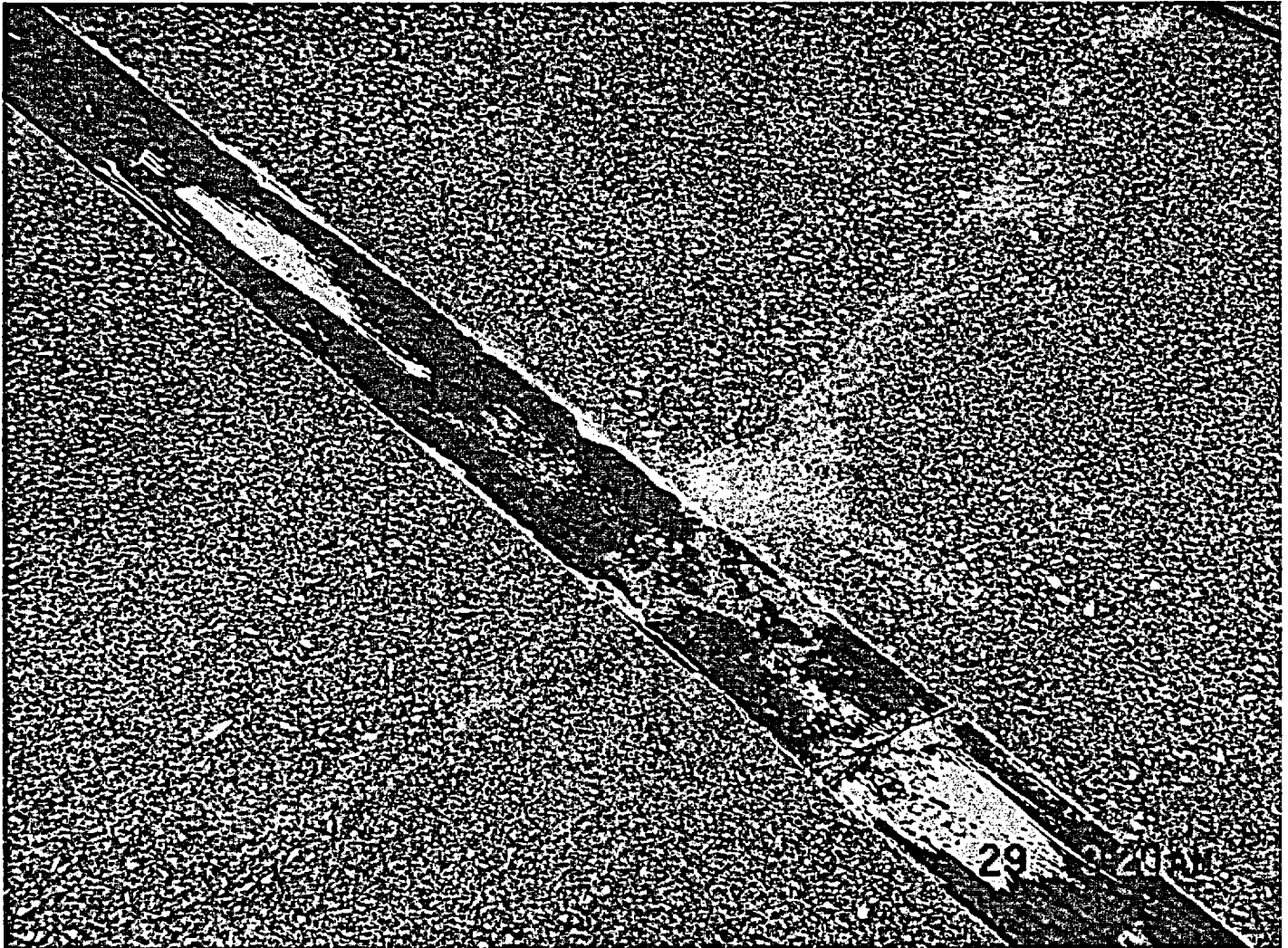
SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



29 9:19AM

PICTURE 33

SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



PICTURE 38

SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6

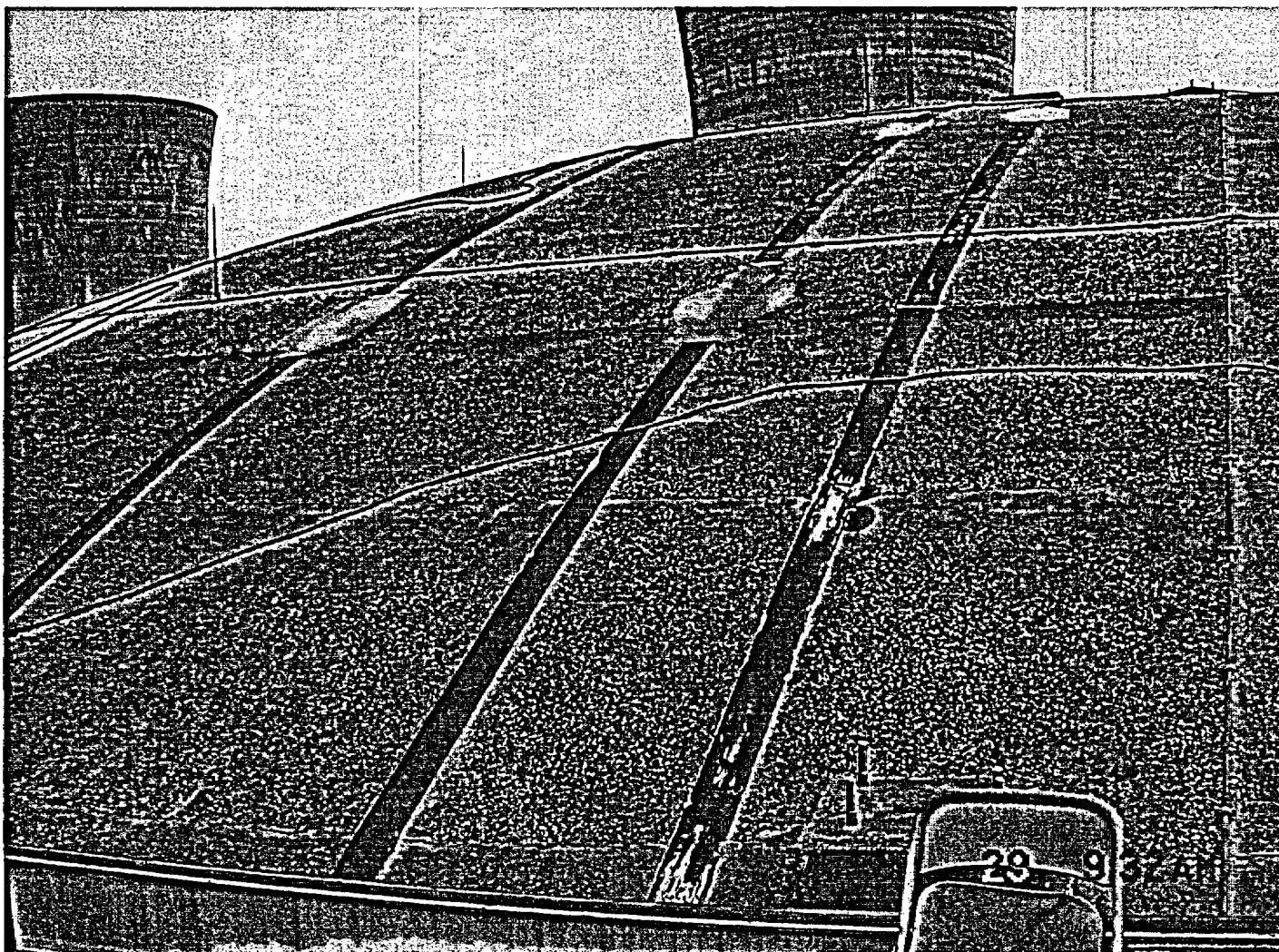


29 923AH

A241/A459

PICTURE 42

SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



A242/A459

ER-AA-335-018

Revision 2

Page 24 of 24

ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
Page 1 of 1

Station: THREE MILE ISLAND Unit: 1 Exam Data Sheet. No.: 2 Exam Date: 11-29-04

System: Examination Procedure ER-AA-335-018 Rev. 2 Work Order No(s): R1801589

Location: Building: CONTAINMENT Elev.: 456' Col.: H/A Row: H/A Azimuth/Radius: 270°

Exam Type: General VT-1C VT-3C Type Of Exam: Direct Remote Matl. Type: CONCRETE

Design Drawing(s) TMI 1-0016 Visual Aids: H/A

Surface: ID (OD) Surface / Components Coated: YES NO

M&TE Used: LIGHT METER UTC or Serial No. 0002552583 Cal. Due Date: 7-30-2005

Illumination Used NONE Illumination Verified: Date: 11-29-04 Time: 8:00 A.M.

Special / Specific Instructions: NEAR VISION DISTANCE CHART

Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<u>CONTAINMENT DOME TOP OF CONTAINMENT BUILDING</u>		<u>H.</u>		<u>SEE ATTACHED SKETCH SH. 2 OF 3 & 3 OF 3</u>

Results Legend:
 NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)

Recordable Indication Type Codes:

A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain) <u>SEE PIC'S</u>

Supplemental Information: Yes No Sketch Photo Video Other (Describe): 32 & 40

VISUAL EXAMINER SIGNATURE: [Signature] LEVEL II DATE: 11-29-04

RESPONSIBLE ENGINEER SIG.: [Signature] DATE: 27 FEB 05

FINAL DISPOSITION BY RESPONSIBLE ENGINEER Accept Reject

Comments: REPAIR

ANII REVIEW SIGNATURE: _____ DATE: _____

PSC

Precision Surveillance Corporation

THREE MILE ISLAND

VT-10 SKETCH SHEET

CALCULATION NO:

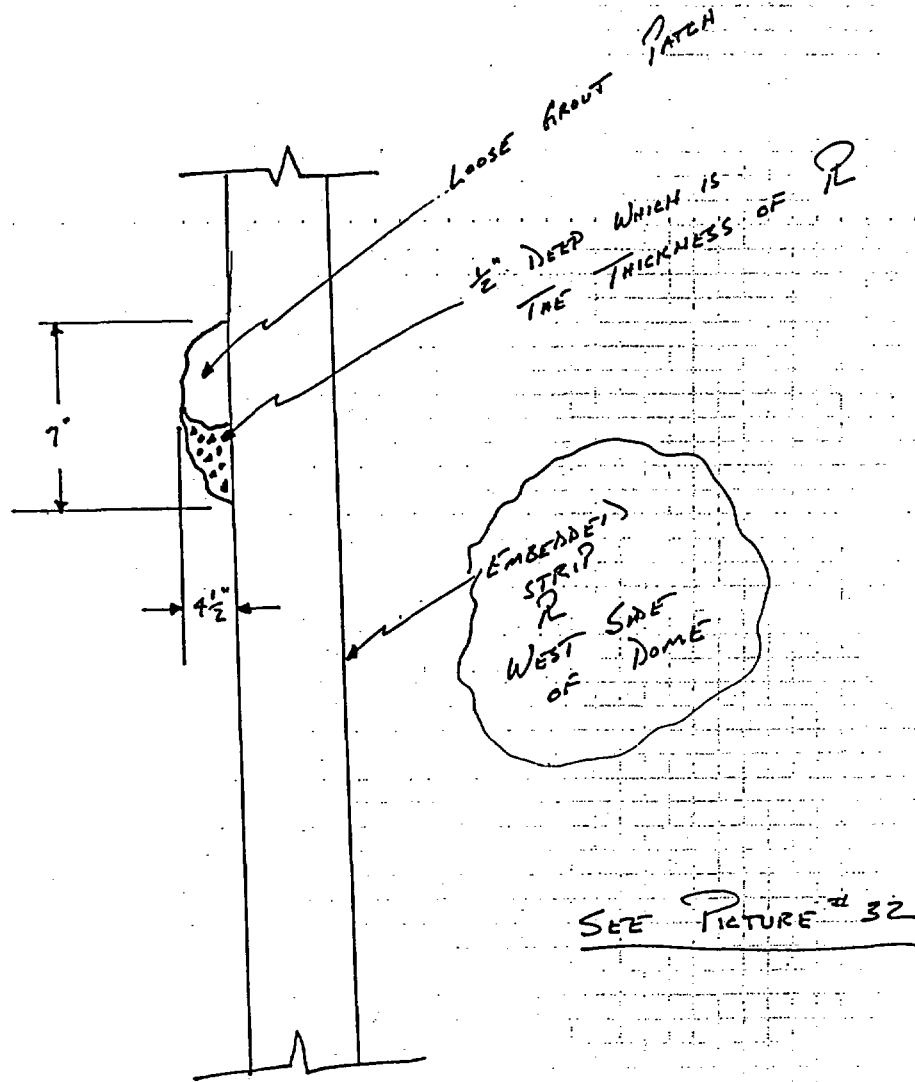
SKETCH SHEET

X SAFETY RELATED

NON-SAFETY RELATED

PAGE 2 OF 3

EXAM DATA SHEET No. : 2



TOP OF CONTAINMENT
ON
DOME

14 OF 21

PREPARED BY

[Signature]

DATE 11-29-04

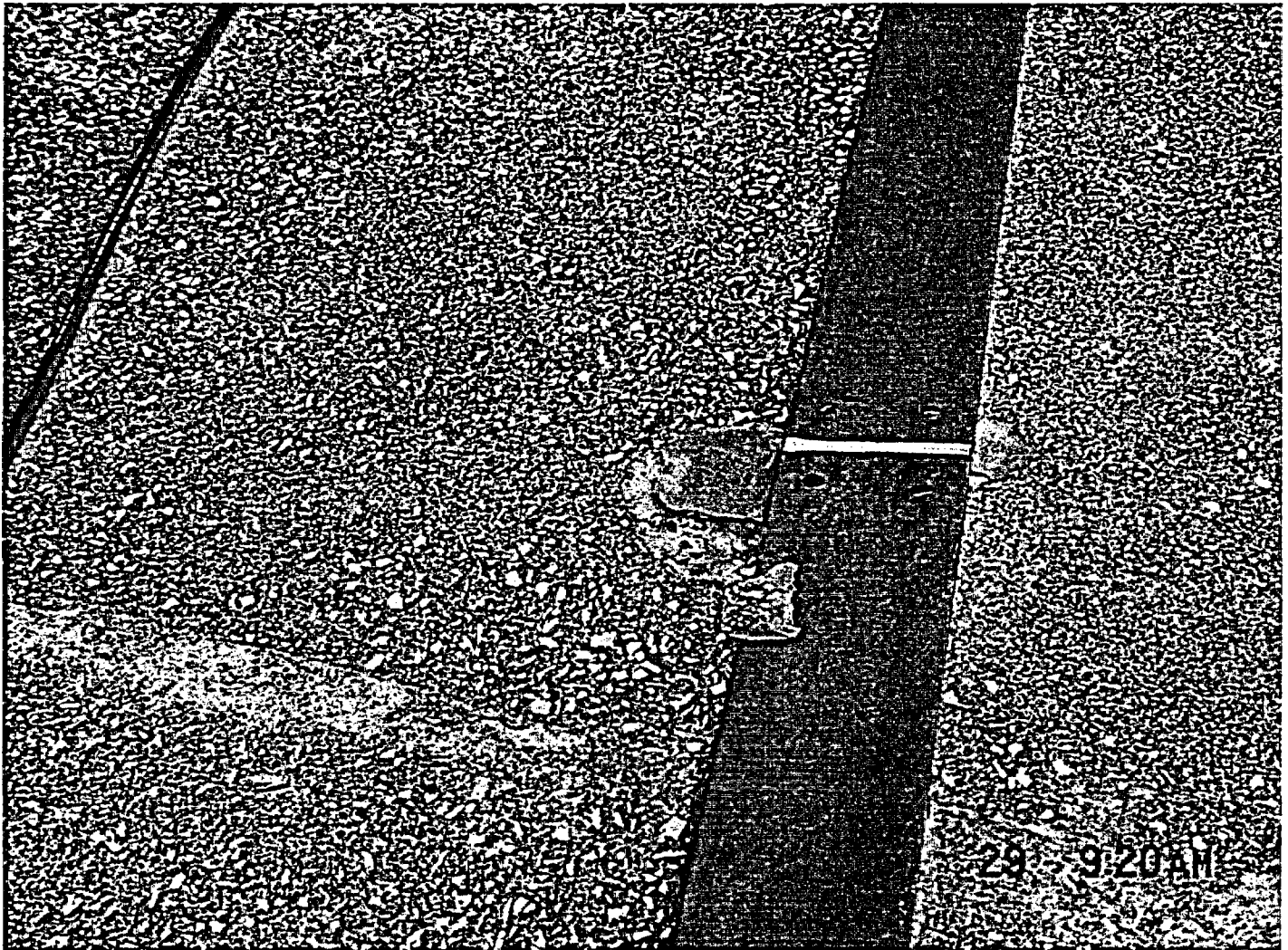
REVIEWED BY

DATE

A244/A459

PICTURE 32

SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



A245/A459

PSC

Precision Surveillance Corporation

THREE MILE ISLAND

VT-10 SKETCH SHEET

CALCULATION NO:

SKETCH SHEET

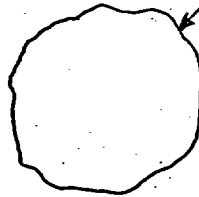
X

SAFETY RELATED

NON-SAFETY RELATED

PAGE 3 OF 3

EXAM DATA SHEET No.: 2



ROUND GROUT
 PATCH POPPED OUT
 ON WEST SIDE OF
 DOME HEFT TO
 INNER CRANE RAIL.
 APPROX. 4" ROUND
 1/2 DIA.

SEE PICTURE #40

15 OF 21

PREPARED BY

[Handwritten Signature]

DATE 11-29-04

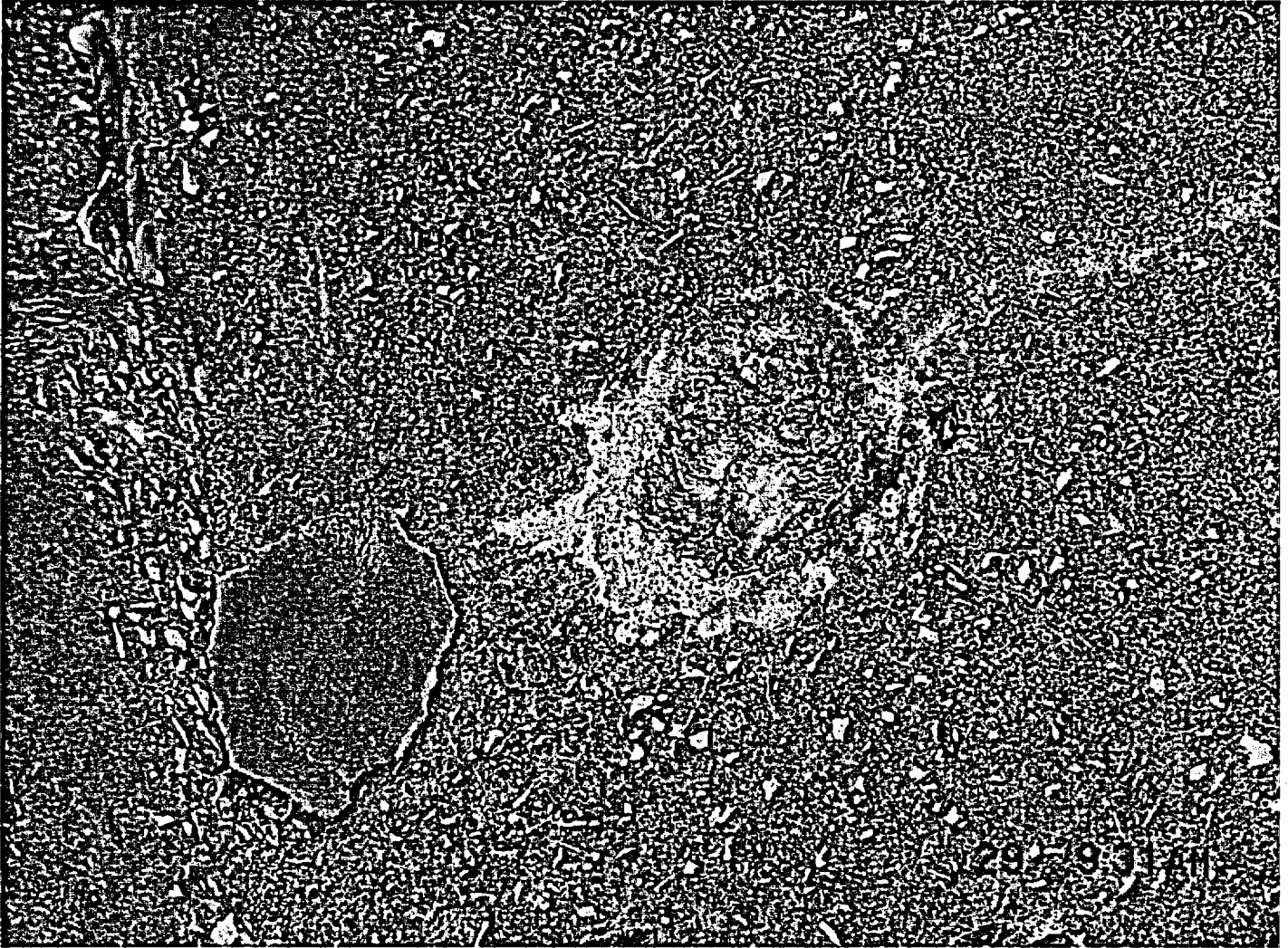
REVIEWED BY

DATE

A246/A459

PICTURE 40

SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



A247/A459

ER-AA-335-018
Revision 2
Page 24 of 24

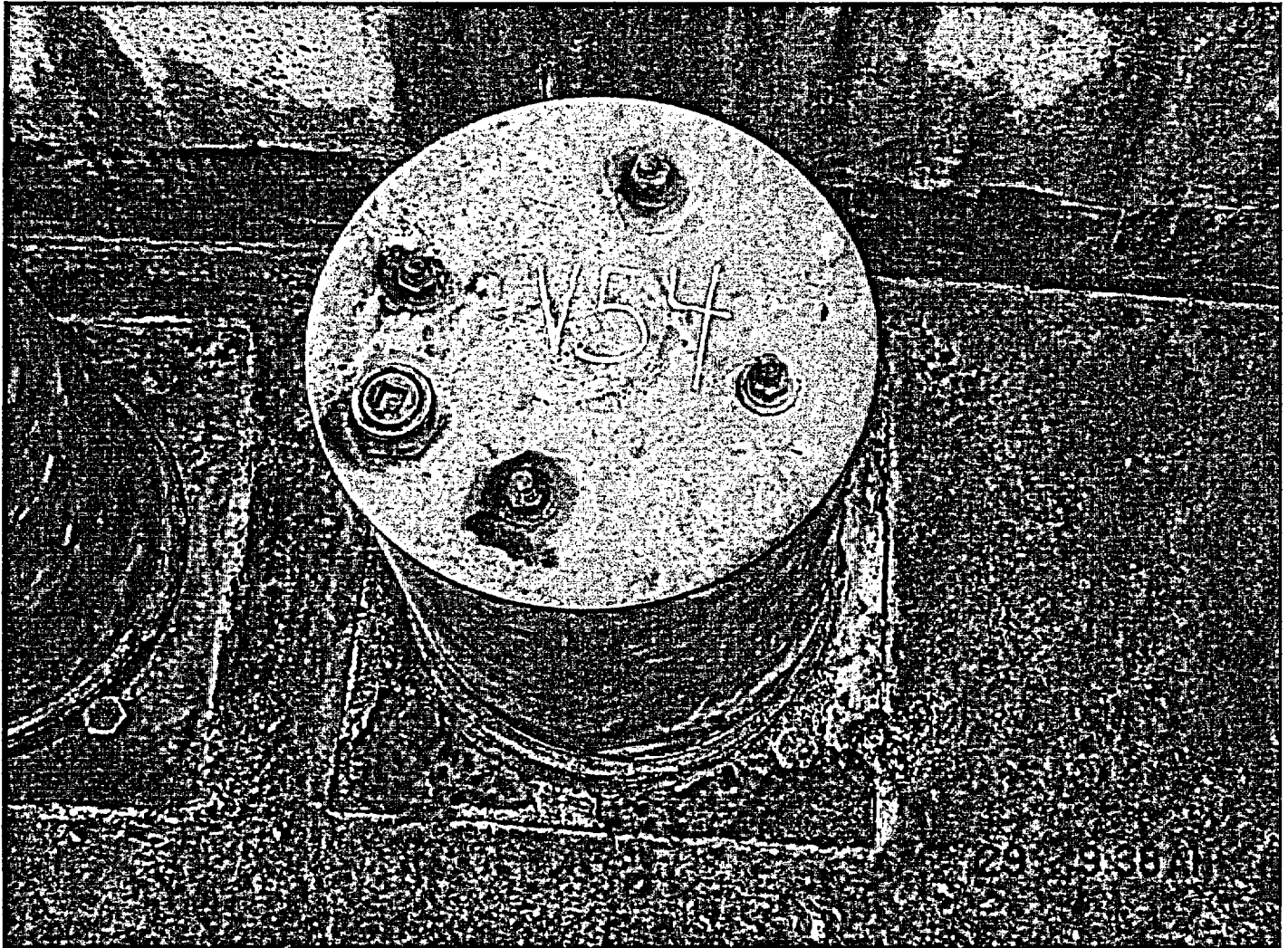
ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
Page 1 of 1

Station: <u>THREE MILE ISLAND</u> Unit: <u>1</u>		Exam Data Sheet. No.: <u>3</u>		Exam Date: <u>11-29-04</u>	
System: Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>		Work Order No(s): <u>R1601589</u>	
Location: Building: <u>CONTAINMENT</u>		Elev.: <u>456'</u>		Col.: <u>H/A</u> Row: <u>H/A</u> Azimuth/Radius: <u>VARIOUS</u>	
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote		Matl. Type: <u>METAL</u>	
Design Drawing(s): <u>TMEI-0016</u>		Visual Aids: <u>N/A</u>			
Surface: <u>ID</u> <input checked="" type="checkbox"/> <u>OD</u>		Surface / Components Coated: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552583</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>NONE</u>		Illumination Verified: Date: <u>11-29-04</u> Time: <u>8:00 A.M.</u>			
Special / Specific Instructions: <u>NEAR VISION DISTANCE CHART</u>					
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)	
	NI	RI TYPE	I.N.		
<u>CONTAINMENT BUILDING (DOME)</u> <u>VERT. GREASE CAP</u> <u>TRENCH BEARING RL'S</u> <u>VARIOUS LOCATIONS</u> <u>360° AROUND</u>		<u>N.</u>		<u>BEARING RL COATING IS PEELING OFF AND BEARING RL'S ARE SHOWING SIGNS OF RUST</u>	
Results Legend:					
NI - No Indications		RI - Recordable Indication		I.N.- Indication Number (if applicable)	
Recordable Indication Type Codes:					
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting			
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration			
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear			
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes			
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence			
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain) <u>SEE PICS</u>			
Supplemental Information: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input checked="" type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe): <u>44, 45, 46, 47, 48, 49</u>					
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL <u>II</u>		DATE: <u>11-29-04</u>	
RESPONSIBLE ENGINEER SIG.: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>			
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject					
Comments: <u>RECOAT</u>					
ANII REVIEW SIGNATURE:				DATE:	

A248/A459

PICTURE 44

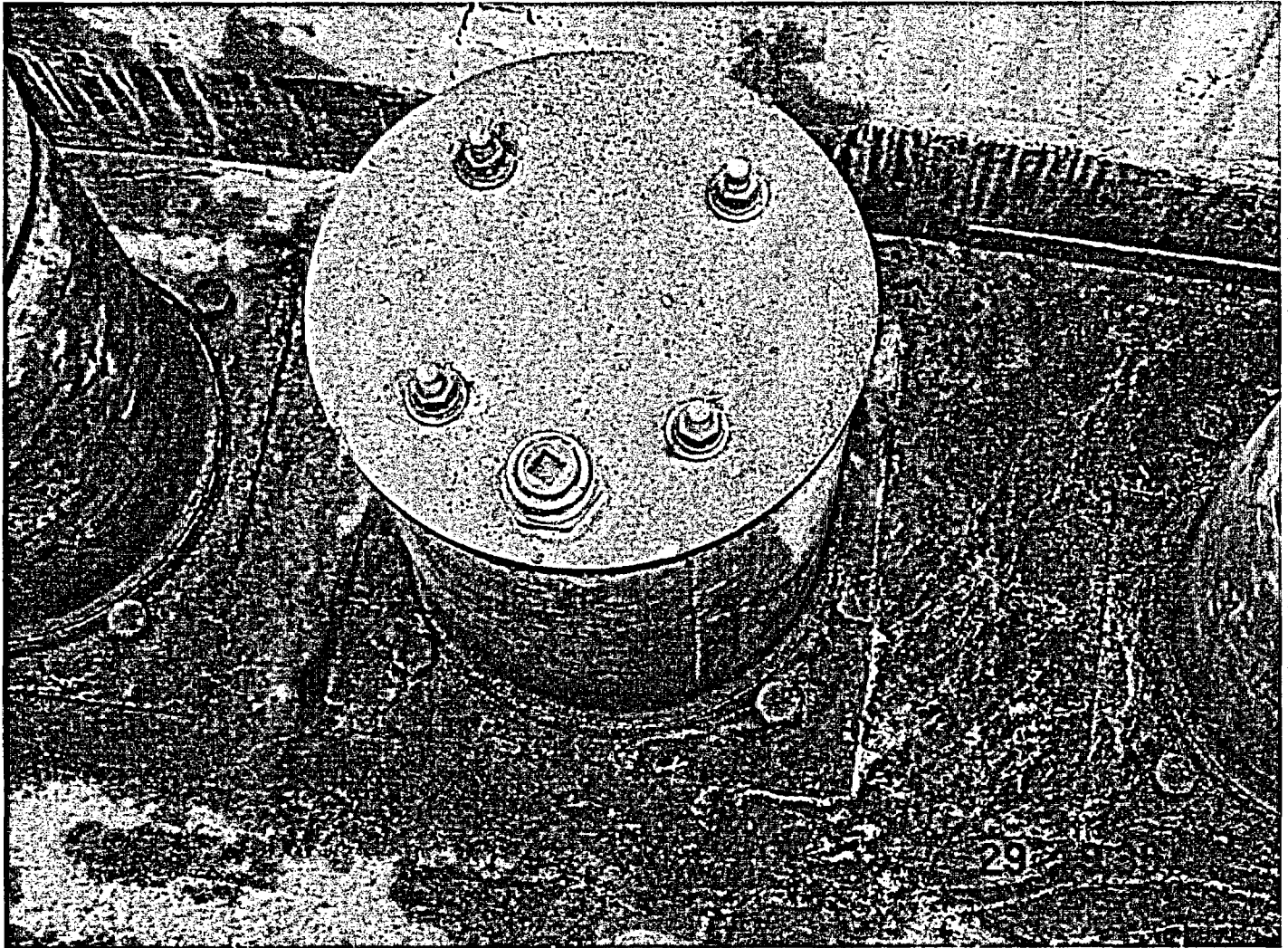
SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



4249/A459

PICTURE 45

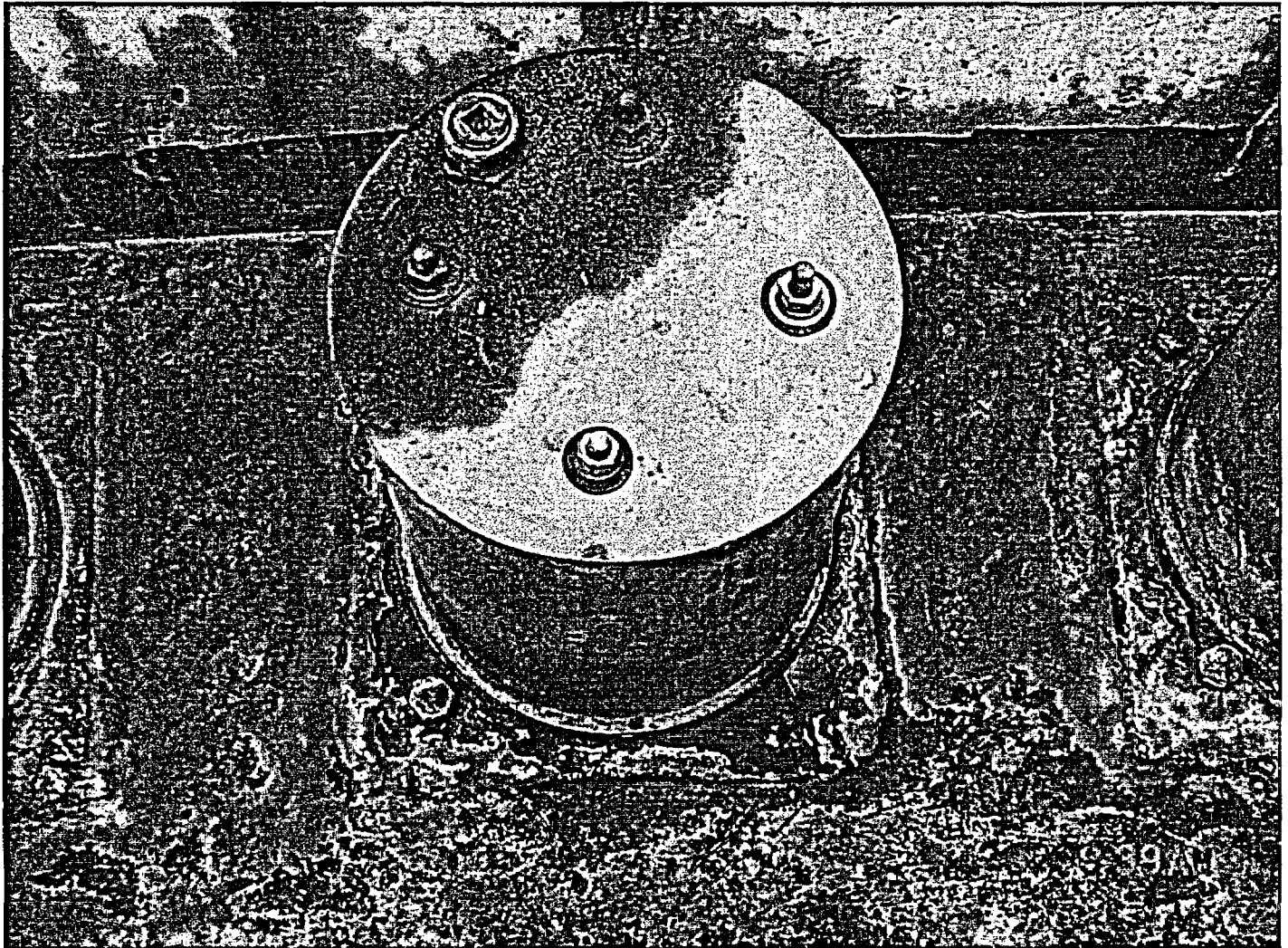
SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



A050/A459

PICTURE 46

SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



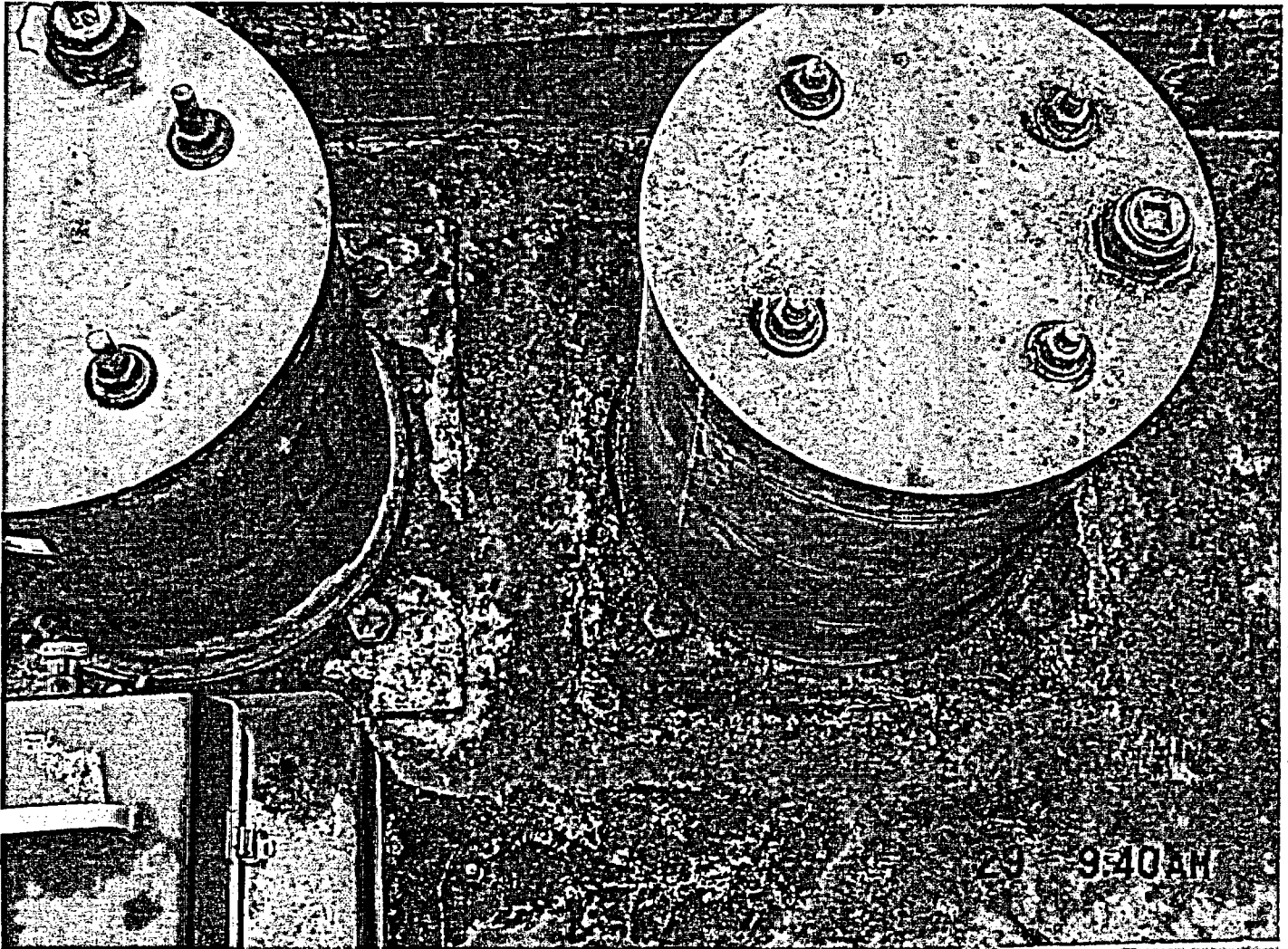
PICTURE 47

SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



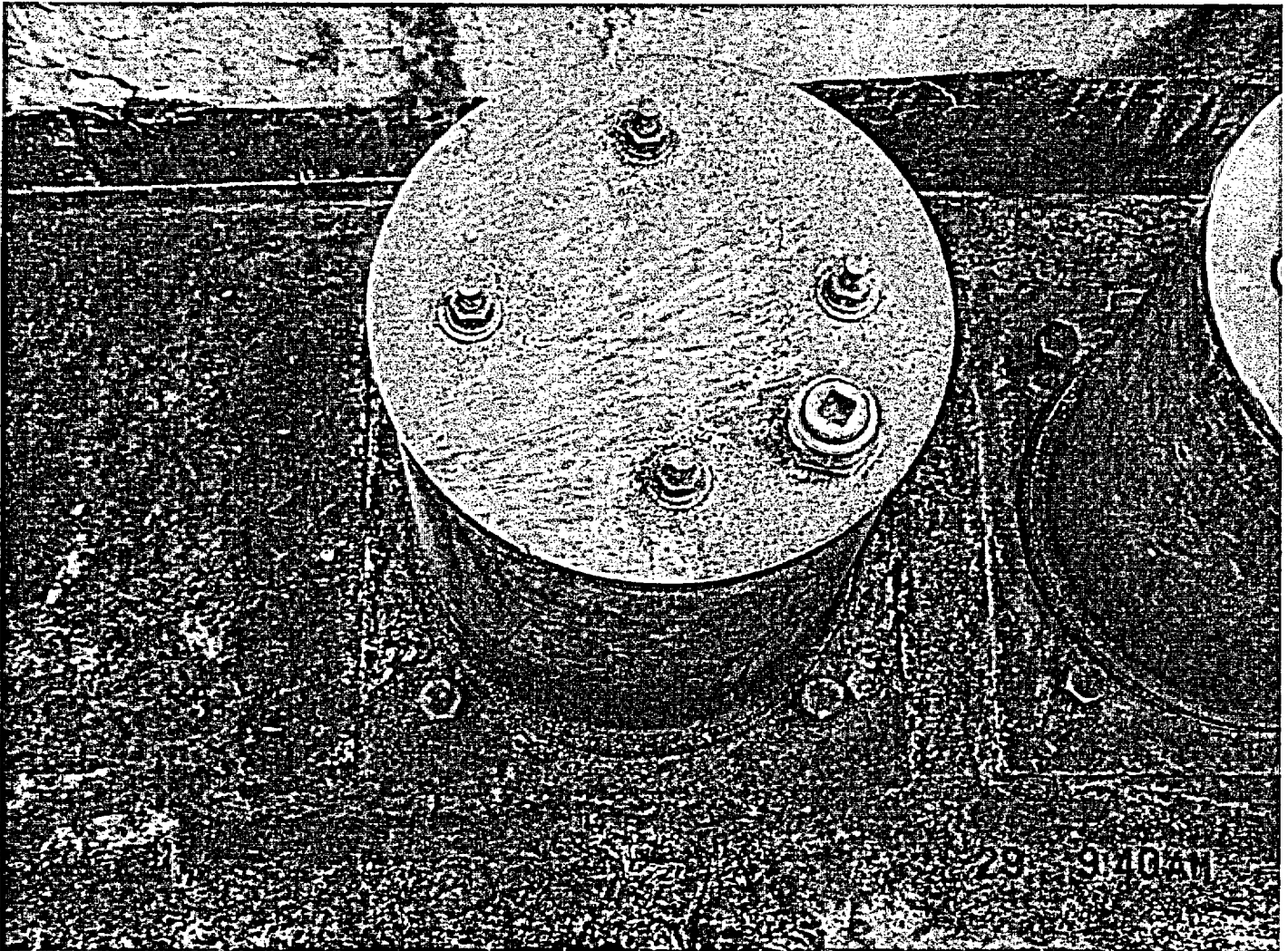
PICTURE 48

SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



PICTURE 49

SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



A254/A459

ER-AA-335-018
Revision 2
Page 24 of 24

ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
Page 1 of 1

Station: <u>T.M.I.</u> Unit: <u>1</u> Exam Data Sheet. No.: <u>4</u> Exam Date: <u>12-3-04</u>																			
System: Examination Procedure <u>ER-AA-335-018</u> Rev. <u>2</u> Work Order No(s): <u>R1801589</u>																			
Location: Building: <u>CONTAINMENT</u> Elev.: <u>339'</u> Col.: <u>N/A</u> Row: <u>N/A</u> Azimuth/Radius: <u>160°</u>																			
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote Matl. Type: <u>CONCRETE</u>																			
Design Drawing(s) <u>TMI-0014</u> Visual Aids: <u>N/A</u>																			
Surface: ID <u>OD</u> Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO																			
M&TE Used: <u>LIGHT METER</u> UTC or Serial No. <u>0002552583</u> Cal. Due Date: <u>7-30-2005</u>																			
Illumination Used <u>NONE</u> Illumination Verified: Date: <u>4.12.04</u> 10.06.04 Time: <u>10:00 A.M.</u>																			
Special / Specific Instructions: <u>NEAR VISION DISTANCE CHART</u> <u>12-3-04</u>																			
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Component / Item Number and Description (e.g. EIN, EID, etc.)</th> <th colspan="3">RESULTS</th> <th rowspan="2">Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)</th> </tr> <tr> <th>NI</th> <th>RI TYPE</th> <th>I.N.</th> </tr> </thead> <tbody> <tr> <td style="height: 150px; vertical-align: top;"><u>CRACKS FOUND OVER FHS ROOF BETWEEN BUTRESSES 3'4 (T.R. 136, SEC. 4.1)</u></td> <td></td> <td align="center" style="font-size: 2em;"><u>A</u></td> <td></td> <td style="vertical-align: top;"><u>THIS AREA WAS REEXAMINED AND THE CRACKS IDENTIFIED DURING THE 7th INSPECTION PERIOD REMAIN STABLE W/NO SIGNS OF ACTIVE DEGRADATION MECHANISM.</u></td> </tr> </tbody> </table>	Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)	NI	RI TYPE	I.N.	<u>CRACKS FOUND OVER FHS ROOF BETWEEN BUTRESSES 3'4 (T.R. 136, SEC. 4.1)</u>		<u>A</u>		<u>THIS AREA WAS REEXAMINED AND THE CRACKS IDENTIFIED DURING THE 7th INSPECTION PERIOD REMAIN STABLE W/NO SIGNS OF ACTIVE DEGRADATION MECHANISM.</u>						
Component / Item Number and Description (e.g. EIN, EID, etc.)		RESULTS				Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)													
	NI	RI TYPE	I.N.																
<u>CRACKS FOUND OVER FHS ROOF BETWEEN BUTRESSES 3'4 (T.R. 136, SEC. 4.1)</u>		<u>A</u>		<u>THIS AREA WAS REEXAMINED AND THE CRACKS IDENTIFIED DURING THE 7th INSPECTION PERIOD REMAIN STABLE W/NO SIGNS OF ACTIVE DEGRADATION MECHANISM.</u>															
Results Legend: NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)																			
Recordable Indication Type Codes: <table style="width:100%; border: none;"> <tr> <td style="width:33%;">A. Cracks (Characterize and Size)</td> <td style="width:33%;">G. Settlements Or Deflections</td> <td style="width:33%;">M. Scaling / Dusting</td> </tr> <tr> <td>B. Exposed Reinforcing Steel</td> <td>H. Degraded Patches or Repairs</td> <td>N. Coating Deterioration</td> </tr> <tr> <td>C. Exposed Metallic Items (Other)</td> <td>I. Popouts, Voids, Honeycomb</td> <td>O. Abrasion, Cavitation, Wear</td> </tr> <tr> <td>D. Evidence Of Grease Leakage</td> <td>J. Spalls</td> <td>P. Air Voids / Bug Holes</td> </tr> <tr> <td>E. Evidence Of Moisture</td> <td>K. Cold Joint Lines</td> <td>Q. Efflorescence</td> </tr> <tr> <td>F. Leaching Or Chemical Attack</td> <td>L. Corrosion Staining</td> <td>R. Other (Explain) <u>SEE PIC'S</u></td> </tr> </table>		A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting	B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration	C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear	D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes	E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence	F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain) <u>SEE PIC'S</u>
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting																	
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration																	
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear																	
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes																	
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence																	
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain) <u>SEE PIC'S</u>																	
Supplemental Information: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input checked="" type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe): <u>64, 65, 66</u>																			
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u> LEVEL <u>II</u> DATE: <u>12-3-04</u>																			
RESPONSIBLE ENGINEER SIG.: <u>[Signature]</u> DATE: <u>27 FEB 05</u>																			
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject																			
Comments: _____																			
ANII REVIEW SIGNATURE: _____ DATE: _____																			

A055/A459

PICTURE 64

SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



PICTURE 65

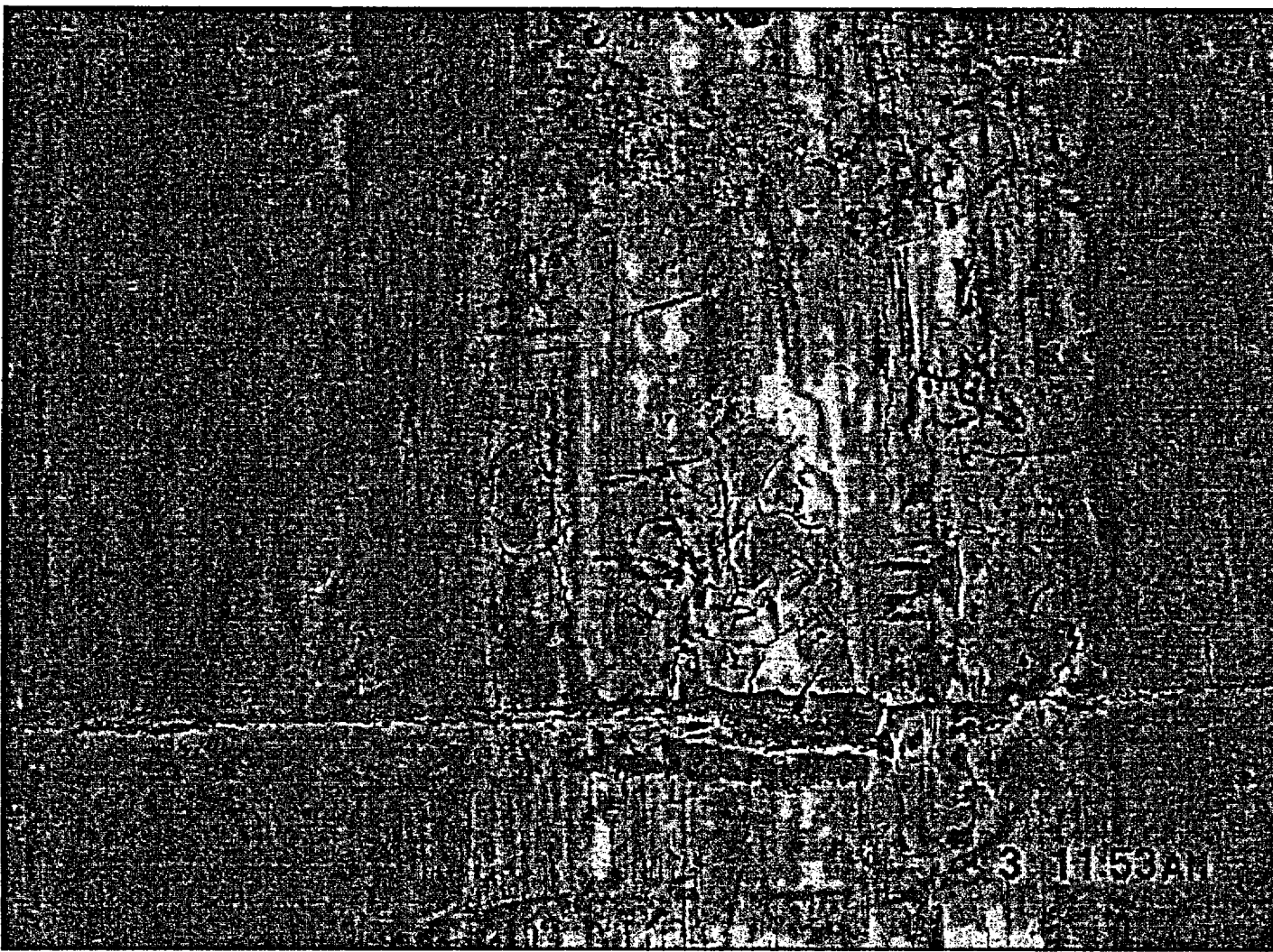
SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



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PICTURE 66

SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
Page 1 of 1

Station: <u>THI</u>		Unit: <u>1</u>	Exam Data Sheet No.: <u>5</u>	Exam Date: <u>12-4-04</u>
System: Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>	Work Order No(s): <u>2101589</u>	
Location: Building: <u>CONTAINMENT</u>	Elev.: <u>10</u>	Col.: <u>N/A</u>	Row: <u>N/A</u>	Azimuth/Radius:
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote		Matl. Type: <u>CONCRETE</u>
Design Drawing(s) <u>THI 1-0014</u>		Visual Aids: <u>NONE</u>		
Surface: ID <u>(OD)</u>	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
M&TE Used: <u>LIGHTBOX</u>	UTC or Serial No. <u>000255253</u>		Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>NONE</u>		Illumination Verified: Date: <u>12-4-04</u>		Time: <u>8:00 AM</u>
Special / Specific Instructions: <u>NEAR DISTANCE VISION CHART</u>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<u>REPAIRED REBAR</u> <u>SE BRAD ABOVE RING FINGER -</u> <u>CRACK OVERLAY COMING OFF AND</u> <u>UNDERLUNG REBAR EXPOSED.</u> <u>(T.R. 136, SEC. 4.2)</u>		<u>B</u>		<u>EXPOSED REBAR / SIGNS OF CORROSION</u> <u>PREVIOUSLY RECORDED</u>
Results Legend:				
NI - No Indications		RI - Recordable Indication	I.N. - Indication Number (if applicable)	
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input checked="" type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe): <u>SEE PICS 67, 68, 69, 70, 71, 72</u>				
VISUAL EXAMINER SIGNATURE: <u>PER CLIFF PETERS DATA SHEET ATTACH 5 DATED 12-4-04</u>		LEVEL: <u>IF</u>	DATE: <u>2-18-05</u>	
RESPONSIBLE ENGINEER SIG.: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: <u>REPAIR</u>				
ANII REVIEW SIGNATURE:				DATE:

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Revision 2
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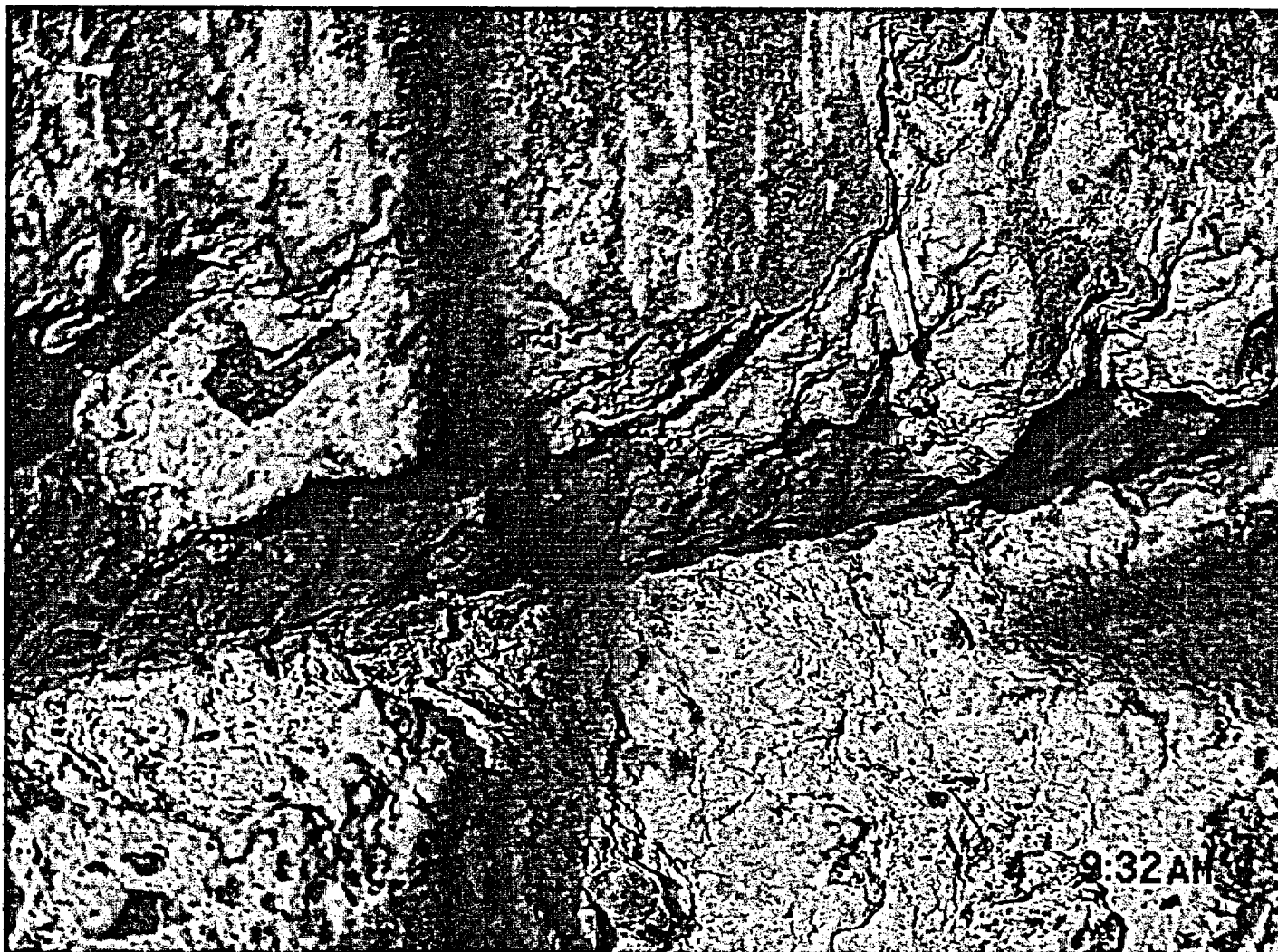
ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>T.M.I.</u> Unit: <u>1</u> Exam Data Sheet. No.: <u>5</u> Exam Date: <u>12-4-04</u>				
Work Order No(s):	Tendon Anchorage No.: <u>N/A</u> Tendon End: <input type="checkbox"/> Shop <input type="checkbox"/> Field			
Location: Tunnel, Gallery, Buttress: <u>RING GIRDER</u> Elevation: <u>436</u> Bearing Plate I.D.: <u>N/A</u>				
Bearing Plate I.D. <u>N/A</u> Anchor Head I.D. <u>N/A</u> Bushing I.D. <u>N/A</u>				
Examination Procedure <u>ER-AA-335-018</u> Rev. <u>2</u> Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote				
<input checked="" type="checkbox"/> As Found Exam <input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned				
Design Drawing(s) <u>TMEI-0014</u> Visual Aids: <u>NONE</u>				
M&TE Used: <u>LIGHT METER</u> UTC or Serial No. <u>0002552583</u> Cal. Due Date: <u>7-30-2005</u>				
Illumination Used <u>NONE</u> Illumination Verified: Date: <u>12-4-04</u> Time: <u>8:00 AM.</u>				
Special / Specific Instructions: <u>NEAR DISTANCE VISION CHART</u>				
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)
	NI	RI TYPE	I.N.	
<u>EXPOSED REBAR SE QUAD ABOVE RING GIRDER - GROUT OVERLAY COMING OFF & UNDERLING REBAR EXPOSED (T.R. 136, SEC 4.2)</u>		<u>O.</u>		<u>EXPOSED REBAR w/ SIGNS OF CORROSION</u>
Results Legend: NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)				
Recordable Indication Type Codes:				
A. Missing Wires	H. Cracks	O. Other (Explain)		
B. Missing Button Heads	I. Pitting			
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage			
D. Broken Wires	K. Uneven Shim Stack			
E. Active Corrosion	L. Excessive Shim Gaps			
F. Other Corrosion	M. Gasket Seating Surface Damage			
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections	<u>SEE PICS</u>		
Supplemental Information: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input checked="" type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe): <u>67,68,69,70,71,72</u>				
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u> LEVEL <u>II</u> DATE: <u>12-4-04</u>				
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u> DATE: <u>27 Feb 05</u>				
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: <u>REPAIR</u>				
ANII REVIEW SIGNATURE:		DATE:		

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PICTURE 67

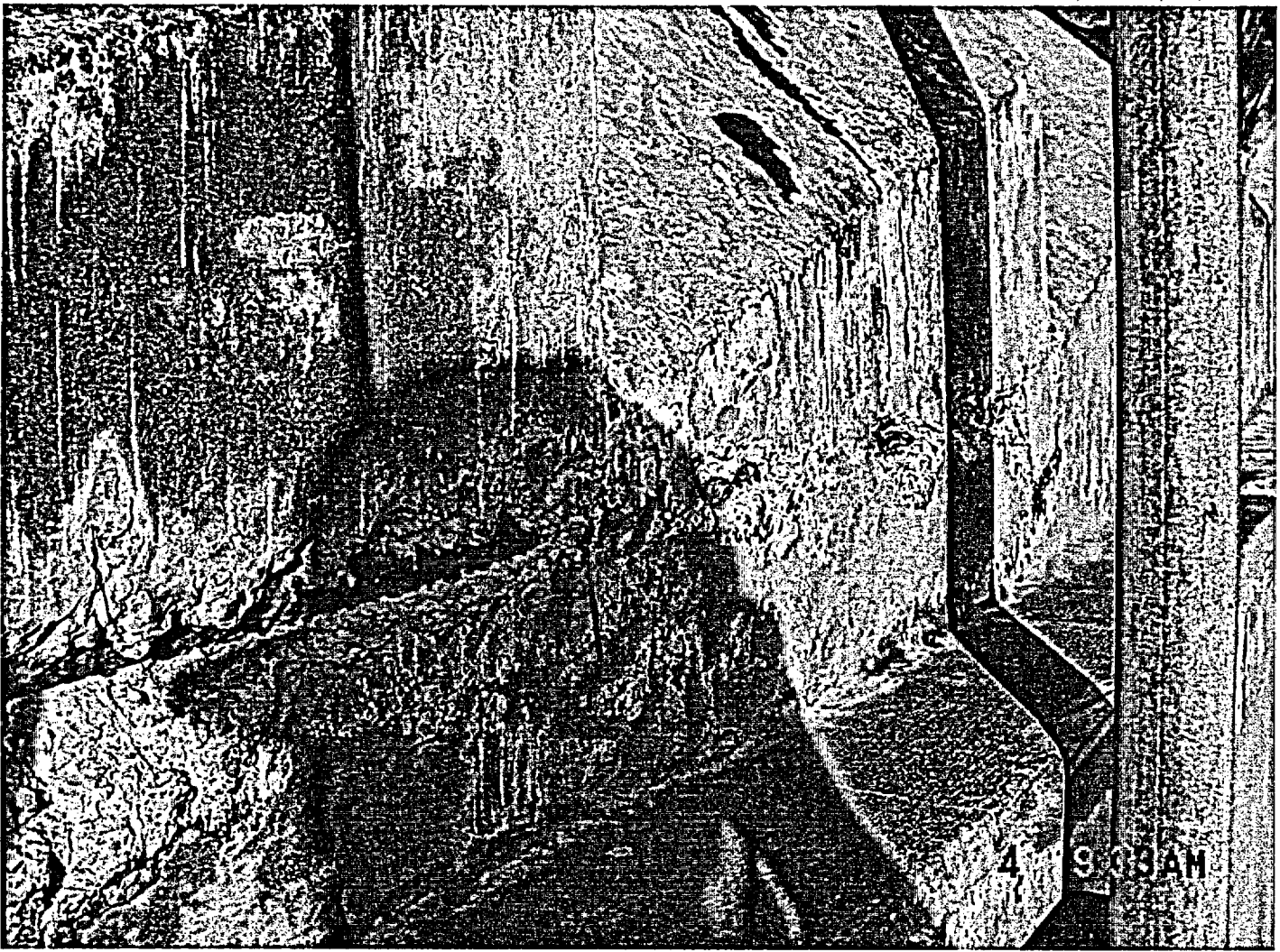
SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



A201/A459

PICTURE 68

SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



A202/A459

PICTURE 69

SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



PICTURE 70

SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



A264/A459

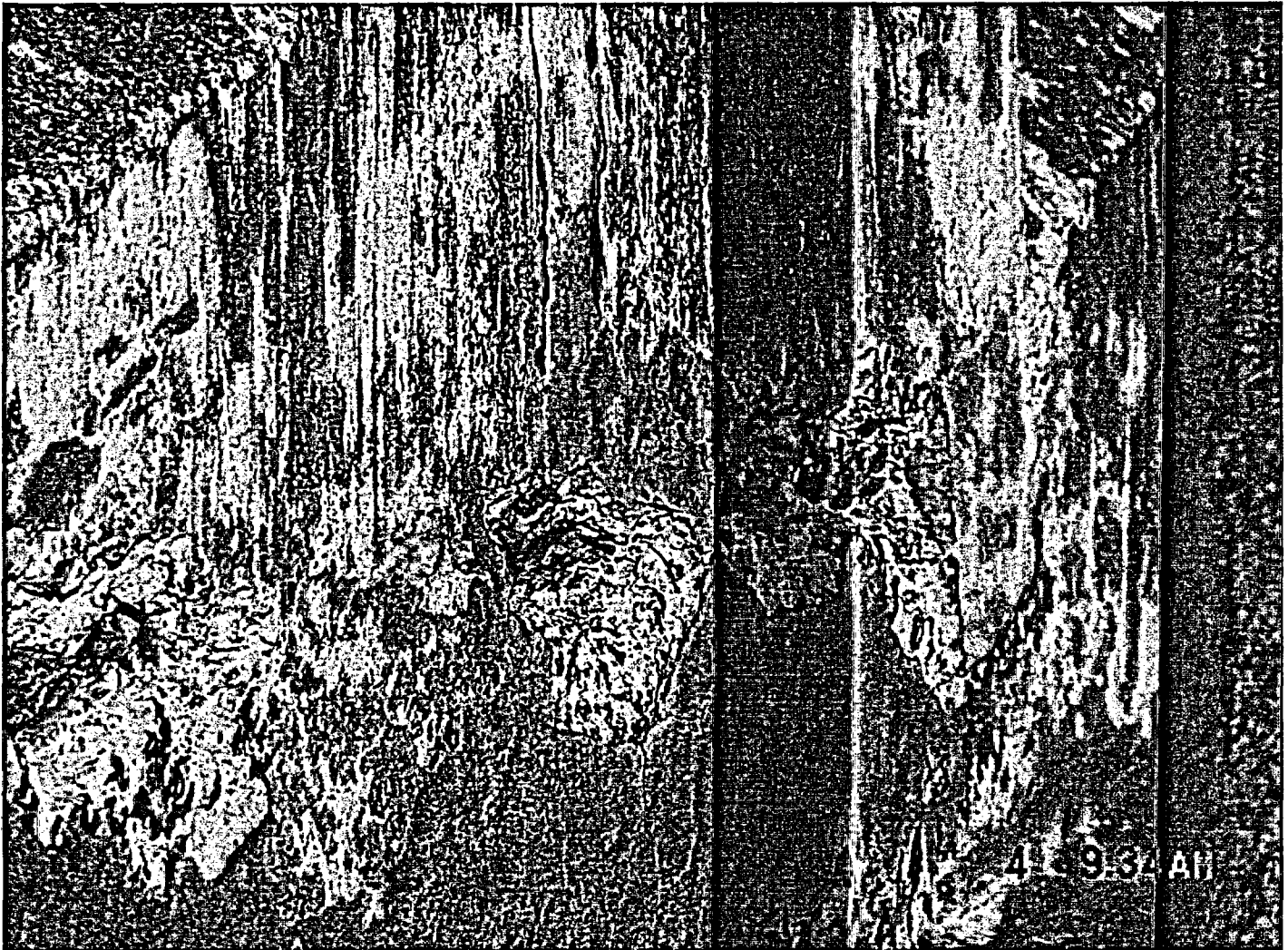
PICTURE 71

SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



PICTURE 72

SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
Page 1 of 1

Station: <i>TMI</i>		Unit: <i>/</i>		Exam Data Sheet. No.: <i>6</i>		Exam Date: <i>12-6-04</i>	
System:		Examination Procedure <i>ER-AA-335-018</i>		Rev. <i>2</i>		Work Order No(s): <i>R1801589</i>	
Location: Building: <i>CONTAINMENT</i>		Elev.:		Col.: <i>N/A</i>		Row: <i>N/A</i>	
Azimuth/Radius:		Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote		Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI-0016</i>		Visual Aids: <i>NONE</i>					
Surface: <i>ID</i> <input checked="" type="checkbox"/> <i>OD</i>		Surface / Components Coated: <input type="checkbox"/> YES <input type="checkbox"/> NO					
M&TE Used: <i>LIGHT METER</i>		UTC or Serial No. <i>0002552583</i>		Cal. Due Date: <i>7-30-05</i>			
Illumination Used <i>50000 CP FLASHLIGHT</i>		Illumination Verified:		Date: <i>12-6-04</i>		Time: <i>8:00 AM</i>	
Special / Specific Instructions: <i>NEAR DISTANCE TEST CHART</i>							
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)			
	NI	RI TYPE	I.N.				
<i>EXPOSED METAL/REBAR ADJACENT TO V89 IN TENDON GALLERY</i>		<i>B</i>		<i>EXPOSED METAL/REBAR SIGNS OF CORROSION SEE PICS. 73, 74, 75 PREVIOUSLY RECORDED</i>			
Results Legend:							
NI - No Indications		RI - Recordable Indication		I.N.- Indication Number (if applicable)			
Recordable Indication Type Codes:							
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting					
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration					
C. Exposed Metallic Items (Other)	I. Popouts , Voids, Honeycomb	O. Abrasion, Cavitation, Wear					
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes					
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence					
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)					
Supplemental Information : <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input checked="" type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe): <i>SEE PICS. 73, 74, 75</i>							
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL: <i>IF</i>		DATE: <i>2-17-05</i>			
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>					
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject							
Comments: _____							
ANII REVIEW SIGNATURE: _____						DATE: _____	

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Revision 2
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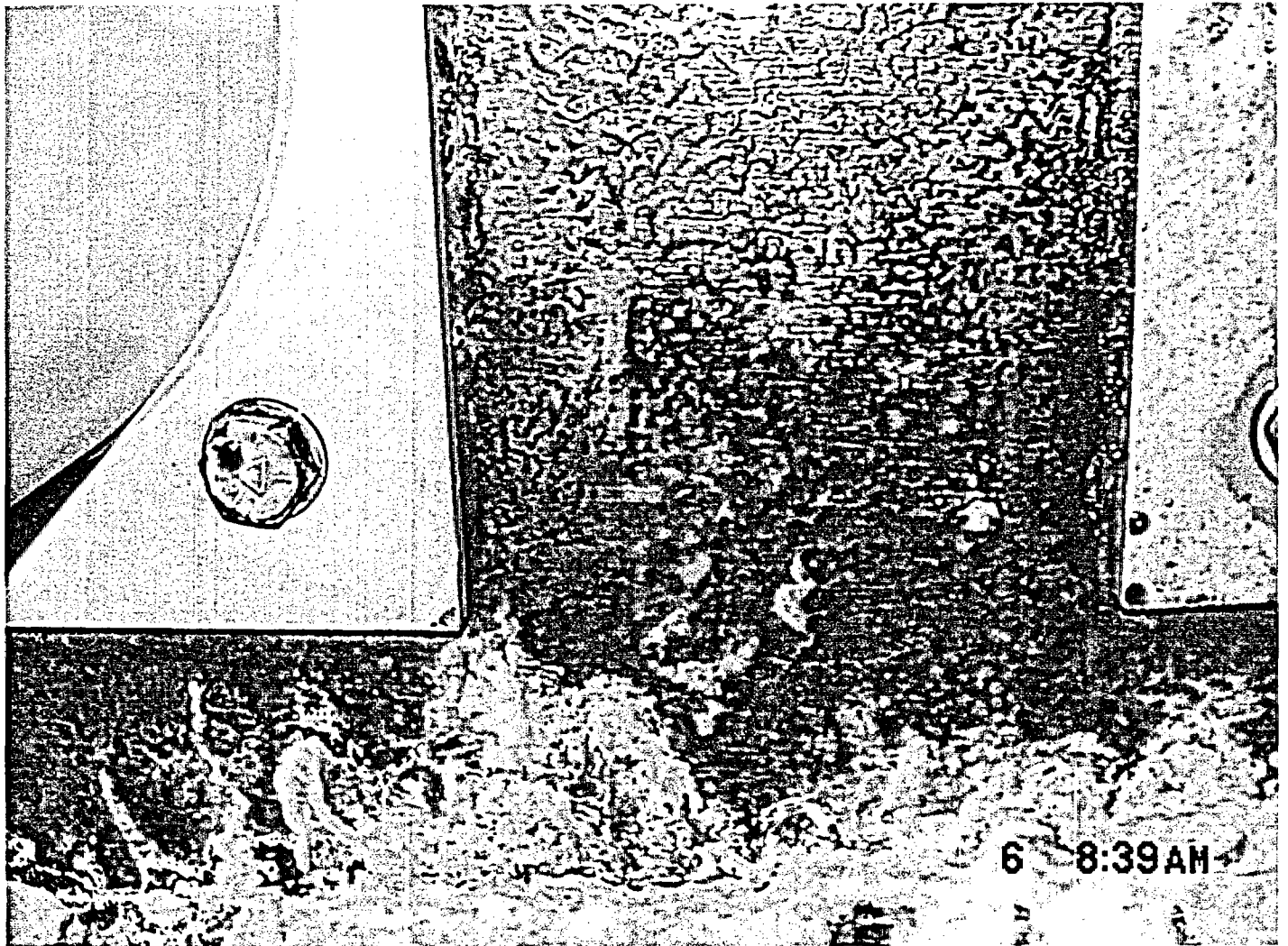
ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>T.M.I.</u>	Unit: <u>1</u>	Exam Data Sheet. No.: <u>6</u>	Exam Date: <u>12-6-04</u>	
Work Order No(s):	Tendon Anchorage No.: <u>V89</u>	Tendon End: <input type="checkbox"/> Shop <input checked="" type="checkbox"/> Field		
Location: Tunnel <u>Gallery</u> Buttress:	Elevation: <u>MAT</u>	Bearing Plate I.D.: <u>N/A</u>		
Bearing Plate I.D. <u>H/A</u>	Anchor Head I.D. <u>H/A</u>	Bushing I.D. <u>H/A</u>		
Examination Procedure <u>ER-AA-335-018</u>	Rev. <u>2</u>	Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote		
<input checked="" type="checkbox"/> As Found Exam <input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned				
Design Drawing(s) <u>TMI-6016</u>	Visual Aids: <u>HME</u>			
M&TE Used: <u>LIGHT METER</u>	UTC or Serial No. <u>0002552583</u>	Cal. Due Date: <u>7-30-05</u>		
Illumination Used <u>500,000 CP FLASHLIGHT</u>	Illumination Verified: <u>DATE: 12-6-04</u>	Time: <u>8:00 A.M.</u>		
Special / Specific Instructions: <u>HEAR DISTANCE TEST CHART</u>				
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)
	NI	RI TYPE	I.N.	
<u>EXPOSED METAL/REBAR ADJACENT TO V89 IN TENDON GALLERY</u>		<u>O.</u>		<u>EXPOSED METAL/REBAR, SIGNS OF CORROSION.</u>
Results Legend: NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)				
Recordable Indication Type Codes:				
A. Missing Wires	H. Cracks	O. Other (Explain)		
B. Missing Button Heads	I. Pitting			
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage			
D. Broken Wires	K. Uneven Shim Stack			
E. Active Corrosion	L. Excessive Shim Gaps			
F. Other Corrosion	M. Gasket Seating Surface Damage			
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections	<u>SEE PICS</u>		
Supplemental Information: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input checked="" type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe): <u>73, 74, 75</u>				
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u> LEVEL <u>II</u> DATE: <u>12-6-04</u>				
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u> DATE: <u>27 FEB 05</u>				
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____ DATE: _____				

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PICTURE 74

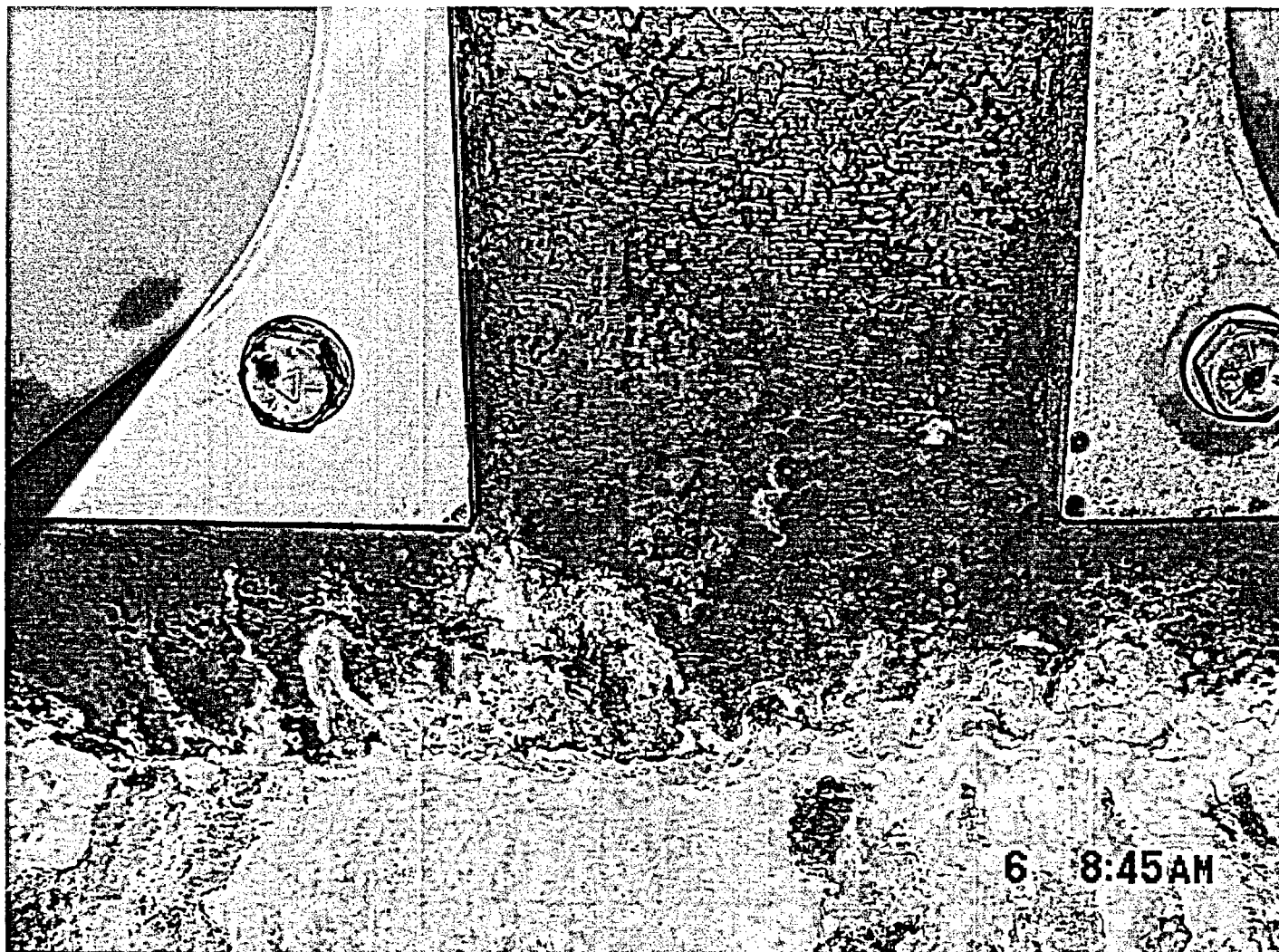
SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



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PICTURE 75

SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



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ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
Page 1 of 1

Station: <i>TMI</i>	Unit: <i>/</i>	Exam Data Sheet. No.: <i>7</i>	Exam Date: <i>12-6-04</i>	
System:	Examination Procedure <i>ER-AA-335-018</i>	Rev. <i>2</i>	Work Order No(s): <i>R1801589</i>	
Location: Building: <i>CONTAINMENT</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i> Azimuth/Radius:	
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C	Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>		
Design Drawing(s) <i>TMI-0016</i>	Visual Aids: <i>None</i>			
Surface: <i>ID</i> <input checked="" type="checkbox"/> <i>OD</i>	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
M&TE Used: <i>Light Meter</i>	UTC or Serial No. <i>0002552583</i>	Cal. Due Date: <i>7-30-05</i>		
illumination Used <i>500,000 W/P FLASHLIGHT</i>	illumination Verified:	Date: <i>12-6-04</i>	Time: <i>8:00 AM</i>	
Special / Specific Instructions: <i>near DANGER TEST CHART</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>EXPOSED METAL/REBAR ADJACENT TO V43 IN FERRON GALLERY</i>		<i>B</i>		<i>EXPOSED METAL/REBAR, SIGNS OF CORROSION PREVIOUSLY RECORDED</i>
Results Legend:				
NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)				
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts , Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information : <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input checked="" type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe): <i>SEE PICS 76, 77, 78</i>				
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL: <i>2</i>	DATE: <i>2-18-05</i>	
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____			DATE: _____	

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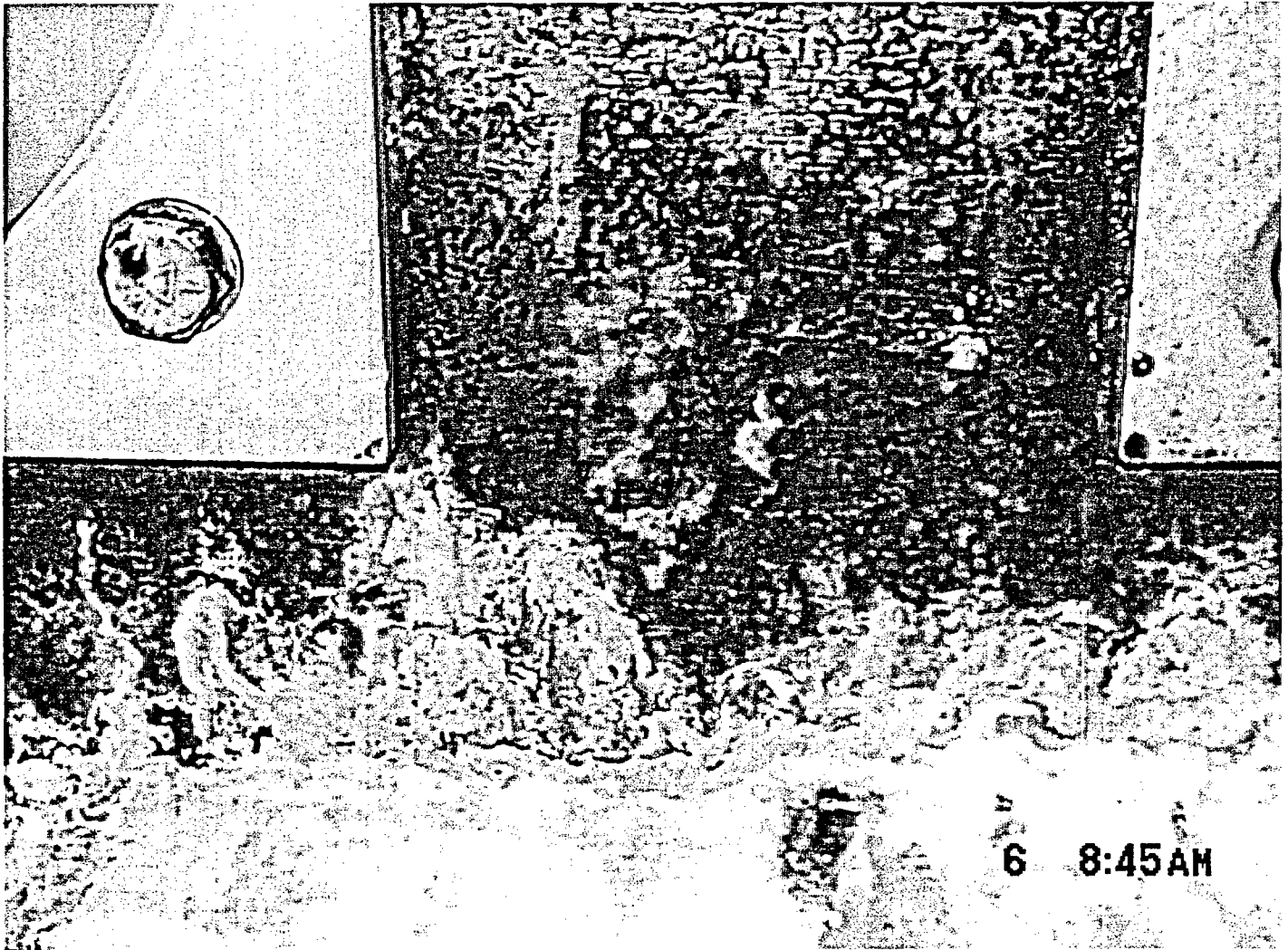
ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>T.M.I.</u>	Unit: <u>1</u>	Exam Data Sheet. No.: <u>7</u>	Exam Date: <u>12-6-04</u>	
Work Order No(s):	Tendon Anchorage No.: <u>V143</u>	Tendon End: <input type="checkbox"/> Shop <input checked="" type="checkbox"/> Field		
Location: Tunnel, <u>Gallery</u> , Buttress:	Elevation: <u>MAT</u>	Bearing Plate I.D.: <u>N/A</u>		
Bearing Plate I.D. <u>N/A</u>	Anchor Head I.D. <u>N/A</u>	Bushing I.D. <u>N/A</u>		
Examination Procedure <u>ER-AA-335-018</u>		Rev. <u>2</u>	Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam <input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned				
Design Drawing(s) <u>TMI-0016</u>		Visual Aids: <u>NONE</u>		
M&TE Used: <u>LIGHT METER</u>		UTC or Serial No. <u>0002552563</u>	Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>500,000 c/p FLASHLIGHT</u>		Illumination Verified: <u>DATE: 12-6-04</u>	Time: <u>8:00 A.M.</u>	
Special / Specific Instructions: <u>NEAR DISTANCE TEST CHART</u>				
Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)
	NI	RI TYPE	I.N.	
<u>EXPOSED METAL/REBAR ADJACENT TO V143 IN TENDON GALLERY</u>		<u>0.</u>		<u>EXPOSED METAL/REBAR, SIGNS OF CORROSION.</u>
Results Legend: NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)				
Recordable Indication Type Codes:				
A. Missing Wires	H. Cracks	O. Other (Explain)		
B. Missing Button Heads	I. Pitting			
C. Protruding / Unseated Wires	J. Nicks, Gouges, Mechanical Damage			
D. Broken Wires	K. Uneven Shim Stack			
E. Active Corrosion	L. Excessive Shim Gaps			
F. Other Corrosion	M. Gasket Seating Surface Damage			
G. Evidence Of Free Water (Quantify)	N. Surface Discontinuities, Deflections	<u>SEE PIC'S</u>		
Supplemental Information : <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input checked="" type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe): <u>76, 77, 78</u>				
VISUAL EXAMINER SIGNATURE: <u>[Signature]</u>		LEVEL <u>II</u>	DATE: <u>12-6-04</u>	
RESPONSIBLE ENGINEER SIGNATURE: <u>[Signature]</u>		DATE: <u>27 FEB 05</u>		
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____				DATE: _____

A272/A459

PICTURE 76

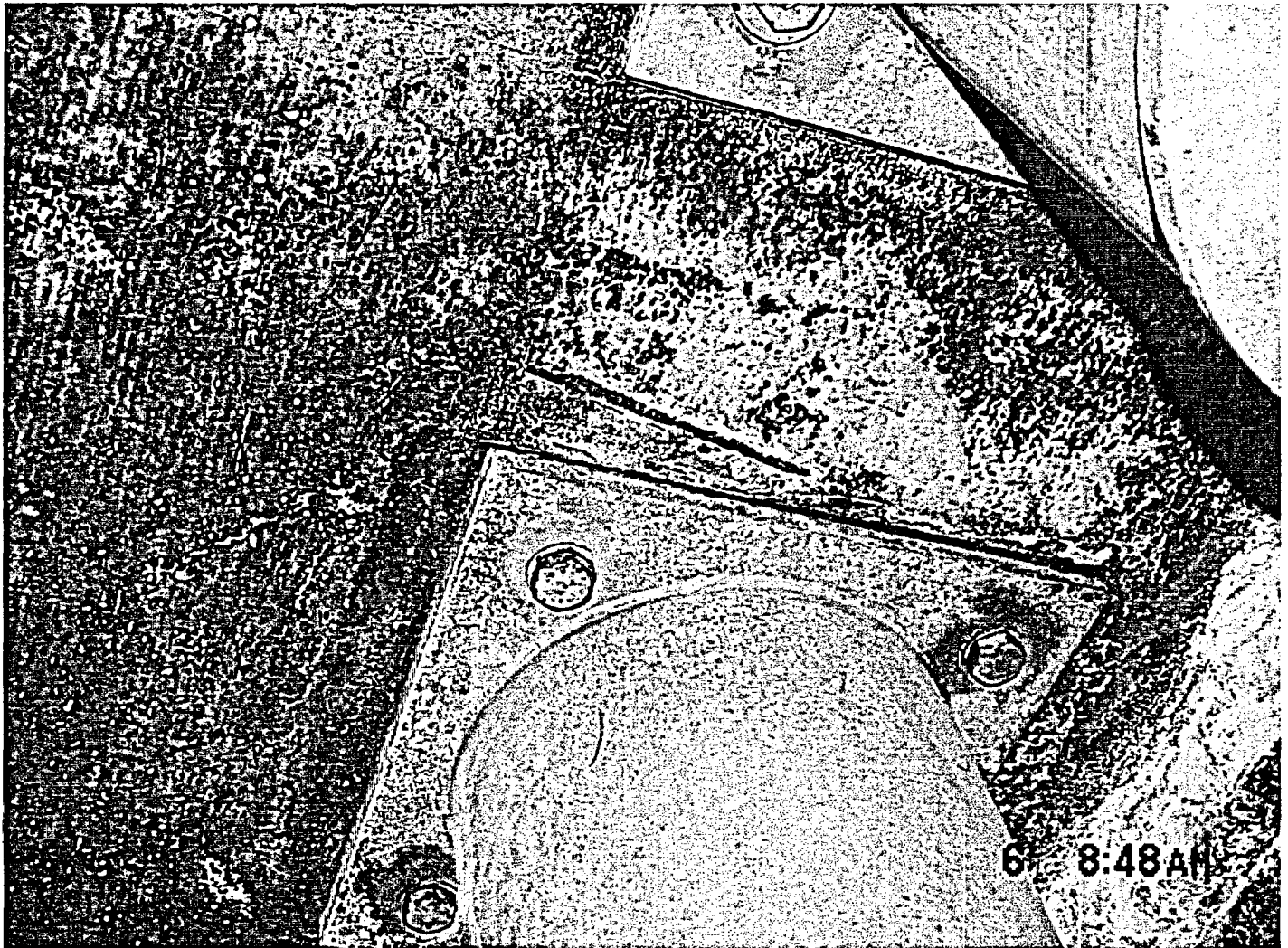
SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



A273/A459

PICTURE 77

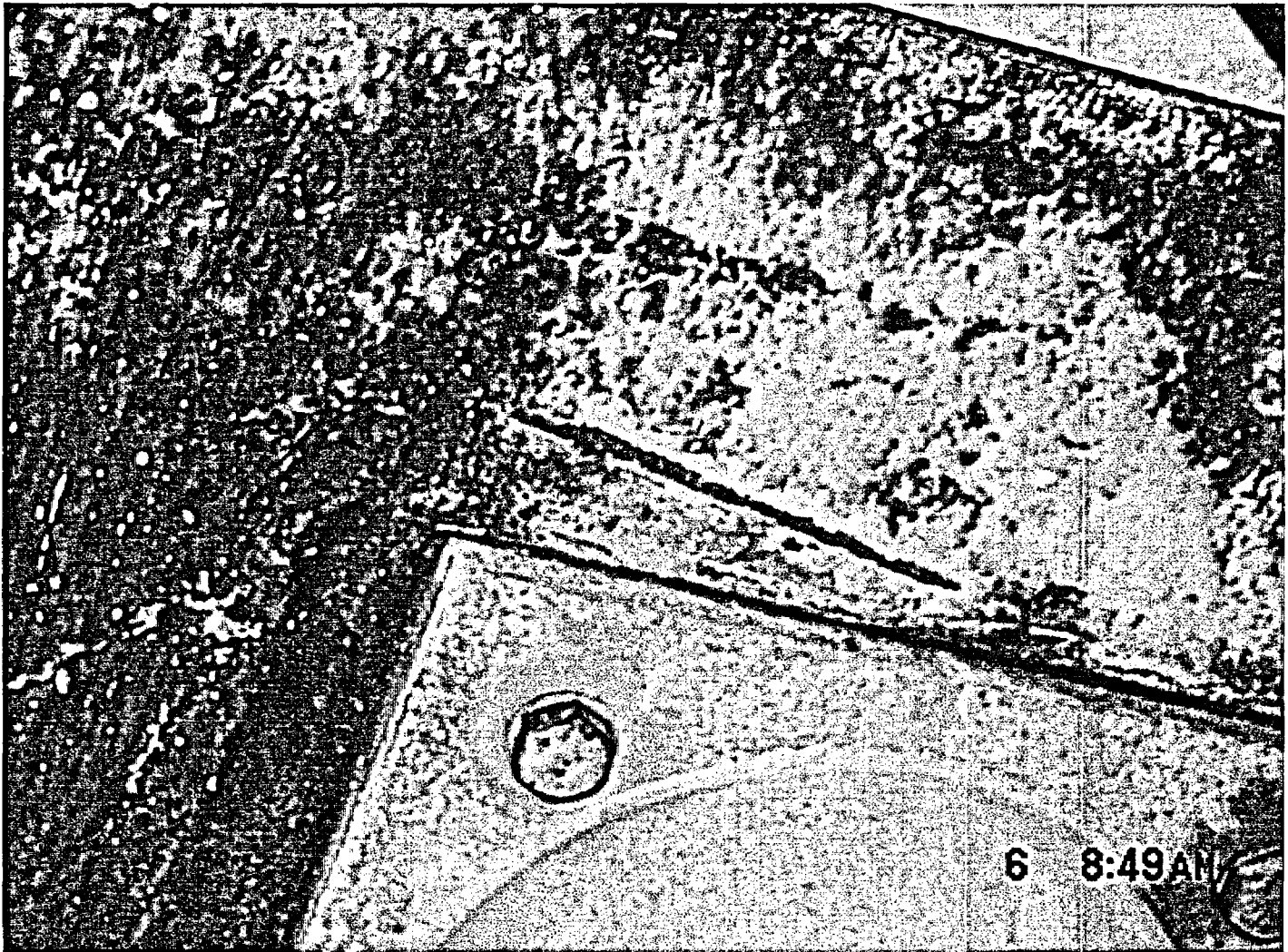
SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



A274/A459

PICTURE 78

SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



A275/A459

ER-AA-335-018
Revision 2
Page 24 of 24

ATTACHMENT 6
ASME IWL (Class CC) Containment Concrete Visual Examination Record
Page 1 of 1

Station: <i>TMI</i>	Unit: <i>1</i>	Exam Data Sheet No.: <i>8</i>	Exam Date: <i>12-6-04</i>	
System: Examination Procedure <i>ER-AA-335-018</i>		Rev. <i>2</i>	Work Order No(s): <i>21801584</i>	
Location: Building: <i>CONTAINMENT</i>	Elev.:	Col.: <i>N/A</i>	Row: <i>N/A</i> Azimuth/Radius:	
Exam Type: <input type="checkbox"/> General <input checked="" type="checkbox"/> VT-1C <input type="checkbox"/> VT-3C		Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	Matl. Type: <i>CONCRETE</i>	
Design Drawing(s) <i>TMI 1-0016</i>		Visual Aids: <i>None</i>		
Surface: ID <i>OD</i>	Surface / Components Coated: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
M&TE Used: <i>LIGHT METER</i>	UTC or Serial No. <i>000233-2583</i>		Cal. Due Date: <i>7-30-05</i>	
Illumination Used: <i>500,000 LUX FLASHLIGHT</i>		Illumination Verified: <i>12-6-04</i>	Time: <i>8:00 AM</i>	
Special / Specific Instructions: <i>None</i>				
Component / Item Number and Description (e.g. EIN, EID, etc.)	RESULTS			Explanation / Notes (As a minimum, Record Location and Size of Recordable Indications as applicable)
	NI	RI TYPE	I.N.	
<i>EXPOSED METAL/REBAR ADJACENT TO V149 IN TENDON GALLERY</i>		<i>B</i>		<i>EXPOSED METAL/REBAR, HAS BEEN COATED WITH A WHITE COATING MATERIAL. PREVIOUSLY RECORDED</i>
Results Legend:				
NI - No Indications RI - Recordable Indication I.N. - Indication Number (if applicable)				
Recordable Indication Type Codes:				
A. Cracks (Characterize and Size)	G. Settlements Or Deflections	M. Scaling / Dusting		
B. Exposed Reinforcing Steel	H. Degraded Patches or Repairs	N. Coating Deterioration		
C. Exposed Metallic Items (Other)	I. Popouts, Voids, Honeycomb	O. Abrasion, Cavitation, Wear		
D. Evidence Of Grease Leakage	J. Spalls	P. Air Voids / Bug Holes		
E. Evidence Of Moisture	K. Cold Joint Lines	Q. Efflorescence		
F. Leaching Or Chemical Attack	L. Corrosion Staining	R. Other (Explain)		
Supplemental Information: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sketch <input checked="" type="checkbox"/> Photo <input type="checkbox"/> Video <input type="checkbox"/> Other (Describe): <i>SEE PICS 79, 80, 81, 82</i>				
VISUAL EXAMINER SIGNATURE: <i>[Signature]</i>		LEVEL: <i>II</i>	DATE: <i>2/18/05</i>	
RESPONSIBLE ENGINEER SIG.: <i>[Signature]</i>		DATE: <i>27 FEB 05</i>		
FINAL DISPOSITION BY RESPONSIBLE ENGINEER <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject				
Comments: _____				
ANII REVIEW SIGNATURE: _____			DATE: _____	

A270/A459

ER-AA-335-018
Revision 2
Page 23 of 24

ATTACHMENT 5
ASME IWL (Class CC) Containment Tendon Anchorage VT-1 Visual Exam Record
Page 1 of 1

Station: <u>T.M.I.</u>	Unit: <u>1</u>	Exam Data Sheet. No.: <u>8</u>	Exam Date: <u>12-6-04</u>
Work Order No(s):	Tendon Anchorage No.: <u>V149</u>	Tendon End: <input type="checkbox"/> Shop <input checked="" type="checkbox"/> Field	
Location: Tunnel <u>(Gallery)</u> Buttress:	Elevation: <u>MAT</u>	Bearing Plate I.D.: <u>N/A</u>	
Bearing Plate I.D. <u>N/A</u>	Anchor Head I.D. <u>N/A</u>	Bushing I.D. <u>N/A</u>	
Examination Procedure <u>ER-AA-335-018</u>	Rev. <u>2</u>	Type Of Exam: <input checked="" type="checkbox"/> Direct <input type="checkbox"/> Remote	
<input checked="" type="checkbox"/> As Found Exam <input type="checkbox"/> As Left Exam Following Retensioning Of Tendons Which Have Been Detentioned			
Design Drawing(s) <u>TMI-0016</u>	Visual Aids: <u>None</u>		
M&TE Used: <u>LIGHT METER</u>	UTC or Serial No. <u>0002552583</u>	Cal. Due Date: <u>7-30-05</u>	
Illumination Used <u>500,000 c/p FLASHLIGHT</u>	Illumination Verified: <u>Date: 12-6-04</u>	Time: <u>8:00 AM.</u>	
Special / Specific Instructions:			

Component / Item Number and Description	RESULTS			Explanation / Notes (Sketch Shall Be Attached Depicting Location Of All Missing, Protruding, Unseated Wires)
	NI	RI TYPE	I.N.	
<u>EXPOSED METAL/REBAR ADJACENT TO V149 IN TENDON GALLERY</u>		<u>O.</u>		<u>EXPOSED METAL/REBAR, THAT HAS BEEN COATED WITH A WHITE COATING MATERIAL.</u>

Results Legend:
NI - No Indications RI - Recordable Indication I.N.- Indication Number (if applicable)

- Recordable Indication Type Codes:
- | | | |
|--------------------------------------|---|-----------------------|
| A. Missing Wires | H. Cracks | O. Other (Explain) |
| B. Missing Button Heads | I. Pitting | |
| C. Protruding / Unseated Wires | J. Nicks, Gouges, Mechanical Damage | |
| D. Broken Wires | K. Uneven Shim Stack | |
| E. Active Corrosion | L. Excessive Shim Gaps | |
| F. Other Corrosion | M. Gasket Seating Surface Damage | <u>SEE PICS</u> |
| G. Evidence Of Free Water (Quantify) | N. Surface Discontinuities, Deflections | <u>79, 80, 81, 82</u> |

Supplemental Information: Yes No Sketch Photo Video Other (Describe): 73, 74, 75

VISUAL EXAMINER SIGNATURE: [Signature] LEVEL II DATE: 12-6-04

RESPONSIBLE ENGINEER SIGNATURE: [Signature] DATE: 27 FEB 05

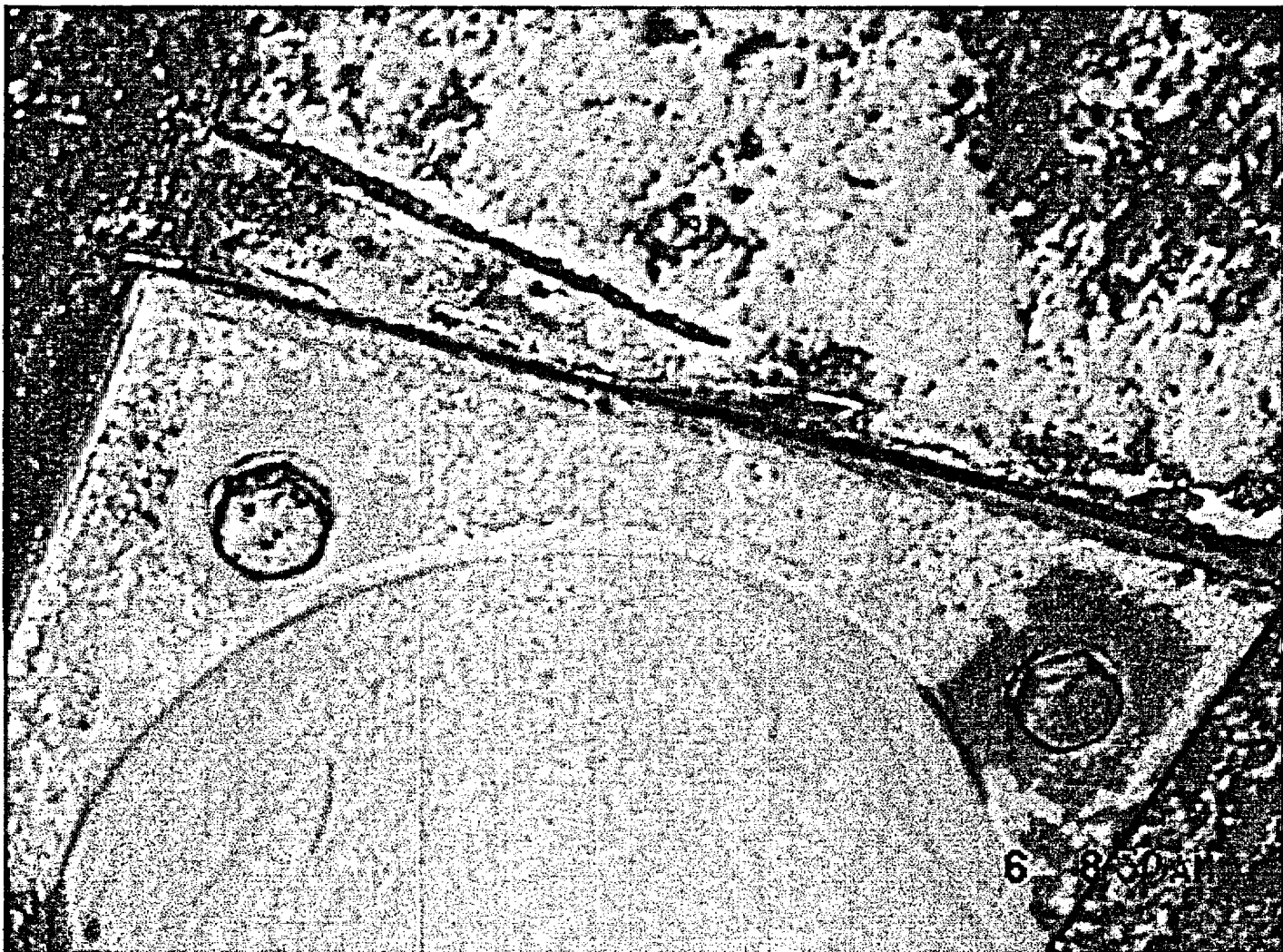
FINAL DISPOSITION BY RESPONSIBLE INDIVIDUAL Accept Reject
Comments: _____

ANII REVIEW SIGNATURE: _____ DATE: _____

A277/A459

PICTURE 79

SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



A278/A459

PICTURE 80

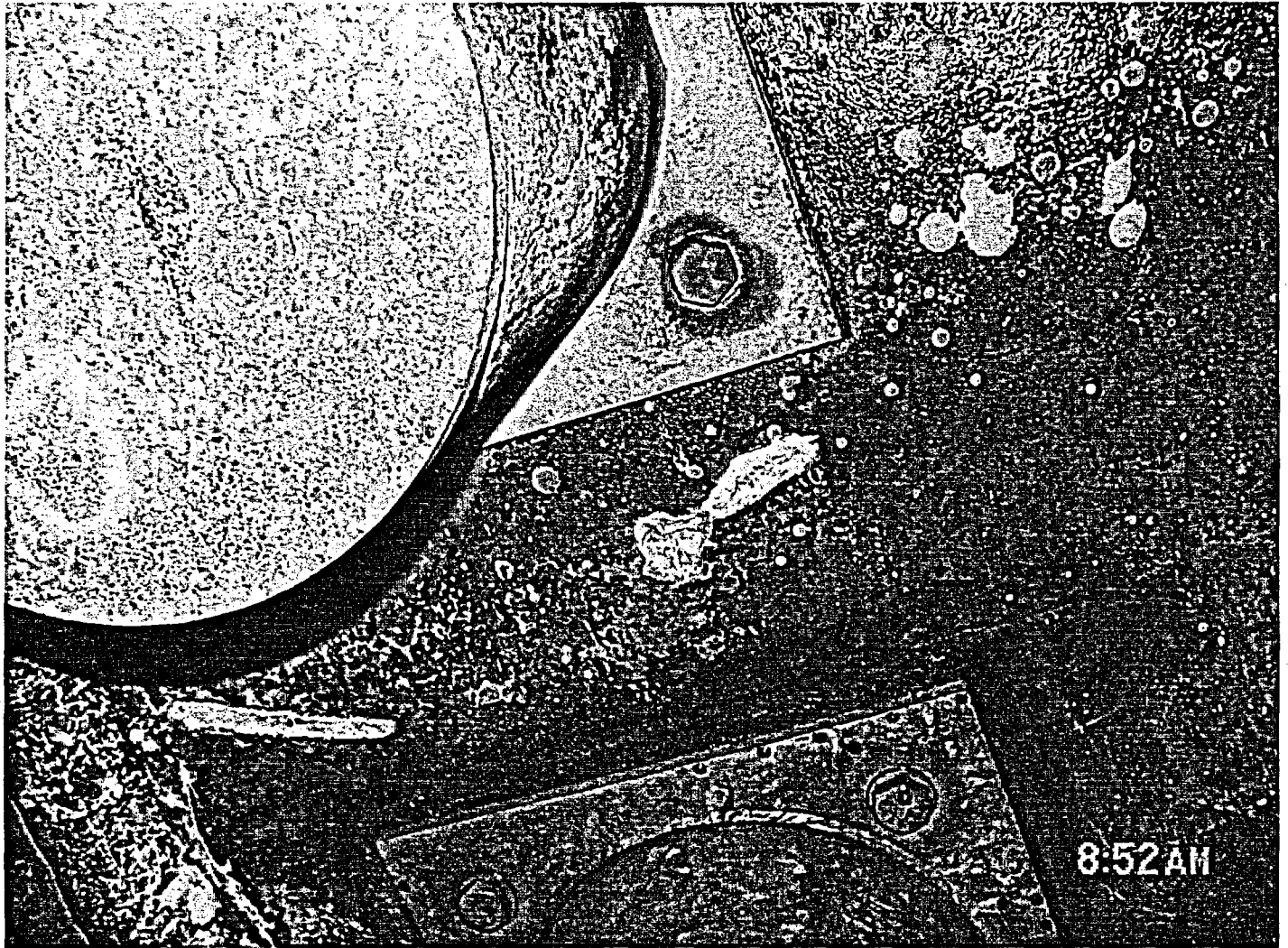
SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



A279/A459

PICTURE 81

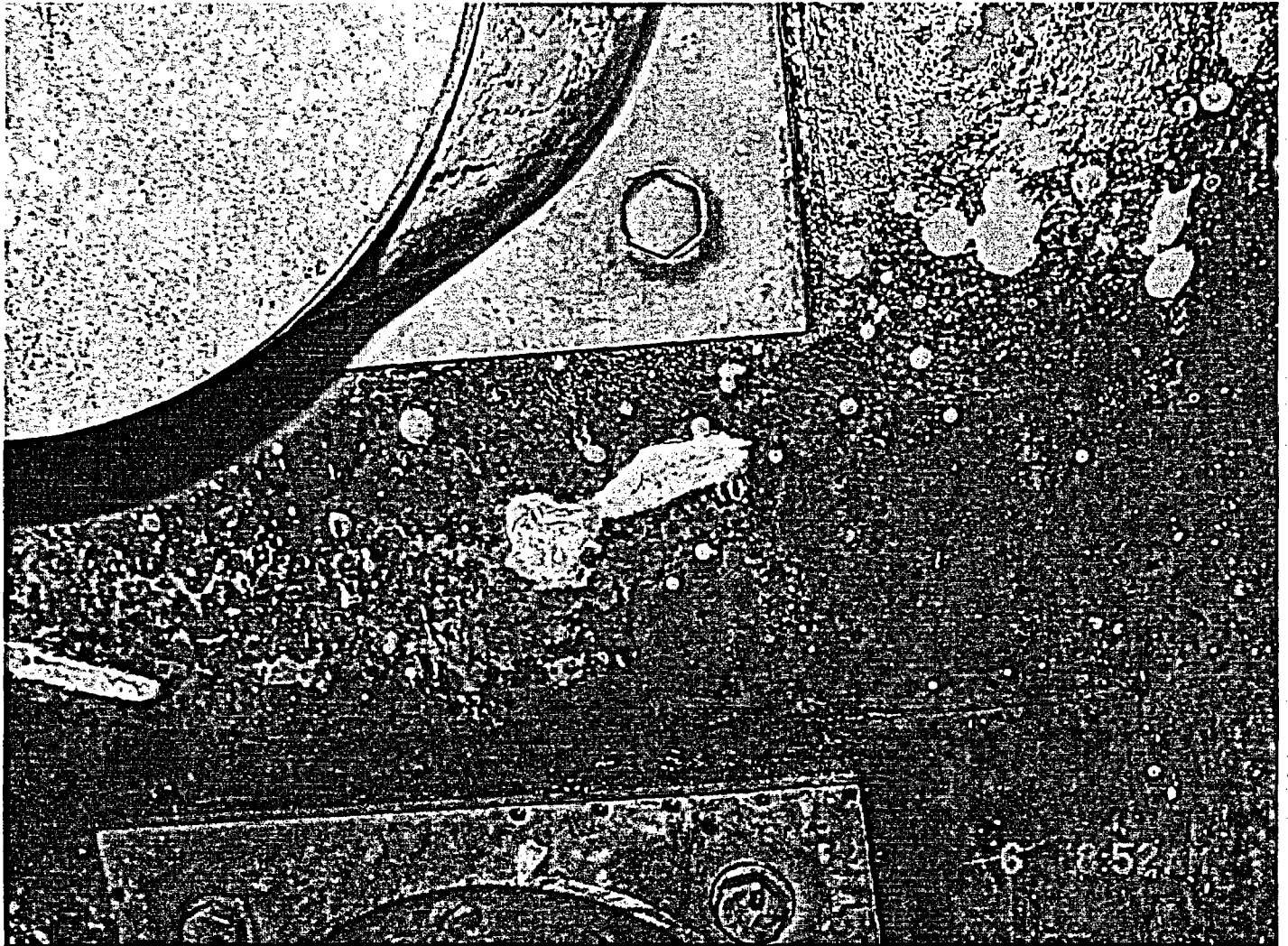
SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



A200/A459

PICTURE 82

SUPPLEMENTAL INFORMATION FOR PROCEDURE ER-AA-335-018 ATTACHMENT 6



A281/A459

DATA SHEET 8
Minor, Major, and Pitch Diameter Checks - Anchorage and Ram Adapter

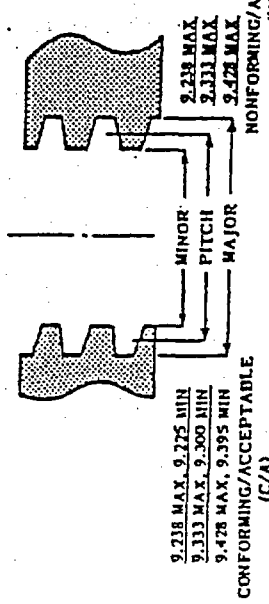
IDENTITY OF ANCHORAGE OR ADAPTOR	DIA.	MAJOR O.D. AND MINOR I.D. DIAMETER CHECK				MINOR O.D. AND MAJOR I.D. DIAMETER CHECK				PITCH DIAMETER CHECK		TOTAL	INSP. BY CONTR. FOREMAN	VERIFY BY COGNIZANT QV INSP.	
		3RD THREAD	6TH THREAD	9TH THREAD	AVERAGE DIA.	C/A NC/A NA	3RD THREAD	9TH THREAD	AVERAGE DIA.	C/A NC/A NA	PITCH DIA.				C/A NC/A NA
1. V32/1034	O.D.	366	367	370	9.368	X	463	462	462	9.193	X	547	262	BAC	X09-31-04
1. V53/1087	O.D.	364	365	372	9.369	X	450	452	452	9.180	X	555	276	BAC	X09-31-04
1. V66/1097	O.D.	368	371	371	9.370	X	459	459	461	9.187	X	548	265	BAC	X09-31-04
1. V140/1000	O.D.	366	370	372	9.369	X	456	457	460	9.186	X	537	254	BAC	X09-31-04
1. D213/547	O.D.	364	363	365	9.363	X	472	474	474	N/A	X	530	249	BAC	X09-31-04
1. D213/600	O.D.	362	365	367	9.365	X	455	453	463	9.187	X	538	235	BAC	X09-31-04
1. D225/1157	O.D.	365	369	371	9.369	X	457	457	462	9.187	X	542	243	BAC	X09-31-04
1. D225/684	O.D.	369	371	373	9.371	X	452	452	457	9.184	X	543	239	BAC	X09-31-04
1. A35-19/532	O.D.	362	367	369	9.365	X	462	462	461	9.191	X	531	244	BAC	X09-31-04
1. A35-19/524	O.D.	369	371	372	9.371	X	453	453	457	9.184	X	545	240	BAC	X09-31-04

CALIBRATION CONTROLS:

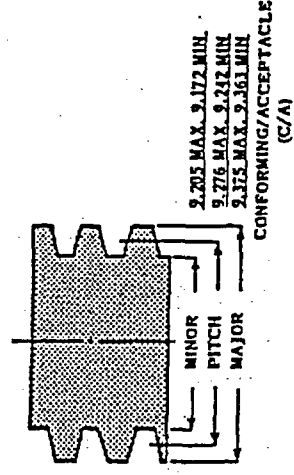
O.D. MICROMETER NO. 02.62 CAL. DATE 8-3-05
 I.D. MICROMETER NO. N/A CAL. DATE N/A
 MICROMETER NO. N/A CAL. DATE N/A
 SHIM SIZE 0.032" NO. 5089/0 CAL. DATE 8-3-05
 WIRE SIZE 0.1475" NO. 3674 CAL. DATE 8-3-05
 WIRE SIZE 0.120" NO. 8124 CAL. DATE 8-3-05

NOTE: NOT ACCEPTABLE (NA)

RAM ADAPTOR (I.D.)



ANCHORAGE (O.D.)



COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY:

DATE:

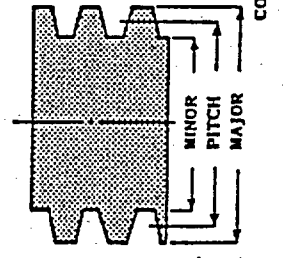
DATA SHEET 8
Minor, Major, and Pitch Diameter Checks - Anchorage and Ram Adaptor

IDENTITY OF ANCHORAGE OR ADAPTOR	MAJOR O.D. AND MINOR I.D. DIAMETER CHECK				MINOR O.D. AND MAJOR I.D. DIAMETER CHECK				PITCH DIAMETER CHECK		TOTAL		INSPECTION BY CONTR. FOREMAN	VERIFICATION BY COGNIZANT					
	3RD THREAD	6TH THREAD	9TH THREAD	AVERAGE DIA.	C/A	NC/A	NA	3RD THREAD	9TH THREAD	AVERAGE DIA.	C/A	NC/A			NA	PITCH DIA.	C/A	NC/A	NA
1 H024/924	325	371	372	9.370	X			441	449	9.173	X			527	X			BAC	2/15/04
1 H024/924	316	369	370	9.369	X			442	448	9.173	X			528	X			BAC	2/15/04
1 H025/925	361	372	375	9.373	X			457	461	9.184	X			554	X			BAC	2/11/04
1 H025/925	364	372	377	9.370	X			457	465	9.184	X			554	X			BAC	2/11/04
1 D230/923	371	375	378	9.374	X			459	464	9.185	X			561	X			BAC	2/11/04
1 D230/924	370	375	375	9.373	X			458	463	9.175	X			528	X			BAC	2/11/04
1 H0216/926	364	375	376	9.370	X			456	460	9.180	X			545	X			BAC	2/11/04
1 H0216/926	367	376	376	9.372	X			460	466	9.177	X			553	X			BAC	2/11/04
1 H13-11/923	366	372	377	9.372	X			462	465	9.180	X			541	X			BAC	2/11/04
1 H13-11/923	360	368	380	9.368	X			457	468	9.172	X			526	X			BAC	2/11/04

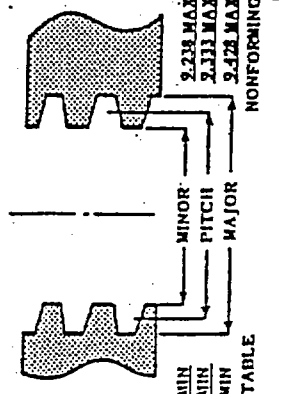
CALIBRATION CONTROLS:
 O.D. MICROMETER NO. 02022 CAL. DATE 2-3-05
 I.D. MICROMETER NO. 214 CAL. DATE 2/4
 MICROMETER NO. 214 CAL. DATE 2/4
 SHIM SIZE 0.032" NO. 50812/0 CAL. DATE 2-3-05
 WIRE SIZE 0.14756" NO. 3874 CAL. DATE 2-3-05
 WIRE SIZE 0.120" NO. 14464 CAL. DATE 2-2-05

NOTE: NOT ACCEPTABLE (NA)

ANCHORAGE (O.D.)



RAM ADAPTOR (I.D.)



COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY:

DATE:

9.238 MAX. 9.275 MIN
9.333 MAX. 9.300 MIN
9.428 MAX. 9.395 MIN
CONFORMING/ACCEPTABLE (C/A)

2.238 MAX
2.333 MAX
2.428 MAX
NONFORMING/ACCEPTABLE (NC/A)

9.205 MAX. 9.172 MIN
9.276 MAX. 9.232 MIN
9.375 MAX. 9.361 MIN
CONFORMING/ACCEPTABLE (C/A)

A282/A 459

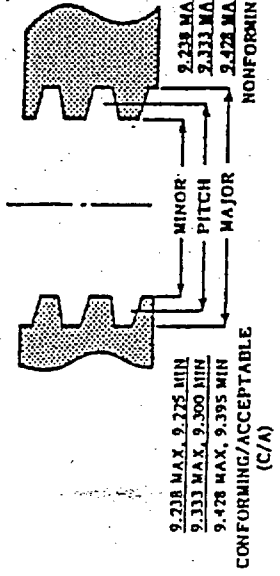
DATA SHEET 8
Minor, Major, and Pitch Diameter Checks - Anchorage and Ram Adapter

IDENTITY OF ANCHORAGE OR ADAPTER	MAJOR O.D. AND MINOR I.D. DIAMETER CHECK					MINOR O.D. AND MAJOR I.D. DIAMETER CHECK					PITCH DIAMETER CHECK		TOTAL		INSP. BY CONTR. FOREMAN	VERIF. BY COGNIZANT QV/INSP.		
	3RD THREAD	6TH THREAD	9TH THREAD	AVERAGE DIA.	C/A NC/A NA	3RD THREAD	9TH THREAD	AVERAGE DIA.	C/A NC/A NA	PITCH DIA.	C/A NC/A NA	C/A NC/A NA	C/A NC/A NA					
1 V137	366	370	373	375	376	361	360	365	367	9.191	X	947	942	X			PK	5/11-17-04
1 V141	366	372	373	376	375	356	358	361	361	9.187	X	564	563	X			PK	5/11-17-04
1										N/A								
1										N/A								
1										N/A								
1										N/A								
1										N/A								
1										N/A								
1										N/A								
1										N/A								
1										N/A								
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1										N/A								

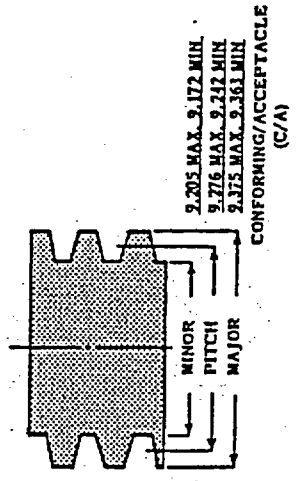
CALIBRATION CONTROLS:
 O.D. MICROMETER NO. 0.005 CAL. DATE 2-3-05
 I.D. MICROMETER NO. N/A CAL. DATE N/A
 MICROMETER NO. N/A CAL. DATE N/A
 SHIM SIZE 0.032 NO. 308212 CAL. DATE 2-3-05
 WIRE SIZE 0.1475 NO. 3274 CAL. DATE 2-3-05
 WIRE SIZE 0.120 NO. Black CAL. DATE 2-2-05

NOTE: NOT ACCEPTABLE (NA)

RAM ADAPTOR (I.D.)



ANCHORAGE (O.D.)



COGNIZANT MECH/STRUCT ENGINEER
 REVIEWED BY: _____

DATE: _____

A284/A459

ANCHORAGE THREAD MEASUREMENT - PROCEDURE SQ 7.1

PSC

Precision Surveillance Corporation

DATA SHEET 7.1 - INSPECTION DOCUMENTATION

PROJECT THREE MILE ISLAND SURVEILLANCE NO. 30TH YR. YEAR 04

TENDON NO. V32 TENDON END/BUTTRESS NO. SHOP/TOP UNIT 1

ANCHORAGE I.D. 1050 ADAPTOR I.D. D4
 BUSHING I.D. 1036

1. EQUIPMENT		MICROMETER		WIRE		SHIMS	
THREAD	IDENT.	RECAL DATE	NO.	RECAL DATE	NO.	RECAL DATE	
EXT. MAJOR	QC52	2-3-05					
EXT. PITCH	QC52	2-3-05	SET 4	8-3-05	SUR 9	2-3-05	
EXT. MINOR	QC52	2-3-05	BLACK	2-3-05	SUR 10	2-3-05	
INT. MAJOR	N/A	N/A					
INT. MINOR	N/A	N/A					

2. MEASUREMENTS		THREAD			AVG.	WIRE CONST.	WIRE DIAM.	SHIM SIZE	AVG DIAM.
THREAD	READ	3RD	6TH	9TH					
EXT. MAJOR	1	9.366	9.368	9.370					9.368
EXT. MAJOR	2	9.366	9.368	9.370					9.368
EXT. PITCH ¹	1	9.547		9.547					
PITCH	2	9.547		9.547	9.547	.253		.032	9.262
EXT. MINOR ²	1	9.462		9.468			(.120)		
MINOR	2	9.462		9.468	9.465		.240	.032	9.193
INT. MAJOR	1	N/A		N/A					
INT. MAJOR	2	N/A		N/A					N/A
INT. MINOR	1	N/A	N/A	N/A					N/A
INT. MINOR	2	N/A	N/A	N/A					N/A
INT. PITCH	GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	
	NO-GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	

NOTES: 1. EXT. PITCH DIAM. = AVG. - WIRE CONSTANT - SHIM SIZE
 2. EXT. MINOR DIAM. = AVG. - (2 x WIRE DIAM.) - SHIM SIZE

3. DISPOSITION

	TRIAL 1	TRIAL 2	TRIAL 3	TRIAL 4
ADAPTOR MARK	D4			
MIN. MINOR DIAM. FROM ADAPTOR TABLE	9.679			
ACCEPTABLE? (YES, NO)	YES			

Q.C. Signoff [Signature] Date 8-31-04

Q.C. Review [Signature] Level II Date 1-27-05

Title LEAS QC. LEVEL II

A285/A459

ANCHORAGE THREAD MEASUREMENT - PROCEDURE SQ 7.1

PSC

Precision
Surveillance
Corporation

DATA SHEET 7.1 - INSPECTION DOCUMENTATION

PROJECT THREE MILE ISLAND SURVEILLANCE NO. 30TH YR. YEAR 04

TENDON NO. V53 TENDON END/BUTTRESS NO. SKOP/TOP UNIT 1

ANCHORAGE I.D. 1047 ADAPTOR I.D. D4
BUSHING I.D. 1087

1. EQUIPMENT	MICROMETER		WIRE		SHIMS	
	THREAD	IDENT.	RECAL DATE	NO.	RECAL DATE	NO.
EXT. MAJOR	QC52	2-3-05				
EXT. PITCH	QC52	2-3-05	SET 4	8-3-05	SUR 9	2-3-05
EXT. MINOR	QC52	2-3-05	BLACK	2-3-05	SUR 10	2-3-05
INT. MAJOR	N/A	N/A				
INT. MINOR	N/A	N/A				

2. MEASUREMENTS		THREAD			AVG.	WIRE CONST.	WIRE DIAM.	SHIM SIZE	AVG DIAM.
THREAD	READ	3RD	6TH	9TH					
EXT. MAJOR	1	9.364	9.368	9.372					
	2	9.364	9.370	9.372					
EXT. PITCH ¹	1	9.552			9.555	.253		.032	9.270
	2	9.554							
EXT. MINOR ²	1	9.450			9.452		(.120)	.032	9.180
	2	9.452							
INT. MAJOR	1	N/A							
	2	N/A							
INT. MINOR	1	N/A	N/A	N/A					
	2	N/A	N/A	N/A					
INT. PITCH	GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	
	NO-GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	

NOTES: 1. EXT. PITCH DIAM. = AVG. - WIRE CONSTANT - SHIM SIZE
2. EXT. MINOR DIAM. = AVG. - (2 x WIRE DIAM.) - SHIM SIZE

3. DISPOSITION

	TRIAL 1	TRIAL 2	TRIAL 3	TRIAL 4
ADAPTOR MARK	D4			
MIN. MINOR DIAM. FROM ADAPTOR TABLE	8.679			
ACCEPTABLE? (YES, NO)	YES			

Q.C. Signoff Daniel P. O'Hea Date 8-31-04

Q.C. Review Bio D. Cato Level II Date 1-27-05

Title LEB DC. LEVEL II

A236/A459

ANCHORAGE THREAD MEASUREMENT - PROCEDURE SQ 7.1

PSC

Precision Surveillance Corporation

DATA SHEET 7.1 - INSPECTION DOCUMENTATION

PROJECT THREE MILE ISLAND SURVEILLANCE NO. 30TH YR. YEAR 04

TENDON NO. V66 TENDON END/BUTTRESS NO. SHOP/TOP UNIT 1

ANCHORAGE I.D. 1118 ADAPTOR I.D. D4
 BUSHING I.D. 1027

1. EQUIPMENT			MICROMETER		WIRE		SHIMS	
THREAD	IDENT.	RECAL DATE	NO.	RECAL DATE	NO.	RECAL DATE		
EXT. MAJOR	QC52	2-3-05						
EXT. PITCH	QC52	2-3-05	SET 4	2-3-05	SUR 9	2-3-05		
EXT. MINOR	QC52	2-3-05	BLACK	2-3-05	SUR 10	2-3-05		
INT. MAJOR	N/A	N/A						
INT. MINOR	N/A	N/A						

2. MEASUREMENTS		THREAD			AVG.	WIRE CONST.	WIRE DIAM.	SHIM SIZE	AVG DIAM.
THREAD	READ	3RD	6TH	9TH					
EXT. MAJOR	1	9.369	9.371	9.371					
	2	9.369	9.371	9.371					
EXT. PITCH	1	9.547		9.549	9.548	.253		.032	9.263
	2	9.547		9.549					
EXT. MINOR	1	9.459		9.461	9.460		(0.120)	.032	9.188
	2	9.459		9.461					
INT. MAJOR	1	N/A		N/A					
	2	N/A		N/A					
INT. MINOR	1	N/A	N/A	N/A					
	2	N/A	N/A	N/A					
INT. PITCH	GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	
	NO-GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	

NOTES: 1. EXT. PITCH DIAM. = AVG. - WIRE CONSTANT - SHIM SIZE
 2. EXT. MINOR DIAM. = AVG. - (2 x WIRE DIAM.) - SHIM SIZE

3. DISPOSITION

	TRIAL 1	TRIAL 2	TRIAL 3	TRIAL 4
ADAPTOR MARK	D4			
MIN. MINOR DIAM. FROM ADAPTOR TABLE	8.679			
ACCEPTABLE? (YES, NO)	YES			

Q.C. Signoff David P. O'Neil Date 8-31-04

Q.C. Review W.D. Cato Level II Date 1-27-06

Title LEAD QC LEVEL II

A287/A459

ANCHORAGE THREAD MEASUREMENT - PROCEDURE SQ 7.1

PSC

Precision Surveillance Corporation

DATA SHEET 7.1 - INSPECTION DOCUMENTATION

PROJECT THREE MILE ISLAND SURVEILLANCE NO. 30TH YR. YEAR 04

TENDON NO. V137 TENDON END/BUTTRESS NO. SHOP / TOP UNIT 1

ANCHORAGE I.D. 878 ADAPTOR I.D. D4

BUSHING 1017

1. EQUIPMENT			MICROMETER		WIRE		SHIMS	
THREAD	IDENT.	RECAL DATE	NO.	RECAL DATE	NO.	RECAL DATE		
EXT. MAJOR	QC52	2-3-05						
EXT. PITCH	QC52	2-3-05	SET 4	8-3-05	SUR 9	2-3-05		
EXT. MINOR	QC52	2-3-05	BLACK	2-3-05	SUR 10	2-3-05		
INT. MAJOR	N/A	N/A						
INT. MINOR	N/A	N/A						

2. MEASUREMENTS		THREAD			AVG.	WIRE CONST.	WIRE DIAM.	SHIM SIZE	AVG DIAM.
THREAD	READ	3RD	6TH	9TH					
EXT. MAJOR	1	9.366	9.370	9.375					
	2	9.367	9.373	9.376					
EXT. PITCH	1	9.545		9.548	9.547	.253		.032	9.262
	2	9.546		9.548					
EXT. MINOR	1	9.461		9.465	9.463		(.120)	.032	9.191
	2	9.460		9.467					
INT. MAJOR	1	N/A		N/A					
	2	N/A		N/A					
INT. MINOR	1	N/A	N/A	N/A					
	2	N/A	N/A	N/A					
INT. PITCH	GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	
	NO-GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	

NOTES: 1. EXT. PITCH DIAM. = AVG. - WIRE CONSTANT - SHIM SIZE
 2. EXT. MINOR DIAM. = AVG. - (2 x WIRE DIAM.) - SHIM SIZE

3. DISPOSITION

	TRIAL 1	TRIAL 2	TRIAL 3	TRIAL 4
ADAPTOR MARK	D4			
MIN. MINOR DIAM. FROM ADAPTOR TABLE	8.679			
ACCEPTABLE? (YES, NO)	YES			

Q.C. Signoff [Signature] Date 11-17-04

Q.C. Review [Signature] Level II Date 1-27-05

Title LEAD RC

A288/A459

ANCHORAGE THREAD MEASUREMENT - PROCEDURE SQ 7.1

PSC Precision Surveillance Corporation

DATA SHEET 7.1 - INSPECTION DOCUMENTATION

PROJECT THREE MILE ISLAND SURVEILLANCE NO. 30TH YR. YEAR 04
 TENDON NO. V140 TENDON END/BUTTRESS NO. 5402/TOP UNIT 1
 ANCHORAGE I.D. 918 ADAPTOR I.D. D4
 BUSHING I.D. 1000

1. EQUIPMENT		MICROMETER		WIRE		SHIMS	
THREAD	IDENT.	RECAL DATE	NO.	RECAL DATE	NO.	RECAL DATE	
EXT. MAJOR	QC52	2-3-05					
EXT. PITCH	QC52	2-3-05	SET 4	8-3-05	SUR 9	2-3-05	
EXT. MINOR	QC52	2-3-05	BLACK	2-3-05	SUR 10	2-3-05	
INT. MAJOR	N/A	N/A					
INT. MINOR	N/A	N/A					

2. MEASUREMENTS		THREAD			WIRE	WIRE	SHIM	AVG	
THREAD	READ	3RD	6TH	9TH	AVG.	CONST.	DIAM.	SIZE	DIAM.
EXT. MAJOR	1	9.366	9.370	9.372					9.369
EXT. PITCH	1	9.537		9.539	9.539	.253		.032	9.254
EXT. MINOR	1	9.456		9.458	9.458		(.120)	.032	9.186
INT. MAJOR	1	N/A		N/A					N/A
INT. MINOR	1	N/A	N/A	N/A					N/A
INT. PITCH	1	N/A	N/A	N/A					N/A
	GO GAUGE #	N/A			RECAL DATE	N/A		RESULT	N/A
	NO-GO GAUGE #	N/A			RECAL DATE	N/A		RESULT	N/A

NOTES: 1. EXT. PITCH DIAM. = AVG. - WIRE CONSTANT - SHIM SIZE
 2. EXT. MINOR DIAM. = AVG. - (2 x WIRE DIAM.) - SHIM SIZE

3. DISPOSITION

	TRIAL 1	TRIAL 2	TRIAL 3	TRIAL 4
ADAPTOR MARK	D4	CC001	CC002	
MIN. MINOR DIAM. FROM ADAPTOR TABLE	8.696	8.605	8.631	
ACCEPTABLE? (YES, NO)	YES	YES	YES	

Q.C. Signoff Paul P. O'Brien Date 8-31-04
 Q.C. Review Bob H. Cato Level II Date 1-27-06
 Title LEAD QC. LEVEL II

A289/A459

ANCHORAGE THREAD MEASUREMENT - PROCEDURE SQ 7.1

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DATA SHEET 7.1 - INSPECTION DOCUMENTATION

PROJECT THREE MILE ISLAND SURVEILLANCE NO. 30TH YR. YEAR 04
 TENDON NO. V141 TENDON END/BUTTRESS NO. SHOP / TOP UNIT 1
 ANCHORAGE I.D. 869 ADAPTOR I.D. D4
BUSHING 1096

1. EQUIPMENT			MICROMETER		WIRE		SHIMS	
THREAD	IDENT.	RECAL DATE	NO.	RECAL DATE	NO.	RECAL DATE		
EXT. MAJOR	QC52	2-3-05						
EXT. PITCH	QC52	2-3-05	SET 4	2-3-05	SUR 9	2-3-05		
EXT. MINOR	QC52	2-3-05	BLACK	2-3-05	SUR 10	2-3-05		
INT. MAJOR	N/A	N/A						
INT. MINOR	N/A	N/A						

2. MEASUREMENTS		THREAD			AVG.	WIRE CONST.	WIRE DIAM.	SHIM SIZE	AVG DIAM.
THREAD	READ	3RD	6TH	9TH					
EXT. MAJOR	1	9.366	9.373	9.386					
	2	9.372	9.374	9.376					
EXT. PITCH	1	9.545		9.551	9.548	.253		.032	9.263
	2	9.545		9.552					
EXT. MINOR	1	9.456		9.461	9.459		(.120) .240	.032	9.187
	2	9.458		9.461					
INT. MAJOR	1	N/A		N/A					
	2	N/A		N/A					
INT. MINOR	1	N/A	N/A	N/A					
	2	N/A	N/A	N/A					
INT. PITCH	GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	
	NO-GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	

NOTES: 1. EXT. PITCH DIAM. = AVG. - WIRE CONSTANT - SHIM SIZE
 2. EXT. MINOR DIAM. = AVG. - (2 x WIRE DIAM.) - SHIM SIZE

3. DISPOSITION

	TRIAL 1	TRIAL 2	TRIAL 3	TRIAL 4
ADAPTOR MARK	D4			
MIN. MINOR DIAM. FROM ADAPTOR TABLE	8.635			
ACCEPTABLE? (YES, NO)	YES			

Q.C. Signoff [Signature] Date 11-17-04
 Q.C. Review [Signature] Level II Date 1-27-05
 Title LOAD QC

A2910/A459

ANCHORAGE THREAD MEASUREMENT - PROCEDURE SQ 7.1

P5C

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DATA SHEET 7.1 - INSPECTION DOCUMENTATION

PROJECT THREE MILE ISLAND SURVEILLANCE NO. 30TH YR. YEAR 04
 TENDON NO. H13-11 TENDON END/BUTTRESS NO. SHOP / BUTT #1 UNIT 1
 ANCHORAGE I.D. 557 / 1039 ^{BUSHING} ADAPTOR I.D. 26001

1. EQUIPMENT		MICROMETER		WIRE		SHIMS	
THREAD	IDENT.	RECAL DATE	NO.	RECAL DATE	NO.	RECAL DATE	
EXT. MAJOR	QC52	2-3-05					
EXT. PITCH	QC52	2-3-05	SET 4	8-3-05	SUR 9	2-3-05	
EXT. MINOR	QC52	2-3-05	BLACK	2-3-05	SUR 10	2-3-05	
INT. MAJOR	N/A	N/A					
INT. MINOR	N/A	N/A					

2. MEASUREMENTS		THREAD			AVG.	WIRE CONST.	WIRE DIAM.	SHIM SIZE	AVG DIAM.
THREAD	READ	3RD	6TH	9TH					
EXT. MAJOR	1	9.366	9.372	9.377					
	2	9.370	9.372	9.375					
EXT. PITCH	1	9.533		9.550	9.541	.253		.032	9.256
	2	9.536		9.545					
EXT. MINOR	1	9.445		9.455	9.452		(.120) .240	.032	9.180
	2	9.450		9.456					
INT. MAJOR	1	N/A		N/A					
	2	N/A		N/A					
INT. MINOR	1	N/A	N/A	N/A					
	2	N/A	N/A	N/A					
INT. PITCH	GO GAUGE #	N/A			RECAL DATE	N/A		RESULT	N/A
	NO-GO GAUGE #	N/A			RECAL DATE	N/A		RESULT	N/A

NOTES: 1. EXT. PITCH DIAM. = AVG. - WIRE CONSTANT - SHIM SIZE
 2. EXT. MINOR DIAM. = AVG. - (2 x WIRE DIAM.) - SHIM SIZE

3. DISPOSITION

	TRIAL 1	TRIAL 2	TRIAL 3	TRIAL 4
ADAPTOR MARK	26001			
MIN. MINOR DIAM. FROM ADAPTOR TABLE	8.605			
ACCEPTABLE? (YES, NO)	YES			

Q.C. Signoff [Signature] Date 11-20-04
 Q.C. Review [Signature] Level II Date 1-27-05
 Title LEAD QC

Formerly "Inryco Surveillance"

A291/A459

ANCHORAGE THREAD MEASUREMENT - PROCEDURE SQ 7.1

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DATA SHEET 7.1 - INSPECTION DOCUMENTATION

PROJECT THREE MILE ISLAND SURVEILLANCE NO. 30TH YR. YEAR 04
 TENDON NO. H13-11 TENDON END/BUTTRESS NO. FIELD / BUTT. 3 UNIT 1
 ANCHORAGE I.D. 933 ADAPTOR I.D. C6001

1. EQUIPMENT		MICROMETER		WIRE		SHIMS	
THREAD	IDENT.	RECAL DATE	NO.	RECAL DATE	NO.	RECAL DATE	
EXT. MAJOR	QC52	2-3-05					
EXT. PITCH	QC52	2-3-05	SET 4	9-3-05	SUR 9	2-3-05	
EXT. MINOR	QC52	2-3-05	BLACK	2-3-05	SUR 10	2-3-05	
INT. MAJOR	N/A	N/A					
INT. MINOR	N/A	N/A					

2. MEASUREMENTS		THREAD			AVG.	WIRE CONST.	WIRE DIAM.	SHIM SIZE	AVG DIAM.
THREAD	READ	3RD	6TH	9TH					
EXT. MAJOR	1	9.360	9.365	9.380					
	2	9.365	9.368	9.370					
EXT. PITCH	1	9.524		9.527	9.526	.253		.032	9.241
	2	9.525		9.528					
EXT. MINOR	1	9.439		9.448	9.444		(120) .240	.032	9.172
	2	9.440		9.440					
INT. MAJOR	1	N/A		N/A					
	2	N/A		N/A					
INT. MINOR	1	N/A	N/A	N/A					
	2	N/A	N/A	N/A					
INT. PITCH	GO GAUGE #	N/A			RECAL DATE	N/A		RESULT	N/A
	NO-GO GAUGE #	N/A			RECAL DATE	N/A		RESULT	N/A

NOTES: 1. EXT. PITCH DIAM. = AVG. - WIRE CONSTANT - SHIM SIZE
 2. EXT. MINOR DIAM. = AVG. - (2 x WIRE DIAM.) - SHIM SIZE

3. DISPOSITION

	TRIAL 1	TRIAL 2	TRIAL 3	TRIAL 4
ADAPTOR MARK	C6001			
MIN. MINOR DIAM. FROM ADAPTOR TABLE	8.624			
ACCEPTABLE? (YES, NO)	YES			

Q.C. Signoff [Signature] Date 11-22-04
 Q.C. Review [Signature] Level II Date 1-27-05
 Title Lead QC

Formerly "Inryco Surveillance"

A292/A459

ANCHORAGE THREAD MEASUREMENT - PROCEDURE SQ 7.1

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DATA SHEET 7.1 - INSPECTION DOCUMENTATION

PROJECT THREE MILE ISLAND SURVEILLANCE NO. 30TH YR. YEAR 04

TENDON NO. H35-49 TENDON END/BUTTRESS NO. SHOP/BUTT. 5 UNIT 1

ANCHORAGE I.D. 970 ADAPTOR I.D. C6001
 BUSHING I.D. 852

1. EQUIPMENT		MICROMETER		WIRE		SHIMS	
THREAD	IDENT.	RECAL DATE	NO.	RECAL DATE	NO.	RECAL DATE	
EXT. MAJOR	QC52	2-3-05					
EXT. PITCH	QC52	2-3-05	SET 4	8-3-05	SUR 9	2-3-05	
EXT. MINOR	QC52	2-3-05	BLACK	2-3-05	SUR 10	2-3-05	
INT. MAJOR	N/A	N/A					
INT. MINOR	N/A	N/A					

2. MEASUREMENTS		THREAD			AVG.	WIRE CONST.	WIRE DIAM.	SHIM SIZE	AVG DIAM.
THREAD	READ	3RD	6TH	9TH					
EXT. MAJOR	1	9.369	9.371	9.373				9.371	
EXT. MAJOR	2	9.369	9.371	9.373				9.371	
EXT. PITCH	1	9.543		9.547	9.545	.253		9.260	
EXT. PITCH	2	9.543		9.547			.032		
EXT. MINOR	1	9.455		9.457	9.456		(.120)	9.184	
EXT. MINOR	2	9.453		9.459			.240		
INT. MAJOR	1	N/A		N/A				N/A	
INT. MAJOR	2	N/A		N/A				N/A	
INT. MINOR	1	N/A	N/A	N/A				N/A	
INT. MINOR	2	N/A	N/A	N/A				N/A	
INT. PITCH	GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	
	NO-GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	

- NOTES: 1. EXT. PITCH DIAM. = AVG. - WIRE CONSTANT - SHIM SIZE
 2. EXT. MINOR DIAM. = AVG. - (2 x WIRE DIAM.) - SHIM SIZE

3. DISPOSITION

	TRIAL 1	TRIAL 2	TRIAL 3	TRIAL 4
ADAPTOR MARK	C6001			
MIN. MINOR DIAM. FROM ADAPTOR TABLE	8.606			
ACCEPTABLE? (YES, NO)	YES			

Q.C. Signoff Daniel P. O'Hara Date 9-16-04

Q.C. Review Bill D. Conley Level II Date 1-27-05

Title LEAD QC, LEVEL II

A293/A459

ANCHORAGE THREAD MEASUREMENT - PROCEDURE SQ 7.1

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DATA SHEET 7.1 - INSPECTION DOCUMENTATION

PROJECT THREE MILE ISLAND SURVEILLANCE NO. 30TH YR. YEAR 04
 TENDON NO. H35-49 TENDON END/BUTTRESS NO. FIELD/BUTT 3 UNIT 1
 ANCHORAGE I.D. 548 ADAPTOR I.D. C6002

1. EQUIPMENT		MICROMETER		WIRE		SHIMS	
THREAD	IDENT.	RECAL DATE	NO.	RECAL DATE	NO.	RECAL DATE	
EXT. MAJOR	QC52	2-3-05					
EXT. PITCH	QC52	2-3-05	SET 4	2-3-05	SUR 9	2-3-05	
EXT. MINOR	QC52	2-3-05	BLACK	2-3-05	SUR 10	2-3-05	
INT. MAJOR	N/A	N/A					
INT. MINOR	N/A	N/A					

2. MEASUREMENTS		THREAD			AVG.	WIRE CONST.	WIRE DIAM.	SHIM SIZE	AVG DIAM.
THREAD	READ	3RD	6TH	9TH					
EXT. MAJOR	1	9.363	9.367	9.369					
	2	9.361	9.365	9.367					
EXT. PITCH ¹	1	9.551		9.551	9.551	.253		.032	9.266
	2	9.551		9.551					
EXT. MINOR ²	1	9.462		9.464	9.463		(.120) .240	.032	9.191
	2	9.462		9.464					
INT. MAJOR	1	N/A		N/A					
	2	N/A		N/A					
INT. MINOR	1	N/A	N/A	N/A					
	2	N/A	N/A	N/A					
INT. PITCH	GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	
	NO-GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	

NOTES: 1. EXT. PITCH DIAM. = AVG. - WIRE CONSTANT - SHIM SIZE
 2. EXT. MINOR DIAM. = AVG. - (2 x WIRE DIAM.) - SHIM SIZE

3. DISPOSITION

	TRIAL 1	TRIAL 2	TRIAL 3	TRIAL 4
ADAPTOR MARK	C6002			
MIN. MINOR DIAM. FROM ADAPTOR TABLE	8.613			
ACCEPTABLE? (YES, NO)	Yes			

Q.C. Signoff [Signature] Date 9-15-04
 Q.C. Review [Signature] Level II Date 1-27-05
 Title LEAD QC. LEVEL II

A294/A459

ANCHORAGE THREAD MEASUREMENT - PROCEDURE SQ 7.1

PSC Precision Surveillance Corporation

DATA SHEET 7.1 - INSPECTION DOCUMENTATION

PROJECT THREE MILE ISLAND SURVEILLANCE NO. 30TH YR. YEAR 04
 TENDON NO. H46-2S TENDON END/BUTTRESS NO. SHOP / BUTT. 6 UNIT 1
 ANCHORAGE I.D. 580 / BUSHING 1252 ADAPTOR I.D. C6001

1. EQUIPMENT		MICROMETER		WIRE		SHIMS	
THREAD	IDENT.	RECAL DATE	NO.	RECAL DATE	NO.	RECAL DATE	
EXT. MAJOR	QC52	2-3-05					
EXT. PITCH	QC52	2-3-05	SET 4	8-3-05	SUR 9	2-3-05	
EXT. MINOR	QC52	2-3-05	BLACK	2-3-05	SUR 10	2-3-05	
INT. MAJOR	N/A	N/A					
INT. MINOR	N/A	N/A					

2. MEASUREMENTS		THREAD			AVG.	WIRE CONST.	WIRE DIAM.	SHIM SIZE	AVG DIAM.
THREAD	READ	3RD	6TH	9TH					
EXT. MAJOR	1	9.367	9.371	9.375					
	2	9.372	9.374	9.377				9.373	
EXT. PITCH	1	9.531		9.535	9.534	.253		.032	
	2	9.537		9.534					
EXT. MINOR	1	9.455		9.451	9.456		(.120) .240	.032	
	2	9.457		9.460					
INT. MAJOR	1	N/A		N/A					
	2	N/A		N/A				N/A	
INT. MINOR	1	N/A	N/A	N/A					
	2	N/A	N/A	N/A				N/A	
INT. PITCH	GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	
	NO-GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	

NOTES: 1. EXT. PITCH DIAM. = AVG. - WIRE CONSTANT - SHIM SIZE
 2. EXT. MINOR DIAM. = AVG. - (2 x WIRE DIAM.) - SHIM SIZE

3. DISPOSITION

	TRIAL 1	TRIAL 2	TRIAL 3	TRIAL 4
ADAPTOR MARK	C6001			
MIN. MINOR DIAM. FROM ADAPTOR TABLE	8.605			
ACCEPTABLE? (YES, NO)	YES			

Q.C. Signoff [Signature] Date 11-5-04
 Q.C. Review [Signature] Level II Date 1-27-05
 Title LOAD QC

Formerly "Inryco Surveillance"

A295/A459

ANCHORAGE THREAD MEASUREMENT - PROCEDURE SQ 7.1

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DATA SHEET 7.1 - INSPECTION DOCUMENTATION

PROJECT THREE MILE ISLAND SURVEILLANCE NO. 30TH YR. YEAR 04
 TENDON NO. H46-25 TENDON END/BUTTRESS NO. FIELD / 3RD / 4 UNIT 1
 ANCHORAGE I.D. 1009 ADAPTOR I.D. C6002

1. EQUIPMENT		MICROMETER		WIRE		SHIMS	
THREAD	IDENT.	RECAL DATE	NO.	RECAL DATE	NO.	RECAL DATE	
EXT. MAJOR	QC52	2-3-05					
EXT. PITCH	QC52	2-3-05	SET 4	2-3-05	SUR 9	2-3-05	
EXT. MINOR	QC52	2-3-05	BLACK	2-3-05	SUR 10	2-3-05	
INT. MAJOR	N/A	N/A					
INT. MINOR	N/A	N/A					

2. MEASUREMENTS		THREAD			AVG.	WIRE CONST.	WIRE DIAM.	SHIM SIZE	AVG DIAM.
THREAD	READ	3RD	6TH	9TH					
EXT. MAJOR	1	9.364	9.372	9.377					
	2	9.367	9.368	9.372					
EXT. PITCH ¹	1	9.536		9.538	9.536	.253	.032	9.251	
	2	9.533		9.536					
EXT. MINOR ²	1	9.437		9.445	9.441		(.120) .240	-032	9.169
	2	9.440		9.441					
INT. MAJOR	1	N/A		N/A					
	2	N/A		N/A					
INT. MINOR	1	N/A	N/A	N/A					
	2	N/A	N/A	N/A					
INT. PITCH	GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	
	NO-GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	

NOTES: 1. EXT. PITCH DIAM. = AVG. - WIRE CONSTANT - SHIM SIZE
 2. EXT. MINOR DIAM. = AVG. - (2 x WIRE DIAM.) - SHIM SIZE

3. DISPOSITION

	TRIAL 1	TRIAL 2	TRIAL 3	TRIAL 4
ADAPTOR MARK	C6002			
MIN. MINOR DIAM. FROM ADAPTOR TABLE	8.631			
ACCEPTABLE? (YES, NO)	YES			

Q.C. Signoff Chiff M. PA Date 11-8-04
 Q.C. Review Chiff M. PA Level II Date 1-27-05
 Title LOAD QC

12916/A459

ANCHORAGE THREAD MEASUREMENT - PROCEDURE SQ 7.1

PSC Precision Surveillance Corporation

DATA SHEET 7.1 - INSPECTION DOCUMENTATION

PROJECT THREE MILE ISLAND SURVEILLANCE NO. 30TH YR. YEAR 04
 TENDON NO. H62-18 TENDON END/BUTTRESS NO. SHOP / BUTT. 6 UNIT 1
 ANCHORAGE I.D. 1053 / ^{BUSHING} 1053 ADAPTOR I.D. C6001

1. EQUIPMENT		MICROMETER		WIRE		SHIMS	
THREAD	IDENT.	RECAL DATE	NO.	RECAL DATE	NO.	RECAL DATE	
EXT. MAJOR	QC52	2-3-05					
EXT. PITCH	QC52	2-3-05	SET 4	9-3-05	SUR 9	2-3-05	
EXT. MINOR	QC52	2-3-05	BLACK	2-3-05	SUR 10	2-3-05	
INT. MAJOR	N/A	N/A					
INT. MINOR	N/A	N/A					

2. MEASUREMENTS		THREAD			AVG.	WIRE CONST.	WIRE DIAM.	SHIM SIZE	AVG DIAM.
THREAD	READ	3RD	6TH	9TH					
EXT. MAJOR	1	9.364	9.375	9.376					
	2	9.367	9.369	9.371				9.370	
EXT. PITCH ¹	1	9.550		9.538	9.545	.253		.032	
	2	9.544		9.544					
EXT. MINOR ²	1	9.456		9.448	9.452		(.120)	.032	
	2	9.450		9.455					
INT. MAJOR	1	N/A		N/A					
	2	N/A		N/A				N/A	
INT. MINOR	1	N/A	N/A	N/A					
	2	N/A	N/A	N/A				N/A	
INT. PITCH	GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	
	NO-GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	

NOTES: 1. EXT. PITCH DIAM. = AVG. - WIRE CONSTANT - SHIM SIZE
 2. EXT. MINOR DIAM. = AVG. - (2 x WIRE DIAM.) - SHIM SIZE

3. DISPOSITION

	ADAPTOR MARK	TRIAL 1	TRIAL 2	TRIAL 3	TRIAL 4
MIN. MINOR DIAM. FROM ADAPTOR TABLE	C6001	8.605			
ACCEPTABLE? (YES, NO)		YES			

Q.C. Signoff [Signature] Date 11-5-04

Q.C. Review [Signature] Level II Date 1-27-05

Title Load RC

4297/A459

ANCHORAGE THREAD MEASUREMENT - PROCEDURE SQ 7.1

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DATA SHEET 7.1 - INSPECTION DOCUMENTATION

PROJECT THREE MILE ISLAND SURVEILLANCE NO. 30TH YR. YEAR 04
 TENDON NO. H62-18 TENDON END/BUTTRESS NO. FIELD / BUTT. 2 UNIT 1
 ANCHORAGE I.D. 948 ADAPTOR I.D. C6001

1. EQUIPMENT		MICROMETER		WIRE		SHIMS	
THREAD	IDENT.	RECAL DATE	NO.	RECAL DATE	NO.	RECAL DATE	
EXT. MAJOR	QC52	2-3-05					
EXT. PITCH	QC52	2-3-05	SET 4	2-3-05	SUR 9	2-3-05	
EXT. MINOR	QC52	2-3-05	BLACK	2-3-05	SUR 10	2-3-05	
INT. MAJOR	N/A	N/A					
INT. MINOR	N/A	N/A					

2. MEASUREMENTS		THREAD			AVG.	WIRE CONST.	WIRE DIAM.	SHIM SIZE	AVG DIAM.
THREAD	READ	3RD	6TH	9TH					
EXT. MAJOR	1	9.367	9.376	9.376					
	2	9.368	9.370	9.375					
EXT. PITCH	1	9.516		9.542	9.539	.253		.032	
	2	9.550		9.546					
EXT. MINOR	1	9.442		9.450	9.449		(0.120)	.032	
	2	9.448		9.456					
INT. MAJOR	1	N/A		N/A					
	2	N/A		N/A					
INT. MINOR	1	N/A	N/A	N/A					
	2	N/A	N/A	N/A					
INT. PITCH	GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	
	NO-GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	

NOTES: 1. EXT. PITCH DIAM. = AVG. - WIRE CONSTANT - SHIM SIZE
 2. EXT. MINOR DIAM. = AVG. - (2 x WIRE DIAM.) - SHIM SIZE

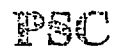
3. DISPOSITION

	TRIAL 1	TRIAL 2	TRIAL 3	TRIAL 4
ADAPTOR MARK	C6001			
MIN. MINOR DIAM. FROM ADAPTOR TABLE	8.605			
ACCEPTABLE? (YES, NO)	YES			

Q.C. Signoff [Signature] Date 11-2-04
 Q.C. Review [Signature] Level II Date 1-27-05
 Title LOAD OP

A298/A459

ANCHORAGE THREAD MEASUREMENT - PROCEDURE SQ 7.1



Precision Surveillance Corporation

DATA SHEET 7.1 - INSPECTION DOCUMENTATION

PROJECT THREE MILE ISLAND SURVEILLANCE NO. 30TH YR. YEAR 04

TENDON NO. H62-26 TENDON END/BUTTRESS NO. SHOP/BUTT 6 UNIT 1

ANCHORAGE I.D. 837 ADAPTOR I.D. C6001
BUSHING I.D. 924

1. EQUIPMENT		MICROMETER		WIRE		SHIMS	
THREAD	IDENT.	RECAL DATE	NO.	RECAL DATE	NO.	RECAL DATE	
EXT. MAJOR	QC52	2-3-05					
EXT. PITCH	QC52	2-3-05	SET 4	8-3-05	SUR 9	2-3-05	
EXT. MINOR	QC52	2-3-05	BLACK	2-3-05	SUR 10	2-3-05	
INT. MAJOR	N/A	N/A					
INT. MINOR	N/A	N/A					

2. MEASUREMENTS		THREAD			AVG.	WIRE CONST.	WIRE DIAM.	SHIM SIZE	AVG DIAM.
THREAD	READ	3RD	6TH	9TH					
EXT. MAJOR	1	9.365	9.369	9.371					9.370
EXT. MAJOR	2	9.371	9.371	9.373					
EXT. PITCH ¹	1	9.537		9.559					
PITCH	2	9.551		9.559	9.555	.253		.032	9.270
EXT. MINOR ²	1	9.441		9.449			(.120)		
MINOR	2	9.441		9.449	9.445		.240	-.032	9.173
INT. MAJOR	1	N/A		N/A					
INT. MAJOR	2	N/A		N/A					N/A
INT. MINOR	1	N/A	N/A	N/A					
INT. MINOR	2	N/A	N/A	N/A					N/A
INT. PITCH	GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	
	NO-GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	

NOTES: 1. EXT. PITCH DIAM. = AVG. - WIRE CONSTANT - SHIM SIZE
 2. EXT. MINOR DIAM. = AVG. - (2 x WIRE DIAM.) - SHIM SIZE

3. DISPOSITION

	TRIAL 1	TRIAL 2	TRIAL 3	TRIAL 4
ADAPTOR MARK	C6001			
MIN. MINOR DIAM. FROM ADAPTOR TABLE	8.585			
ACCEPTABLE? (YES, NO)	YES			

Q.C. Signoff Paul P. O'Neil Date 9-22-04

Q.C. Review Bill J. Cato Level II Date 1-27-05

Title LEAD QC, LEVEL II

A299/A459

ANCHORAGE THREAD MEASUREMENT - PROCEDURE SQ 7.1

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Precision Surveillance Corporation

DATA SHEET 7.1 - INSPECTION DOCUMENTATION

PROJECT THREE MILE ISLAND SURVEILLANCE NO. 30TH YR. YEAR 04
 TENDON NO. H6226 TENDON END/BUTTRESS NO. FIELD/BUTT # 2 UNIT 1
 ANCHORAGE I.D. FIELD HT. 17. 571 ADAPTOR I.D. C6002

1. EQUIPMENT		MICROMETER		WIRE		SHIMS	
THREAD	IDENT.	RECAL DATE	NO.	RECAL DATE	NO.	RECAL DATE	
EXT. MAJOR	QC52	2-3-05					
EXT. PITCH	QC52	2-3-05	SET 4	2-3-05	SUR 9	2-3-05	
EXT. MINOR	QC52	2-3-05	BLACK	2-3-05	SUR 10	2-3-05	
INT. MAJOR	N/A	N/A					
INT. MINOR	N/A	N/A					

2. MEASUREMENTS		THREAD			AVG.	WIRE CONST.	WIRE DIAM.	SHIM SIZE	AVG DIAM.
THREAD	READ	3RD	6TH	9TH					
EXT. MAJOR	1	9.366	9.369	9.370					
	2	9.370	9.370	9.374					
EXT. PITCH	1	9.550		9.559	9.554	.253		.032	
	2	9.550		9.558					
EXT. MINOR	1	9.442		9.448	9.445		(.120) .240	.032	
	2	9.442		9.448					
INT. MAJOR	1	N/A		N/A					
	2	N/A		N/A					
INT. MINOR	1	N/A	N/A	N/A					
	2	N/A	N/A	N/A					
INT. PITCH	GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	
	NO-GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	

NOTES: 1. EXT. PITCH DIAM. = AVG. - WIRE CONSTANT - SHIM SIZE
 2. EXT. MINOR DIAM. = AVG. - (2 x WIRE DIAM.) - SHIM SIZE

3. DISPOSITION

	TRIAL 1	TRIAL 2	TRIAL 3	TRIAL 4
ADAPTOR MARK	D4	C6001	C6002	N/A
MIN. MINOR DIAM. FROM ADAPTOR TABLE	8.679	8.585	8.613	N/A
ACCEPTABLE? (YES, NO)	YES	YES	YES	N/A

Q.C. Signoff H. Henderson Date 9-27-04

Q.C. Review Rid J. C. G. Level # Date 1-27-06

Title LEAD. QC LEVEL #

A300/A459

ANCHORAGE THREAD MEASUREMENT - PROCEDURE SQ 7.1

PSC Precision Surveillance Corporation

DATA SHEET 7.1 - INSPECTION DOCUMENTATION

PROJECT THREE MILE ISLAND SURVEILLANCE NO. 30TH YR. YEAR 04
 TENDON NO. D-213 TENDON END/BUTTRESS NO. SHOP/NW UNIT 1
 ANCHORAGE I.D. 771 ADAPTOR I.D. C6001
 BUSHING I.D. 1030

1. EQUIPMENT		MICROMETER		WIRE		SHIMS	
THREAD	IDENT.	RECAL DATE	NO.	RECAL DATE	NO.	RECAL DATE	
EXT. MAJOR	QC52	2-3-05					
EXT. PITCH	QC52	2-3-05	SET 4	2-3-05	SUR 9	2-3-05	
EXT. MINOR	QC52	2-3-05	BLACK	2-3-05	SUR 10	2-3-05	
INT. MAJOR	N/A	N/A					
INT. MINOR	N/A	N/A					

2. MEASUREMENTS		THREAD			AVG.	WIRE CONST.	WIRE DIAM.	SHIM SIZE	AVG DIAM.
THREAD	READ	3RD	6TH	9TH					
EXT. MAJOR	1	9.363	9.365	9.367					
	2	9.363	9.365	9.367				9.365	
EXT. PITCH ¹	1	9.536		9.536	9.538	.253		.032	
	2	9.536		9.540				9.253	
EXT. MINOR ²	1	9.455		9.463	9.459		(.120)	.032	
	2	9.455		9.463			.240	9.187	
INT. MAJOR	1	N/A		N/A				N/A	
	2	N/A		N/A				N/A	
INT. MINOR	1	N/A	N/A	N/A				N/A	
	2	N/A	N/A	N/A				N/A	
INT. PITCH	GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	
	NO-GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	

NOTES: 1. EXT. PITCH DIAM. = AVG. - WIRE CONSTANT - SHIM SIZE
 2. EXT. MINOR DIAM. = AVG. - (2 x WIRE DIAM.) - SHIM SIZE

3. DISPOSITION

	TRIAL 1	TRIAL 2	TRIAL 3	TRIAL 4
ADAPTOR MARK	C6001			
MIN. MINOR DIAM. FROM ADAPTOR TABLE	8.605			
ACCEPTABLE? (YES, NO)	YES			

Q.C. Signoff [Signature] Date 9-13-04
 Q.C. Review [Signature] Level II Date 1-27-05
 Title LEAD Q.C. LEVEL II

Formerly "Inryco Surveillance"

A201/A459

ANCHORAGE THREAD MEASUREMENT - PROCEDURE SQ 7.1

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DATA SHEET 7.1 - INSPECTION DOCUMENTATION

PROJECT THREE MILE ISLAND SURVEILLANCE NO. 30TH YR. YEAR 04
 TENDON NO. D-213 TENDON END/BUTTRESS NO. FIELD/SE UNIT 1
 ANCHORAGE I.D. 947 ADAPTOR I.D. C0002

1. EQUIPMENT		MICROMETER		WIRE		SHIMS	
THREAD	IDENT.	RECAL DATE	NO.	RECAL DATE	NO.	RECAL DATE	
EXT. MAJOR	QC52	2-3-05					
EXT. PITCH	QC52	2-3-05	SET 4	8-3-05	SUR 9	2-3-05	
EXT. MINOR	QC52	2-3-05	BLACK	2-3-05	SUR 10	2-3-05	
INT. MAJOR	N/A	N/A					
INT. MINOR	N/A	N/A					

2. MEASUREMENTS		THREAD			AVG.	WIRE CONST.	WIRE DIAM.	SHIM SIZE	AVG DIAM.
THREAD	READ	3RD	6TH	9TH					
EXT. MAJOR	1	9.361	9.363	9.365					
EXT. MAJOR	2	9.361	9.363	9.365					
EXT. PITCH ¹	1	9.526		9.532	9.530	.253		.032	9.245
PITCH	2	9.528		9.534					
EXT. MINOR ²	1	9.442		9.446	9.444		(.120) .240	.032	9.172
EXT. MINOR	2	9.442		9.446					
INT. MAJOR	1	N/A		N/A					
INT. MAJOR	2	N/A		N/A					
INT. MINOR	1	N/A	N/A	N/A					
INT. MINOR	2	N/A	N/A	N/A					
INT. PITCH	GO GAUGE #	N/A			RECAL DATE	N/A		RESULT	N/A
	NO-GO GAUGE #	N/A			RECAL DATE	N/A		RESULT	N/A

- NOTES: 1. EXT. PITCH DIAM. = AVG. - WIRE CONSTANT - SHIM SIZE
 2. EXT. MINOR DIAM. = AVG. - (2 x WIRE DIAM.) - SHIM SIZE

3. DISPOSITION

	TRIAL 1	TRIAL 2	TRIAL 3	TRIAL 4
ADAPTOR MARK	C0002			
MIN. MINOR DIAM. FROM ADAPTOR TABLE	5.692			
ACCEPTABLE? (YES, NO)	YES			

Q.C. Signoff David P. O'Hara Date 9-11-04
 Q.C. Review Bio S. Cato Level II Date 1-27-06
 Title LEAD DC - LEVEL II

A302/A459

ANCHORAGE THREAD MEASUREMENT - PROCEDURE SQ 7.1

PSC Precision Surveillance Corporation

DATA SHEET 7.1 - INSPECTION DOCUMENTATION

PROJECT THREE MILE ISLAND SURVEILLANCE NO. 30TH YR. YEAR 04
 TENDON NO. D-225 TENDON END/BUTTRESS NO. 5408 / NW UNIT 1
 ANCHORAGE I.D. 765 ADAPTOR I.D. C6001
 BUSHING I.D. 1137

1. EQUIPMENT			MICROMETER		WIRE		SHIMS	
THREAD	IDENT.	RECAL DATE	NO.	RECAL DATE	NO.	RECAL DATE		
EXT. MAJOR	QC52	2-3-05						
EXT. PITCH	QC52	2-3-05	SET 4	2-3-05	SUR 9	2-3-05		
EXT. MINOR	QC52	2-3-05	BLACK	2-3-05	SUR 10	2-3-05		
INT. MAJOR	N/A	N/A						
INT. MINOR	N/A	N/A						

2. MEASUREMENTS		THREAD			AVG.	WIRE CONST.	WIRE DIAM.	SHIM SIZE	AVG DIAM.
THREAD	READ	3RD	6TH	9TH					
EXT. MAJOR	1	9.365	9.369	9.371					
	2	9.367	9.371	9.379					
EXT. PITCH	1	9.546			9.548	.253			
	2	9.546					.032	9.263	
EXT. MINOR	1	9.455			9.459		(.120)		
	2	9.459					.240	.032	
INT. MAJOR	1	N/A							
	2	N/A							
INT. MINOR	1	N/A	N/A	N/A					
	2	N/A	N/A	N/A					
INT. PITCH	GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	
	NO-GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	

NOTES: 1. EXT. PITCH DIAM. = AVG. - WIRE CONSTANT - SHIM SIZE
 2. EXT. MINOR DIAM. = AVG. - (2 x WIRE DIAM.) - SHIM SIZE

3. DISPOSITION

	TRIAL 1	TRIAL 2	TRIAL 3	TRIAL 4
ADAPTOR MARK	C6001	C6002		
MIN. MINOR DIAM. FROM ADAPTOR TABLE	8.585	8.619		
ACCEPTABLE? (YES, NO)	YES	YES		

Q.C. Signoff James P. O'Hara Date 9-17-04
 Q.C. Review Jim C. Cote Level II Date 1-27-05
 Title LEAK QC. LEVEL II

Formerly "Inryco Surveillance"

A303/A459

ANCHORAGE THREAD MEASUREMENT - PROCEDURE SQ 7.1

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DATA SHEET 7.1 - INSPECTION DOCUMENTATION

PROJECT THREE MILE ISLAND SURVEILLANCE NO. 30TH YR. YEAR 04
 TENDON NO. D-225 TENDON END/BUTTRESS NO. FIELD / SW UNIT 1
 ANCHORAGE I.D. 684 ADAPTOR I.D. 06002

1. EQUIPMENT		MICROMETER		WIRE		SHIMS	
THREAD	IDENT.	RECAL DATE	NO.	RECAL DATE	NO.	RECAL DATE	
EXT. MAJOR	QC52	2-3-05					
EXT. PITCH	QC52	2-3-05	SET 4	8-3-05	SUR 9	2-3-05	
EXT. MINOR	QC52	2-3-05	BLACK	2-3-05	SUR 10	2-3-05	
INT. MAJOR	N/A	N/A					
INT. MINOR	N/A	N/A					

2. MEASUREMENTS		THREAD			AVG.	WIRE CONST.	WIRE DIAM.	SHIM SIZE	AVG DIAM.
THREAD	READ	3RD	6TH	9TH					
EXT. MAJOR	1	9.369	9.371	9.373					
EXT. MAJOR	2	9.369	9.371	9.373					
EXT. PITCH ¹	1	9.539			9.543	.253	.032	9.258	
EXT. PITCH	2	9.539							
EXT. MINOR ²	1	9.453			9.456	(120) .240	.032	9.184	
EXT. MINOR	2	9.453							
INT. MAJOR	1	N/A							
INT. MAJOR	2	N/A							
INT. MINOR	1	N/A	N/A	N/A					
INT. MINOR	2	N/A	N/A	N/A					
INT. PITCH	GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	
	NO-GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	

NOTES: 1. EXT. PITCH DIAM. = AVG. - WIRE CONSTANT - SHIM SIZE
 2. EXT. MINOR DIAM. = AVG. - (2 x WIRE DIAM.) - SHIM SIZE

3. DISPOSITION

	TRIAL 1	TRIAL 2	TRIAL 3	TRIAL 4
ADAPTOR MARK	06001	06002		
MIN. MINOR DIAM. FROM ADAPTOR TABLE	8.605	8.631		
ACCEPTABLE? (YES, NO)	YES	YES		

Q.C. Signoff Paul P. O'Don Date 9-14-04

Q.C. Review Bill D. C... Level II Date 1-27-05

Title LEAS. QC. LEVEL II

A304/A459

ANCHORAGE THREAD MEASUREMENT - PROCEDURE SQ 7.1

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DATA SHEET 7.1 - INSPECTION DOCUMENTATION

PROJECT THREE MILE ISLAND SURVEILLANCE NO. 30TH YR. YEAR 04

TENDON NO. D-230 TENDON END/BUTTRESS NO. SHOP/ ^{NEAR} BUTTRES UNIT 1

ANCHORAGE I.D. 757 ADAPTOR I.D. C6001
BUSHING I.D. 703

1. EQUIPMENT		MICROMETER		WIRE		SHIMS	
THREAD	IDENT.	RECAL DATE	NO.	RECAL DATE	NO.	RECAL DATE	
EXT. MAJOR	QC52	2-3-05					
EXT. PITCH	QC52	2-3-05	SET 4	8-3-05	SUR 9	2-3-05	
EXT. MINOR	QC52	2-3-05	BLACK	2-3-05	SUR 10	2-3-05	
INT. MAJOR	N/A	N/A					
INT. MINOR	N/A	N/A					

2. MEASUREMENTS		THREAD			AVG.	WIRE CONST.	WIRE DIAM.	SHIM SIZE	AVG DIAM.
THREAD	READ	3RD	6TH	9TH					
EXT. MAJOR	1	9.371	9.375	9.378					9.374
EXT. PITCH	1	9.537			9.541	.253		.032	9.256
	2	9.539							
EXT. MINOR	1	9.454			9.455		(.120) .240	.032	9.183
	2	9.454							
INT. MAJOR	1	N/A							N/A
	2	N/A							N/A
INT. MINOR	1	N/A	N/A	N/A					N/A
	2	N/A	N/A	N/A					N/A
INT. PITCH	GO GAUGE #	N/A			RECAL DATE	N/A		RESULT	N/A
	NO-GO GAUGE #	N/A			RECAL DATE	N/A		RESULT	N/A

NOTES: 1. EXT. PITCH DIAM. = AVG. - WIRE CONSTANT - SHIM SIZE
2. EXT. MINOR DIAM. = AVG. - (2 x WIRE DIAM.) - SHIM SIZE

3. DISPOSITION

	TRIAL 1	TRIAL 2	TRIAL 3	TRIAL 4
ADAPTOR MARK	C6001			
MIN. MINOR DIAM. FROM ADAPTOR TABLE	8.605			
ACCEPTABLE? (YES, NO)	YES			

Q.C. Signoff Chiff Date 11-11-04

Q.C. Review David P. O'Hara Level II Date 1-27-05

Title LEAD QC

A305/A459

ANCHORAGE THREAD MEASUREMENT - PROCEDURE SQ 7.1

PSC

Precision Surveillance Corporation

DATA SHEET 7.1 - INSPECTION DOCUMENTATION

PROJECT THREE MILE ISLAND SURVEILLANCE NO. 30TH YR. YEAR 04
 TENDON NO. D-230 TENDON END/BUTTRESS NO. FIELD / NEAR BUTT. #3 UNIT 1
 ANCHORAGE I.D. 944 ADAPTOR I.D. C6002

1. EQUIPMENT		MICROMETER		WIRE		SHIMS	
THREAD	IDENT.	RECAL DATE	NO.	RECAL DATE	NO.	RECAL DATE	
EXT. MAJOR	QC52	2-3-05					
EXT. PITCH	QC52	2-3-05	SET 4	8-3-05	SUR 9	2-3-05	
EXT. MINOR	QC52	2-3-05	BLACK	2-3-05	SUR 10	2-3-05	
INT. MAJOR	N/A	N/A					
INT. MINOR	N/A	N/A					

2. MEASUREMENTS		THREAD			AVG.	WIRE CONST.	WIRE DIAM.	SHIM SIZE	AVG DIAM.
THREAD	READ	3RD	6TH	9TH					
EXT. MAJOR	1	9.370	9.370	9.375					
	2	9.372	9.373	9.375					
EXT. PITCH ¹	1	9.524			9.528	.253		.032	9.243
	2	9.528							
EXT. MINOR ²	1	9.438			9.447		(.120)	.032	9.175
	2	9.440							
INT. MAJOR	1	N/A							
	2	N/A							
INT. MINOR	1	N/A	N/A	N/A					
	2	N/A	N/A	N/A					
INT. PITCH	GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	
	NO-GO GAUGE #	N/A			RECAL DATE	N/A	RESULT	N/A	

NOTES: 1. EXT. PITCH DIAM. = AVG. - WIRE CONSTANT - SHIM SIZE
 2. EXT. MINOR DIAM. = AVG. - (2 x WIRE DIAM.) - SHIM SIZE

3. DISPOSITION

	TRIAL 1	TRIAL 2	TRIAL 3	TRIAL 4
ADAPTOR MARK	C6002			
MIN. MINOR DIAM. FROM ADAPTOR TABLE	8.6248	8.6508	8.6270	8.6270
ACCEPTABLE? (YES, NO)	YES			

Q.C. Signoff [Signature] Date 11-11-04

Q.C. Review [Signature] Level II Date 1-27-05

Title Lead QC

DA SHEET 1
 Prestress Force Confirmation Test
 Dome Tendons

1301-9.1
 Revision 18
 Page 1 of 1

INSPECTION PERIOD 8

TENDON					LIFT-OFF CONDITION					RETENSIONING			REACTOR BLDG. TEMP.		DATE INSP.	INSP. BY CONTR. FOREMAN	VERIF. BY COGNIZANT QV. INSP.
I.D.	LOCATION	RAM ID/AREA (SQ.IN.)	PREVIOUS FORCE (KIPS)	EXPECTED LIFT-OFF FORCE (KIPS)	GAGE PRESS. (KSI)	FORCE (KIPS)	FORCE AVG. OF 2 ENDS (KIPS)	SHIM THICKNESS (IN.) PREVIOUS AS-FOUND	GAGE PRESS. (KSI)	FORCE (KIPS)	FINAL SHIM THICKNESS (IN.)	INT. °F	EXT. °F		SIGNATURE	SIGNATURE	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1.	D213 NE	6001.191.784	1395	1052	5610	1068	1094.5	5.80" 5.90"	n/a	n/a	n/a	120.1	62	9-13-04	ES 9-13-04	2109-13-04	
	SE	6002.191.565	1395	1052	5880	1121		5.20" 5.40"	n/a	n/a	n/a	118.6	78	9-11-04			
2.	D225 NW	6001.191.784	1104	1074	5880	1120	1120	7.7" 7.60"	n/a	n/a	n/a	120.1	78	9-14-04	ES 9-14-04	2109-14-04	
	SE	6002.191.565			5870	1120		4.7" 4.70"	n/a	n/a	n/a	120.1	78	9-14-04	ES 9-14-04	2109-14-04	
3.	D230 HW	6001.191.784	1432	1111	6100	1163	1149	6.4" 6.5"	7000	1335	6.9"	118.6	58°	11-16-04	ES 11-16-04	V. 11-16-04	
	SE	6002.191.565			5950	1135		6.0" 6.1"	7100	1355	7.8"	118.6	58°	11-16-04	ES 11-16-04	V. 11-16-04	
4.	D342* NW																
	SW																
5.																	
6.																	

NOTE A:

FORCE CALCULATION: FORCE @ LIFT-OFF = JACK PRESSURE X RAM AREA
 OR
 FROM CALIBRATION EQUATION

LEGEND:

LOCATION: NW, NE, SW, SE QUADRANT

PREVIOUS: AT TIME OF ORIGINAL INSTALLATION OR, IF APPLICABLE, FROM PREVIOUS SURVEILLANCE

* VISUAL EXAM SW QUADRANT END ONLY

CALIBRATION EQUATIONS

RAM ID EQUATION
 6002 - AREA = 191.565, K = -4.911

SHIM THICKNESS: CLEAR DISTANCE BETWEEN BEARING PLATE AND STRESSING WASHER.

COGNIZANT MECH/STRUCT ENGINEER

REVIEWED BY [Signature] DATE: 27 FEB 05

A300/A459

DA SHEET 2
 Prestress Force Confirmation Test
 Hoop Tendons

1301-9.1
 Revision 18
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INSPECTION PERIOD 8

TENDON					LIFT-OFF CONDITION					RETENSIONING			REACTOR BLDG. TEMP.		DATE INSP.	INSP. BY CONTR. FOREMAN	VERIF. BY COGNIZANT QV. INSP.
I.D.	LOCATION	RAM ID/AREA (SQ.IN.)	PREVIOUS FORCE (KIPS)	EXPECTED LIFT-OFF FORCE (KIPS)	GAGE PRESS. (KSI)	FORCE (KIPS)	FORCE AVG. OF 2 ENDS (KIPS)	SHIM THICKNESS (IN.) PREVIOUS AS-FOUND	GAGE PRESS. (KSI)	FORCE (KIPS)	FINAL SHIM THICKNESS (IN.)	INT.	EXT.		SIGNATURE	SIGNATURE	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. H13-11	R1	6001/191.784	1437	1167	6900	1235	1218	7.40	7.50"	N/A	N/A	N/A	121.9	80°	11-20-04	PK 11-20-04	2/11-20-04
	RS	6001/191.784			6300	1201		6.50	6.60"	N/A	N/A	N/A	120.4	75°	11-22-04	PK 11-22-04	2/11-22-04
2. H35-49	R3	6002/191.565	1406	1120	6260	1194	1201	6.80	6.85"	N/A	N/A	N/A	118.9	76	9-20-04	EG 9-15-04	2/11-9-20-04
	RS	6001/191.784			6340	1208		7.10	7.25"	N/A	N/A	N/A	120.8	76	9-16-04	EG 9-16-04	2/11-9-20-04
3. H46-25	R4	6002/191.565	1427	1063	5760	1099	1121	6.20	7.10"	6900	1317	8.0	117.4	45°	11-10-04	EG 11-10-04	2/11-10-04
	R6	6001/191.784			6000	1143		6.90	6.50"	6850	1306	7.75"	117.8	32°	11-10-04	PK 11-10-04	2/11-10-04
4. H62-18	R6	6001/191.784	1401	1103	5820	1109	1105	6.90	7.00"	N/A	N/A	N/A	117.4	45°	11-8-04	PK 11-8-04	2/11-8-04
	RS	6001/191.784			5780	1101		7.40	7.50"	N/A	N/A	N/A	115.2	70°	11-2-04	PK 11-2-04	2/11-2-04
5. H62-26	R6	6001/191.784	1136	1112	6010	1145	1119.8	6.9	6.80"	N/A	N/A	N/A	115.392	80°F	7-22-04	EG 9-22-04	2/11-9-22-04
	RS	6002/191.565			5740	1094.6		7.3	7.30"	N/A	N/A	N/A	117.054	80°F	7-22-04	EG 9-29-04	2/11-9-29-04

NOTE A:

FORCE CALCULATION: FORCE @ LIFT-OFF = JACK PRESSURE X RAM AREA
 OR
 FROM CALIBRATION EQUATION

LEGEND:

LOCATION: 1 to 6 - NUMBER OF BUTTRESS NEARER TO END OF TENDON

PREVIOUS: AT TIME OF ORIGINAL INSTALLATION OR, IF APPLICABLE, FROM PREVIOUS SURVEILLANCE

CALIBRATION EQUATIONS

RAM ID	EQUATION
6001	AREA = 191.784 K = -7.404
6002	AREA = 191.565 K = -4.911

SHIM THICKNESS: CLEAR DISTANCE BETWEEN BEARING PLATE AND STRESSING WASHER.

COGNIZANT MECH/STRUCT ENGINEER
 REVIEWED BY [Signature]

DATE: 27 FEB 05

A307/4459

DA SHEET 3
 Prestress Force Confirmation Test
 Vertical Tendons

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 Revision 18
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INSPECTION PERIOD 8

TENDON		LIFT-OFF CONDITION								RETENSIONING			REACTOR BLDG. TEMP.		DATE INSP.	INSP. BY CONTR. FOREMAN	VERIF. BY COGNIZANT QV. INSP.
		I.D.	LOCATION	RAM ID/AREA (SQ.IN.)	PREVIOUS FORCE (KIPS)	EXPECTED LIFT-OFF FORCE (KIPS)	GAGE PRESS. (KSI)	FORCE (KIPS)	FORCE AVG. OF 2 ENDS (KIPS)	SHIM THICKNESS (IN.) PREVIOUS AS-FOUND	GAGE PRESS. (KSI)	FORCE (KIPS)	FINAL SHIM THICKNESS (IN.)	INT. °F	EXT. °F		SIGNATURE
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1.	V32 TOP	9365/211.815	1193	1186	5620	1190	N/A	14.2	14.15	N/A	N/A	N/A	121.2	82	9-204	<i>[Signature]</i>	<i>[Signature]</i>
2.	V53	9365/211.815	1463	1205	5770	1222	N/A	15.5	15.30	N/A	N/A	N/A	121.2	82	9-204	<i>[Signature]</i>	<i>[Signature]</i>
3.	V66	9365/211.815	1416	1170	5560	1178	N/A	14.0	14.30	N/A	N/A	N/A	120.4	84	9-204	<i>[Signature]</i>	<i>[Signature]</i>
4.	V140	9365/211.815	1447	1174	5400	1144	N/A	15.2	15.65	6400	1355.5	15.85/15.90"	121.2	80	9-204	<i>[Signature]</i>	<i>[Signature]</i>
5.	V140 *	6002/191.515			7100	1355.2	N/A	15.254 15.90"	15.85 15.90"	N/A	N/A		117.944		9-204	<i>[Signature]</i>	<i>[Signature]</i>
6.																	

NOTE: V140 FIELD END/BOTTOM SHIM STACK HEIGHT, AS FOUND 2", RETENSIONED 6.05"

NOTE A:

FORCE CALCULATION: FORCE @ LIFT-OFF = JACK PRESSURE X RAM AREA OR FROM CALIBRATION EQUATION

CALIBRATION EQUATIONS

RAM ID 9365	$\frac{6002}{\sqrt{\quad}}$	EQUATION
AREA = 211.815	191.505	
K = -0.077	(-) 4.911	

LEGEND:

- LOCATION: T OR B - TOP OR BOTTOM OF VERTICAL TENDON
- SHIM THICKNESS: CLEAR DISTANCE BETWEEN BEARING PLATE AND STRESSING WASHER.
- PREVIOUS: AT TIME OF ORIGINAL INSTALLATION OR, IF APPLICABLE, FROM PREVIOUS SURVEILLANCE

COGNIZANT MECH/STRUCT ENGINEER
 REVIEWED BY *[Signature]*

DATE: 27 FEB 05

* V140 - LIFT-OFF RECHECK ON 9/27/04 7/11. 9/27/04

A308/A459

DA SHEET 3
 Prestress Force Confirmation Test
 Vertical Tendons

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 Revision 18
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INSPECTION PERIOD 8th

TENDON		LIFT-OFF CONDITION					RETENSIONING					REACTOR BLDG. TEMP.		DATE INSP.	INSP. BY CONTR. FOREMAN	VERIF. BY COGNIZANT QV. INSP.	
I.D.	LOCATION	RAM ID/AREA (SQ.IN.)	PREVIOUS FORCE (KIPS)	EXPECTED LIFT-OFF FORCE (KIPS)	GAGE PRESS. (KSI)	FORCE (KIPS)	FORCE AVG. OF 2 ENDS (KIPS)	SHIM THICKNESS (IN.) PREVIOUS AS-FOUND	GAGE PRESS. (KSI)	FORCE (KIPS)	FINAL SHIM THICKNESS (IN.)	INT. °F	EXT. °F		SIGNATURE	SIGNATURE	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1.V131	SHOP/TOP	9365/211.815		1185	5750	1218	N/A	15"	5850	1239	15.9"	121.4	58°	1/19/04	BAG	J.	
2.V141	SHOP/TOP	9365/211.815		1225	5700	1207	N/A	15.6"	6220	1317	15.3"⓪	121.4	58°	1/19/04	BAG	J.	
3.		/															
4.		/															
5.		/															
6.		/															

NOTE A:

FORCE CALCULATION: FORCE @ LIFT-OFF = JACK PRESSURE X RAM AREA
 OR
 FROM CALIBRATION EQUATION

LEGEND:

LOCATION: T OR B - TOP OR BOTTOM OF VERTICAL TENDON
 SHIM THICKNESS: CLEAR DISTANCE BETWEEN BEARING PLATE AND STRESSING WASHER.
 PREVIOUS: AT TIME OF ORIGINAL INSTALLATION OR, IF APPLICABLE, FROM PREVIOUS SURVEILLANCE

CALIBRATION EQUATIONS	
RAM ID	EQUATION
9365	
AREA = 211.815	
RAM K = -0.077	

NOTES: ⓪ SHIM STACK FIELD/BOTTOM

Prior To Detensioning = 2"

AFTER RETENSIONING = 5.5" 2/11-19-04

COGNIZANT MECH/STRUCT ENGINEER
 REVIEWED BY [Signature]

DATE: 27 FEB 05

A309/A459

DATA SHEET 5
AVERAGE OF THE NORMALIZED LIFT OFF FORCE

Tendon ID	(1)	(2)	(3)	(4)	
	Lift Off Force	Normalizing Factor (NF)	Normalized Lift Off (1) + (2)	Yes	No
<u>Dome Tendons</u>					
1. <u>D 213</u>	<u>1094.5</u>	<u>67</u>	<u>1161.5</u>		
2. <u>D 225</u>	<u>1120</u>	<u>45</u>	<u>1165</u>		
3. <u>D 230</u>	<u>1345</u> 1149	<u>8</u>	<u>1353</u> 1157		
4. _____					
5. _____					
6. _____					
			<u>3483.5</u> BAG 1.27.05		
			<u>3679.5</u>		
			<u>1226.5</u>		
			<u>1161.2</u> BAG 1.27.05	<u>YES</u>	

BAG 1.27.05
(Average Equal to or greater than 1064 kips)

<u>Vertical Tendons</u>					
1. <u>V 32</u>	<u>1190</u>	<u>-7</u>	<u>1183</u>		
2. <u>V 53</u>	<u>1222</u>	<u>-27</u>	<u>1195</u>		
3. <u>V 66</u>	<u>1178</u>	<u>9</u>	<u>1187</u>		
4. <u>V 140</u>	<u>1355.5</u> 1144	<u>4</u>	<u>1359.5</u> 1148		
5. <u>V 137</u>	<u>1218</u>	<u>-7</u>	<u>1211</u>		
6. <u>V 141</u>	<u>1207</u>	<u>-46</u>	<u>1161</u>		
			<u>7085.0</u> BAG 1.27.05		
			<u>4924.5</u>		
			<u>1231</u>		
			<u>1180.8</u> BAG 1.27.05	<u>YES</u>	

BAG 1.27.05
(Average Equal to or greater than 1033 kips)

<u>Hoop Tendons</u>					
1. <u>H 13-11</u>	<u>1218</u>	<u>-54</u>	<u>1164</u>		
2. <u>H 35-49</u>	<u>1201</u>	<u>-7</u>	<u>1194</u>		
3. <u>H 46-25</u>	<u>1311.5</u> 1121	<u>51</u>	<u>1362.5</u> 1172		
4. <u>H 62-18</u>	<u>1105</u>	<u>10</u>	<u>1115</u>		
5. <u>H 62-26</u>	<u>1119.8</u>	<u>2</u>	<u>1121.8</u>		
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
			<u>5766.9</u> BAG 1.27.05		
			<u>5957.5</u>		
			<u>1192</u>		
			<u>1153.4</u> BAG 1.27.05	<u>YES</u>	

BAG 1.27.05
(Average Equal to or greater than 1108 kips)

Cognizant Mech/Struct Engineer
Reviewed By: [Signature] Date: 27 FEB 05

Performed By: [Signature] Date: 11-22-04

A31/A459

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DATA SHEET 5
AVERAGE OF THE NORMALIZED LIFT OFF FORCE

Tendon ID	(1) Lift Off Force	(2) Normalizing Factor (NF)	(3) Normalized Lift Off (1) + (2)	(4) Acceptance	
				Yes	No
<u>Dome Tendons</u>					
1.					(Average Equal to or greater than 1064 kips)
2.					
3.					
4.					
5.					
6.					
			Total Average		
<u>Vertical Tendons</u>					
1.	V137				(Average Equal to or greater than 1033 kips)
2.	V141				
3.					
4.					
5.					
6.					
			Total Average		
<u>Hoop Tendons</u>					
1.					(Average Equal to or greater than 1108 kips)
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
			Total Average		

N/A 11-22-04

N/A 11-22-04

Cognizant Mech/Struct Engineer

Reviewed By: [Signature]

Date: 27 FEB 05

Performed By:

[Signature]

Date: 11-22-04

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8th Tendon I.D. 1.32

END LOCATION	MEASURE- MENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>Top</u>	1	<u>5620 1190</u>	<u>5620 1190</u>	<u>9-7-04 200</u>	<u>Per 11/2/04</u>	<u>200 1-9-04</u>
	2	<u>5620 1190</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	3	<u>5620 1190</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	4	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	5	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	6	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	7	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	8	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	9	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	10	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>

(SHOP
OR
FIELD)

RUNNING AVERAGE:

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY: [Signature]

DATE: 27 FEB 05

AS12/4459

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 9th Tendon I.D. 1.53

END LOCATION	MEASURE- MENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY. CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>Shop/Top</u>	1	<u>5770 11222</u>	<u>5770/1222</u>	<u>9-7-04 2000</u>	<u>PG 19/7/04</u>	<u>SGO 19-7-04</u>
<u>(SHOP</u>	2	<u>5770 11222</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
<u>OR</u>	3	<u>5770 11222</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
<u>FIELD)</u>	4	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	5	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	6	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	7	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	8	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	9	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	10	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>

RUNNING AVERAGE:

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY: [Signature]

DATE: 27 Feb 05

A3B/A459

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 9th Tendon I.D. V66

END LOCATION	MEASURE-MENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>SHOP/Top</u>	1	<u>5570 1 1180</u>	<u>5560 1 1178</u>	<u>9-3-04</u>	<u>BG 1 9/7/04</u>	<u>SPD 1 9-3-04</u>
<u>(SHOP</u> <u>OR</u> <u>FIELD)</u>	2	<u>5560 1 1178</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	3	<u>5550 1 1175</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	4	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	5	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	6	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	7	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	8	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	9	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	10	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>

RUNNING AVERAGE:

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY: [Signature]

DATE: 27 FEB 05

A314/A459

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8 Tendon I.D. V137

END LOCATION 1	MEASURE- MENT NUMBER 2	FEELER GAGE WITHDRAWAL 4	RUNNING AVERAGE 8	DATE INSP. 9	INSP. BY CONTR. FOREMAN 10	VERIFIED BY COGNIZANT QV INSP. 11
<u>TOP</u>	1	<u>5750 / 1218</u>	<u>5750 / 1218</u>	<u>11-19-04</u>	<u>BAG</u>	<u>11-19-04</u>
	2	<u>5750 / 1218</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	3	<u>5750 / 1218</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	4	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	5	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	6	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	7	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	8	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	9	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	10	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>

(SHOP
OR
FIELD)

RUNNING AVERAGE:

Ram # 9365 / GAUGE FORCEY # 5

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER

REVIEWED BY: [Signature] DATE: 27 Feb 05

PRE DETENSIONING

AB15/A459

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8-2 Tendon I.D. V137

END LOCATION	MEASURE- MENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>T3?</u>	1	<u>5850 / 1239</u>	<u>5850 / 1239</u>	<u>11-19-04</u>	<u>PAG 11-19-04</u>	<u>2/11-19-04</u>
(SHOP OR FIELD)	2	<u>5850 / 1239</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	3	<u>5850 / 1239</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	4	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	5	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	6	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	7	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	8	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	9	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	10	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>

RUNNING AVERAGE:

Ram # 9365 / GAUGE # FORNEY # 5

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY: [Signature]

DATE: 27 FEB 05

A814/A459

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8TH Tendon I.D. V140

END LOCATION	MEASURE- MENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>TOP</u>	1	<u>5400 1144</u>	<u>5400 1144</u>	<u>9-7-04 200</u>	<u>BC</u> <u>12/2/04</u>	<u>SAO</u> <u>12-7-04</u>
<u>(SHOP</u> <u>OR</u> <u>FIELD)</u>	2	<u>5400 1144</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	3	<u>5400 1144</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	4	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	5	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	6	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	7	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	8	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	9	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	10	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

RUNNING AVERAGE:

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER

REVIEWED BY: [Signature] DATE: 27 FEB 05

AB17/A459

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8TH Tendon I.D. V140

END LOCATION	MEASURE- MENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>TOP</u>	1	<u>6400 11355.5</u>	<u>6400 11355.5</u>	<u>9-9-04/940</u>	<u>BAR 12-9-04</u>	<u>APD 12-9-04</u>
(SHOP OR FIELD) <u>RETENSION</u>	2	<u>6400 11355.5</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	3	<u>6400 11355.5</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	4	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	5	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	6	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	7	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	8	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	9	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	10	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>

RUNNING AVERAGE:

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY: [Signature]

DATE: 27 Feb 05

A310/A459

DATA SHEET 7

Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

- LIFT-OFF RECHECK 2/18/2004

Inspection Period 8th Tendon I.D. V140

END LOCATION 1	MEASURE- MENT NUMBER 2	FEELER GAGE WITHDRAWAL 4	RUNNING AVERAGE 8	DATE INSP. 9	INSP. BY CONTR. FOREMAN 10	VERIFIED BY COGNIZANT QV INSP. 11
<u>Top</u>	1	<u>7100 / 1355.2</u>	<u>7100 / 1355.2</u>	<u>9/27/04 2:11</u>	<u>FAB 19-27-04</u>	<u>2:11 19/27/04</u>
(SHOP OR FIELD)	2	<u>7100 / 1355.2</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	3	<u>7100 / 1355.2</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	4	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	5	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	6	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	7	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	8	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	9	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	10	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>

RUNNING AVERAGE:

RAM + 6002 RAM AREA 191.565 K = (-) 4.911

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY: [Signature] DATE: 27 Feb 05

A319/A459

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8 Tendon I.D. 1.41

END LOCATION	MEASURE- MENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>Top</u>	1	<u>5700 / 1207</u>	<u>5700 / 1207</u>	<u>11-17-04</u>	<u>Pre 11-17-04</u>	<u>W. 11-17-04</u>
<u>(SHOP</u> OR <u>FIELD)</u>	2	<u>5700 / 1207</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	3	<u>5700 / 1207</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	4	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	5	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	6	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	7	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	8	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	9	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	10	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>

RUNNING AVERAGE:

RAM # 9365 / GAUGE FORNEY # 5

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER

REVIEWED BY: [Signature] DATE: 27 Feb 05

PRE DETENSIONING

AS20/A459

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8 Tendon I.D. v141

END LOCATION	MEASURE- MENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>TOP</u>	1	<u>6170 1307</u>	<u>6170 1307</u>	<u>11-18-04</u>	<u>BB</u> <u>11-18-04</u>	<u>ef.</u> <u>11-18-04</u>
<u>(SHOP</u> <u>OR</u> <u>FIELD)</u>	2	<u>6170 1307</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	3	<u>6170 1307</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	4	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	5	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	6	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	7	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	8	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	9	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	10	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>

RUNNING AVERAGE:

RAM # 9365 / FORNEY #5 GAUGE

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY: [Signature]

DATE: 27 Feb 05

POST TENSIONING 1ST TIME

AB21/A459

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8 Tendon I.D. V141

END LOCATION	MEASURE- MENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>TOP</u>	1	<u>6220 1317</u>	<u>6220 1317</u>	<u>11-19-04</u>	<u>BG 11-19-04</u>	<u>42 11-19-04</u>
(SHOP OR FIELD)	2	<u>6220 1317</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	3	<u>6220 1317</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	4	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	5	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	6	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	7	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	8	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	9	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	10	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

RUNNING AVERAGE:

RAM# 9365 / GAUGE FORNEY# 5

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY: [Signature]

DATE: 27 FEB 05

POST DETENSION & 2ND TIME

A322/A459

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8-2 Tendon I.D. H13-11

END LOCATION	MEASURE- MENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>Bot. 1</u>	1	<u>6400 / 1235</u>	<u>6400 / 1235</u>	<u>11-20-04</u>	<u>Be 11-20-04</u>	<u>LF 11-20-04</u>
(SHOP OR FIELD)	2	<u>6400 / 1235</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	3	<u>6400 / 1235</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	4	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	5	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	6	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	7	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	8	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	9	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	10	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>

RUNNING AVERAGE:

RAM # 6001 / GAUGE FORNEY # 5

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER

REVIEWED BY: [Signature] DATE: 27 Feb 05

A323/4159

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8² Tendon I.D. 413-11

END LOCATION	MEASUREMENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>BUTT #3</u> (SHOP OR <u>FIELD</u>)	1	6300 11201	6300/1201	11-22-04	BAB 11-22-04	2/1 11-22-04
	2	6300 11201	/	/	/	/
	3	6300 11201	/	/	/	/
	4	/	/	/	/	/
	5	/	/	/	/	/
	6	/	/	/	/	/
	7	/	/	/	/	/
	8	/	/	/	/	/
	9	/	/	/	/	/
	10	/	/	/	/	/

RUNNING AVERAGE:

Ram #6001 / AVERAGE CC-125169

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY: [Signature]

DATE: 27 Feb 05

A334/A459

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8TH Tendon I.D. H35-49

END LOCATION 1	MEASURE- MENT NUMBER 2	FEELER GAGE WITHDRAWAL 4	RUNNING AVERAGE 8	DATE INSP. 9	INSP. BY CONTR. FOREMAN 10	VERIFIED BY COGNIZANT QV INSP. 11
<u>Butt 5</u>	1	<u>6340 1208</u>	<u>6340 1208</u>	<u>2/16-04/800</u>	<u>EAG 19.16.04</u>	<u>AD 19-16-04</u>
	2	<u>6340 1208</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	3	<u>6340 1208</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	4	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	5	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	6	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	7	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	8	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	9	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	10	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

(SHOP
OR
FIELD)

RUNNING AVERAGE:

Ram 6001
AREA = 191.784
K = -7.404

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY: [Signature]

DATE: 27 Feb 05

H35/1459

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8TH Tendon I.D. H35-49

END LOCATION	MEASURE- MENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>Butt. 3</u>	1	<u>6260 1 1194</u>	<u>6260 1194</u>	<u>9-15-04 RDD</u>	<u>BAG 19-15-04</u>	<u>RAD 19-15-04</u>
(SHOP	2	<u>6260 1 1194</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
OR	3	<u>6260 1 1194</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
(FIELD)	4	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	5	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	6	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	7	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	8	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	9	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	10	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>

RUNNING AVERAGE:

Ram 6002
Area = 191.565 K = -4.911

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY: [Signature]

DATE: 27 Feb 05

A3316/A3419

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8/2 Tendon I.D. H46-25

END LOCATION	MEASURE- MENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>BUTT. 6</u>	1	<u>6000 1143</u>	<u>6000 1143</u>	<u>11-9-04</u>	<u>PAG 11-9-04</u>	<u>J. 11-9-04</u>
(SHOP OR FIELD)	2	<u>6000 1143</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	3	<u>6000 1143</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	4	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	5	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	6	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	7	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	8	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	9	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	10	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>

RUNNING AVERAGE:

GAUGE FORNEY #5 / RAM #6001

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY: _____ DATE: _____

PRE DETENSIONING

A337/A459

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8-5 Tendon I.D. H46-25

END LOCATION	MEASURE- MENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>Butt. 4</u>	1	<u>5760 / 1099</u>	<u>5760 / 1099</u>	<u>11-8-04</u>	<u>PAG / 11-8-04</u>	<u>U. / 11-8-04</u>
(SHOP	2	<u>5760 / 1099</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
OR	3	<u>5760 / 1099</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
<u>FIELD)</u>	4	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	5	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	6	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	7	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	8	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	9	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	10	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>

RUNNING AVERAGE:

Gauge Forney #2 / Ram #6002

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY: [Signature]

DATE: 27 FEB 05

PRE DETENSIONING.

A328/A459

AFTER RETENSIONING
DATA SHEET 7

1301-9.1
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Page 1 of 1

Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8~~th~~ Tendon I.D. H46-25

END LOCATION	MEASURE- MENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>BUTT. C</u>	1	6850 / 1306	6850/1306	11-10-04	BAG 11-10-04	H.H. / 11-10-04
(SHOP OR FIELD)	2	6850 / 1306	/	/	/	/
	3	6850 / 1306	/	/	/	/
	4	/	/	/	/	/
	5	/	/	/	/	/
	6	/	/	/	/	/
	7	/	/	/	/	/
	8	/	/	/	/	/
	9	/	/	/	/	/
	10	/	/	/	/	/

RUNNING AVERAGE:

GAUGE # FURNEY #5 / RAM #6001

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER

REVIEWED BY: [Signature] DATE: 11 FEB 05

POST DETENSIONING

A929/A459

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8+2 Tendon I.D. H46-25

END LOCATION	MEASUREMENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>H46-25</u>	1	<u>6900 11317</u>	<u>6900/11317</u>	<u>11-10-04</u>	<u>EAG 11-10-04</u>	<u>W. 11-10-04</u>
(SHOP	2	<u>6900 1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
OR	3	<u>6900 1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
<u>FIELD</u>	4	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	5	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	6	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	7	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	8	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	9	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	10	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>

RUNNING AVERAGE:

Ram #6002 / AVERAGE # CC-125169

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY: [Signature]

DATE: 27 Feb 05

POST DETENSIONING.

A330/A459

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8th Tendon I.D. H62-18

END LOCATION	MEASUREMENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>Butt. 6</u>	1	<u>5820 1109</u>	<u>5820/1109</u>	<u>11-8-04</u>	<u>PAG 11-8-04</u>	<u>25. 11-8-04</u>
(SHOP OR FIELD)	2	<u>5820 1109</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	3	<u>5820 1109</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	4	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	5	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	6	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	7	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	8	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	9	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	10	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

RUNNING AVERAGE:

GAUGE FORNEY #2 / RAM #6001

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER

REVIEWED BY: [Signature]

DATE: 27 FEB 05

A931/A159

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8th Tendon I.D. H62-18

END LOCATION	MEASURE- MENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>Butt. 2</u>	1	<u>5780 1101</u>	<u>5780 1101</u>	<u>11-2-04</u> <u>SL</u>	<u>BAG</u> <u>11-2-04</u>	<u>SL</u> <u>11-2-04</u>
(SHOP	2	<u>5780 1101</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
OR	3	<u>5780 1101</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
(FIELD)	4	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	5	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	6	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	7	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	8	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	9	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	10	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>

RUNNING AVERAGE:

Gauge, Forney #2 / RAM # 6001

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER

REVIEWED BY: [Signature] DATE: 17 FEB 05

A332/A459

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8TH Tendon I.D. 62 H 26

END LOCATION	MEASURE- MENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>SHOP/BUT 6</u> (SHOP OR FIELD)	1	6010 1 1145	6010 1145	9-22-04	ENG 19.22.04	DPD 19-22-04
	2	6010 1 1145	1	1	1	1
	3	6010 1 1145	1	1	1	1
	4	1	1	1	1	1
	5	1	1	1	1	1
	6	1	1	1	1	1
	7	1	1	1	1	1
	8	1	1	1	1	1
	9	1	1	1	1	1
	10	1	1	1	1	1

RUNNING AVERAGE:

RAM 6001
Area = 191.784
K = -7.904

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY: 

DATE: 27 FEB 05

A333/A459

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8th Tendon I.D. 462-26

END LOCATION	MEASURE- MENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>2109 BUTT L</u>	1	5740 / 1094.6	5740/1094.6	9-29-04	EAC 19.29.04	76.21 / 9.29.04
(SHOP	2	5740 /	/	/	/	/
OR	3	5740 /	/	/	/	/
(FIELD)	4	/	/	/	/	/
	5	/	/	/	/	/
	6	/	/	/	/	/
	7	/	/	/	/	/
	8	/	/	/	/	/
	9	/	/	/	/	/
	10	/	/	/	/	/

RUNNING AVERAGE:

RAM² 6002
AREA = 191.565
K = 6) 4.911

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY: [Signature]

DATE: 27 FEB 05

A334/A459

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8th Tendon I.D. D-213

END LOCATION 1	MEASUREMENT NUMBER 2	FEELER GAGE WITHDRAWAL 4	RUNNING AVERAGE 8	DATE INSP. 9	INSP. BY CONTR. FOREMAN 10	VERIFIED BY COGNIZANT QV INSP. 11
<u>D-213/NE</u>	1	<u>5610 11068</u>	<u>5610 11068</u>	<u>9-13-04</u>	<u>EGS</u> 19-13-04	<u>SAD</u> 19-13-04
	2	<u>5610 11068</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	3	<u>5610 11068</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	4	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	5	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	6	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	7	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	8	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	9	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	10	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>

(SHOP
OR
FIELD)

RUNNING AVERAGE:

RAM I.D. *6001
AREA = 191.784 K = -7.404

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY: [Signature] DATE: 27 Feb 05

A335/A459

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8TH Tendon I.D. 2-213

END LOCATION	MEASURE- MENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>SE</u>	1	<u>5880 1.121</u>	<u>5880.1121</u>	<u>2-10-04</u>	<u>BAG</u> 19.11.04	<u>SAHO</u> 19-11-04
(SHOP	2	<u>5880 1.121</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
OR	3	<u>5880 1.121</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
<u>FIELD)</u>	4	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	5	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	6	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	7	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	8	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	9	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	10	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>

RUNNING AVERAGE:

RAM ID# 6002
AREA = 191.565 K = -4.911

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY: [Signature]

DATE: 27 FEB 05

A3360/A459

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8TH Tendon I.D. D-225

END LOCATION	MEASURE- MENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>NW</u>	1	<u>5880 1120</u>	<u>5880 1120</u>	<u>9-14-04</u>	<u>ESG</u>	<u>19-14-04</u>
<u>(SHOP</u> OR <u>FIELD)</u>	2	<u>5880 1120</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	3	<u>5880 1120</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	4	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	5	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	6	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	7	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	8	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	9	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	10	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

RUNNING AVERAGE:

RAM I.D. 6001
AREA = 191.784 K = -7.404

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY: [Signature]

DATE: 27 FEB 05

A0337/A459

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8th Tendon I.D. D-225

END LOCATION	MEASURE-MENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>SW</u>	1	<u>5870 1 1120</u>	<u>5870 1120</u>	<u>9-14-04 210</u>	<u>EAG</u> 19.14.04	<u>DRD</u> 19-14-04
(SHOP	2	<u>5870 1 1120</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
OR	3	<u>5870 1 1120</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
<u>(FIELD)</u>	4	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	5	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	6	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	7	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	8	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u> <u>7</u>
	9	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	10	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>

RUNNING AVERAGE:

RAM ID 6002
AREA = 191.565' K = -4.911

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER

REVIEWED BY: [Signature]

DATE: 27 FEB 05

A9338/A459

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8TH Tendon I.D. D-230

END LOCATION 1	MEASURE- MENT NUMBER 2	FEELER GAGE WITHDRAWAL 4	RUNNING AVERAGE 8	DATE INSP. 9	INSP. BY CONTR. FOREMAN 10	VERIFIED BY COGNIZANT QV INSP. 11
<u>D230</u> HEAR Butt*5	1	<u>6100 / 1163</u>	<u>6100 / 1163</u>	<u>11-15-04</u>	<u>PKG 11-15-04</u>	<u>21- 11-15-04</u>
(SHOP)	2	<u>6100 / 1163</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
OR	3	<u>6100 / 1163</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
FIELD)	4	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	5	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	6	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	7	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	8	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	9	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	10	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>

RUNNING AVERAGE:

RAM # 6001 / GAGE # CC-125169

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY: [Signature]

DATE: 27 FEB 05

PRE DETENSIONING

A339/A459

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8TH Tendon I.D. D-230

END LOCATION	MEASURE- MENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>D230</u> NEAR BUTT. #3	1	<u>5950 / 1135</u>	<u>5950 / 1135</u>	<u>11-11-04</u>	<u>FAB 11-11-04</u>	<u>J. 11-11-04</u>
(SHOP	2	<u>5950 / 1135</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
OR	3	<u>5950 / 1135</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
(FIELD)	4	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	5	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	6	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	7	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	8	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	9	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	10	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>

RUNNING AVERAGE:

GAUGE FORNEY #5 / RAM # 600Z

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER

REVIEWED BY: [Signature] DATE: 27 FEB 05

PRE DETENSIONING

A3410/A459

DATA SHEET 7

Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8TH Tendon I.D. D-230

END LOCATION	MEASURE- MENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>D230</u> NEAR BUTT.*S (SHOP) OR FIELD) RETENSION	1	7000 1335	7000 1335	11-16-04	FRG 11/16/04	W. 11-16-04
	2	7000 1335				
	3	7000 1335				
	4					
	5					
	6					
	7					
	8					
	9					
	10					

RUNNING AVERAGE:

RAM # 6001 / GAUGE # CC-125169

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY: [Signature]

DATE: 27 FEB 05

POST DETENSIONING

A341/A459

DATA SHEET 7
Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)

Inspection Period 8TH Tendon I.D. D230

END LOCATION	MEASUREMENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>D230</u>	1	7100 1355	7100 1355	11-11-04	<u>FAG</u> 11-11-04	<u>J.H.H.</u> 11-11-04
<u>NEAR BUTT #3</u>	2	7100 1355				
<u>(SHOP</u>	3	7100 1355				
<u>OR</u>	4					
<u>FIELD)</u>	5					
	6					
	7					
	8					
	9					
	10					

RUNNING AVERAGE:

RAM #6002 / GAUGE FORNEY #5

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY: [Signature]

DATE: 27 Feb 05

Post DETENSIONING

A340/A459

A343/A459
Number

TMI - Unit 1
Surveillance Procedure

1301-9.1

title	Revision No.
RB Structural Integrity Tendon Surveillance	18

DATA SHEET 4

Page 1 of 4

Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

Tendon ID V137

Surveillance No. 8

Part 1
Original Stressing Data

NOTE

PTF force is that equivalent to a ram pressure of 1,000 psi. PTF removes tendon slack and is the starting point for elongation measurements. OSF force is 80% (may be less) of tendon ultimate strength. The tendon is loaded to OSF in order to provide the required force distribution. It is also the force at which final elongation is measured. PTF force / elongation, OSF force / elongation and number of effective wires are documented in construction records.

Table 1		
Row, R	Parameter	Value
1	Shop End PTF Force	210 kip
2	Field end PTF force	N/A* kip
3	Mean PTF Force = (R1 + R2) / 2	210* kip
4	Shop End PTF Elongation	N/A** in.
5	Field End PTF Elongation	N/A** in.
6	Total PTF Elongation = R4 + R5	N/A** in.
7	Shop End OSF Force	1593 kip
8	Field end OSF force	N/A* kip
9	Mean OSF Force = (R7 + R8) / 2	1593* kip
10	Shop End OSF Elongation	N/A** in.
11	Field End OSF Elongation	N/A** in.
12	Total OSF Elongation = R10 + R11	N/A** in.
13	Differential Force = R9 - R3	1383 kip
14	Differential Elongation = R12 - R6	11.89** in.
15	Number of Effective Wires	169
16	Elongation Rate = R14 x R15 / R13	1.45 in./wire/kip

* MEAN FORCE = SHOP END FORCE FOR SINGLE END STRESSED VERTICAL TENDON
 ** ADJUSTED TOTAL ELONGATION AS REPORTED IN VM-TM-2485

A344/A459
Number

TMI - Unit 1
Surveillance Procedure

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RB Structural Integrity Tendon Surveillance

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DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

Page 2 of 4

Tendon ID V137

Surveillance No. 8th

Part 2

Shop End Re-Tensioning Data

Ram ID 9365

Ram Area, A 211.815 in²

Ram k -0.071 kip

NOTE

The number of effective wires entered in R1 must be the same as the number entered for the field end in Table 3. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 2				
Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	165	[Signature]	11-19-04
2	PTF Target Pressure	1,000 psi	[Signature]	11-19-04
3	PTF Actual Pressure	1000 psi	[Signature]	11-19-04
4	PTF Actual Force = $R3 \times A = k$	212 kip	[Signature]	11-19-04
5	PTF Elongation	6.4 in.	[Signature]	11-19-04
6	OSF Maximum Force = $R1 \times 9.4$	1551 kip	[Signature]	11-19-04
7	OSF Max. Pressure = $(R6 + k) / A$	7322 psi	[Signature]	11-19-04
8	1/3 Pressure Interval = $R7 / 3 - 330$	2111 psi	[Signature]	11-19-04
9	Target 1/3 Pressure = $1,000 + R8$	3111 psi	[Signature]	11-19-04
10	Actual 1/3 Pressure	3110 psi	[Signature]	11-19-04
11	1/3 Elongation	10.2 in.	[Signature]	11-19-04
12	Target 2/3 Pressure = $R9 + R8$	5222 psi	[Signature]	11-19-04
13	Actual 2/3 Pressure	5220 psi	[Signature]	11-19-04
14	2/3 Elongation	14.1 in.	[Signature]	11-19-04
15	OSF Actual Pressure	7320 psi	[Signature]	11-19-04
16	OSF Actual Force = $R15 \times A = k$	1551 kip	[Signature]	11-19-04
17	OSF Elongation	18.0 in.	[Signature]	11-19-04
18	Differential Force = $R16 - R4$	1339 kip	[Signature]	11-18-04
19	Differential Elongation = $R17 - R5$	11.6 in.	[Signature]	11-19-04

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TMI - Unit 1
Surveillance Procedure

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RB Structural Integrity Tendon Surveillance

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DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

Page 3 of 4

Tendon ID V137

Surveillance No. 6

Part 3
Field End Re-Tensioning Data

Ram ID N/A

Ram Area, A N/A in²

Ram k N/A kip

NOTE
The number of effective wires entered in R1 must be the same as the number entered for the shop end in Table 2. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 3				
Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	165	<i>[Signature]</i>	11-19-04
2	PTF Target Pressure	1,000 psi		
3	PTF Actual Pressure	psi		
4	PTF Actual Force = $R3 \times A \times k$	kip		
5	PTF Elongation	in.		
6	OSF Maximum Force = $R1 \times 9.4$	kip		
7	OSF Max. Pressure = $(R6 + k) / A$	psi		
8	1/3 Pressure Interval = $R7 / 3 - 330$	psi		
9	Target 1/3 Pressure = $1,000 + R8$	psi	<i>N/A</i>	11-19-04
10	Actual 1/3 Pressure	psi		
11	1/3 Elongation	in.		
12	Target 2/3 Pressure = $R9 + R8$	psi		
13	Actual 2/3 Pressure	psi		
14	2/3 Elongation	in.		
15	OSF Actual Pressure	psi		
16	OSF Actual Force = $R15 \times A \times k$	kip		
17	OSF Elongation	in.		
18	Differential Force = $R16 - R4$	kip		
19	Differential Elongation = $R17 - R5$	in.		

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Number

TMI - Unit 1
Surveillance Procedure

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RB Structural Integrity Tendon Surveillance

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DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

Page 4 of 4

Tendon ID V137

Surveillance No. 82

Part 4
Elongation Comparison

Table 4		
Row, R	Parameter	Value
1	Shop End Differential Force from Table 2, R18	1339 kip
2	Field End Differential Force from Table 3, R18	N/A kip
3	Average Differential Force = (R1 + R2) / 2	1339 kip
4	Shop End Differential Elongation from Table 2, R19	11.6 in.
5	Field End Differential Elongation from Table 3, R19	N/A in.
6	Total Elongation = R4 + R5	11.6 in.
7	Number of Effective Wires from Table 2, R1	165
8	Re-Tensioning Elongation Rate = R6 x R7 / R3	1.43
9	Original Elongation Rate from Table 1, R16	1.45 ⁱⁿ / ^{wire} / ^{ft}
10	Fractional Difference in Rates = (R8 - R9) / R9	- .01

Absolute value of the above Fractional Difference in Rates ≤ 0.1

Yes

No

Signature: [Handwritten Signature]

Date: 11-19-09

A347/A459

Number

TMI - Unit 1
Surveillance Procedure

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RB Structural Integrity Tendon Surveillance

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DATA SHEET 4

Page 1 of 4

Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

Tendon ID V140

Surveillance No. 8

Part 1
Original Stressing Data

NOTE

PTF force is that equivalent to a ram pressure of 1,000 psi. PTF removes tendon slack and is the starting point for elongation measurements. OSF force is 80% (may be less) of tendon ultimate strength. The tendon is loaded to OSF in order to provide the required force distribution. It is also the force at which final elongation is measured. PTF force / elongation, OSF force / elongation and number of effective wires are documented in construction records.

Table 1		
Row, R	Parameter	Value
1	Shop End PTF Force	210 kip
2	Field end PTF force	N/A* kip
3	Mean PTF Force = (R1 + R2) / 2	210* kip
4	Shop End PTF Elongation	N/A** in.
5	Field End PTF Elongation	N/A** in.
6	Total PTF Elongation = R4 + R5	N/A** in.
7	Shop End OSF Force	1548 kip
8	Field end OSF force	N/A* kip
9	Mean OSF Force = (R7 + R8) / 2	1548* kip
10	Shop End OSF Elongation	N/A** in.
11	Field End OSF Elongation	N/A** in.
12	Total OSF Elongation = R10 + R11	N/A** in.
13	Differential Force = R9 - R3	1338 kip
14	Differential Elongation = R12 - R6	12.0** in.
15	Number of Effective Wires	169
16	Elongation Rate = R14 x R15 / R13	1.52 IN/WIRE/KIP

* MEAN FORCE = SHOP END FORCE FOR SINGLE END STRESSED VERTICAL TENDON
 ** ADJUSTED TOTAL ELONGATION AS REPORTED IN VM-TM-2485

A348/A459

TMI - Unit 1
Surveillance Procedure

Number

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RB Structural Integrity Tendon Surveillance

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DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

Page 2 of 4

Tendon ID V140

Surveillance No. 8

Part 2

Shop End Re-Tensioning Data

Ram ID 9365

Ram Area, A 211.815 in²

Ram k -0.077 kip

NOTE

The number of effective wires entered in R1 must be the same as the number entered for the field end in Table 3. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 2

Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	168	<i>David P. O'Brien</i>	9-9-04
2	PTF Target Pressure	1,000 psi	<i>David P. O'Brien</i>	9-9-04
3	PTF Actual Pressure	1000 psi	<i>David P. O'Brien</i>	9-9-04
4	PTF Actual Force = $R3 \times A - kL$	212 kip	<i>David P. O'Brien</i>	9-9-04
5	PTF Elongation	6.95 in.	<i>David P. O'Brien</i>	9-9-04
6	OSF Maximum Force = $R1 \times 9.4$	1579 kip	<i>David P. O'Brien</i>	9-9-04
7	OSF Max. Pressure = $(R6 + k) / A$	7455 psi	<i>David P. O'Brien</i>	9-9-04
8	1/3 Pressure Interval = $R7 / 3 - 330$	2155 psi	<i>David P. O'Brien</i>	9-9-04
9	Target 1/3 Pressure = $1,000 + R8$	3155 psi	<i>David P. O'Brien</i>	9-9-04
10	Actual 1/3 Pressure	3150 psi	<i>David P. O'Brien</i>	9-9-04
11	1/3 Elongation	1640 in.	<i>David P. O'Brien</i>	9-9-04
12	Target 2/3 Pressure = $R9 + R8$	5310 psi	<i>David P. O'Brien</i>	9-9-04
13	Actual 2/3 Pressure	5310 psi	<i>David P. O'Brien</i>	9-9-04
14	2/3 Elongation	1580 in.	<i>David P. O'Brien</i>	9-9-04
15	OSF Actual Pressure	7450 psi	<i>David P. O'Brien</i>	9-9-04
16	OSF Actual Force = $R15 \times A - kL$	1578 kip	<i>David P. O'Brien</i>	9-9-04
17	OSF Elongation	21.50 in.	<i>David P. O'Brien</i>	9-9-04
18	Differential Force = $R16 - R4$	1366 kip	<i>David P. O'Brien</i>	9-9-04
19	Differential Elongation = $R17 - R5$	14.55 in.	<i>David P. O'Brien</i>	9-9-04

12349/A459
Number

TMI - Unit 1
Surveillance Procedure

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Revision No.

RB Structural Integrity Tendon Surveillance

18

DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

Page 3 of 4

Tendon ID V140

Surveillance No. 8

Part 3
Field End Re-Tensioning Data

Ram ID N/A

Ram Area, A N/A in²

Ram k N/A kip

NOTE
The number of effective wires entered in R1 must be the same as the number entered for the shop end in Table 2. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 3				
Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	108	<i>John P. Olson</i>	9-9-04
2	PTF Target Pressure	1,000 psi		
3	PTF Actual Pressure	psi		
4	PTF Actual Force = R3 x A = k	kip		
5	PTF Elongation	in.		
6	OSF Maximum Force = R1 x 9.4	kip		
7	OSF Max. Pressure = (R6 + k) / A	psi		
8	1/3 Pressure Interval = R7 / 3 - 330	psi		
9	Target 1/3 Pressure = 1,000 + R8	psi		
10	Actual 1/3 Pressure	N/A psi	N/A	N/A
11	1/3 Elongation	in.		
12	Target 2/3 Pressure = R9 + R8	psi		
13	Actual 2/3 Pressure	psi		
14	2/3 Elongation	in.		
15	OSF Actual Pressure	psi		
16	OSF Actual Force = R15 x A = k	kip		
17	OSF Elongation	in.		
18	Differential Force = R16 - R4	kip		
19	Differential Elongation = R17 - R5	in.		

A350/A459
Number

TMI - Unit 1
Surveillance Procedure

1301-9.1

Revision No.

RB Structural Integrity Tendon Surveillance

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DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

Page 4 of 4

Tendon ID V140

Surveillance No. 8

Part 4
Elongation Comparison

Table 4		
Row, R	Parameter	Value
1	Shop End Differential Force from Table 2, R18	1366 kip
2	Field End Differential Force from Table 3, R18	N/A kip
3	Average Differential Force = (R1 + R2) / 2	1366 kip
4	Shop End Differential Elongation from Table 2, R19	14.55 in.
5	Field End Differential Elongation from Table 3, R19	N/A in.
6	Total Elongation = R4 + R5	14.55 in.
7	Number of Effective Wires from Table 2, R1	168
8	Re-Tensioning Elongation Rate = R6 x R7 / R3	1.80
9	Original Elongation Rate from Table 1, R16	1.52 in-wire/kip
10	Fractional Difference in Rates = (R8 - R9) / R9	0.18

Absolute value of the above Fractional Difference in Rates ≤ 0.1

Yes _____
No X

Signature: *David P. O'Hara*

Date: 9-9-04

AB51/A459

TMI - Unit 1
Surveillance Procedure

Number
1301-9.1

RB Structural Integrity Tendon Surveillance

Revision No.
18

DATA SHEET 4

Page 1 of 4

Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

Tendon ID V140

Surveillance No. 8

Part 1
Original Stressing Data

NOTE

PTF force is that equivalent to a ram pressure of 1,000 psi. PTF removes tendon slack and is the starting point for elongation measurements. OSF force is 80% (may be less) of tendon ultimate strength. The tendon is loaded to OSF in order to provide the required force distribution. It is also the force at which final elongation is measured. PTF force / elongation, OSF force / elongation and number of effective wires are documented in construction records.

Table 1		
Row, R	Parameter	Value
1	Shop End PTF Force	210 kip
2	Field end PTF force	N/A*kip
3	Mean PTF Force = (R1 + R2) / 2	210*kip
4	Shop End PTF Elongation	N/A**in.
5	Field End PTF Elongation	N/A**in.
6	Total PTF Elongation = R4 + R5	N/A**in.
7	Shop End OSF Force	1548 kip
8	Field end OSF force	N/A*kip
9	Mean OSF Force = (R7 + R8) / 2	1548*kip
10	Shop End OSF Elongation	N/A**in.
11	Field End OSF Elongation	N/A**in.
12	Total OSF Elongation = R10 + R11	N/A**in.
13	Differential Force = R9 - R3	1338 kip
14	Differential Elongation = R12 - R6	12.0**in.
15	Number of Effective Wires	169
16	Elongation Rate = R14 x R15 / R13	1.52 IN/IN/kip

* MEAN FORCE = SHOP END FORCE FOR SINGLE END STRESSED VERTICAL TENDON
 ** ADJUSTED TOTAL ELONGATION AS REPORTED IN VM-TM-2485

A358/A459

TMI - Unit 1
Surveillance Procedure

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1301-9.1

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RB Structural Integrity Tendon Surveillance

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DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID V140

Surveillance No. 8

Part 2

Shop End Re-Tensioning Data

Ram ID 9365

Ram Area, A 211.815 in²

Ram k 0.077 kip

NOTE

The number of effective wires entered in R1 must be the same as the number entered for the field end in Table 3. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 2

Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	168	<i>David P. O'Brien</i>	9-9-04
2	PTF Target Pressure	1,000 psi	<i>David P. O'Brien</i>	9-9-04
3	PTF Actual Pressure	1000 psi	<i>David P. O'Brien</i>	9-9-04
4	PTF Actual Force = R3 x A x k	212 kip	<i>David P. O'Brien</i>	9-9-04
5	PTF Elongation	4.45 in.	<i>David P. O'Brien</i>	9-9-04
6	OSF Maximum Force = R1 x 9.4	1579 kip	<i>David P. O'Brien</i>	9-9-04
7	OSF Max. Pressure = (R6 + k) / A	7455 psi	<i>David P. O'Brien</i>	9-9-04
8	1/3 Pressure Interval = R7 / 3 - 330	2155 psi	<i>David P. O'Brien</i>	9-9-04
9	Target 1/3 Pressure = 1,000 + R8	3155 psi	<i>David P. O'Brien</i>	9-9-04
10	Actual 1/3 Pressure	3150 psi	<i>David P. O'Brien</i>	9-9-04
11	1/3 Elongation	8.60 in.	<i>David P. O'Brien</i>	9-9-04
12	Target 2/3 Pressure = R9 + R8	5310 psi	<i>David P. O'Brien</i>	9-9-04
13	Actual 2/3 Pressure	5310 psi	<i>David P. O'Brien</i>	9-9-04
14	2/3 Elongation	12.95 in.	<i>David P. O'Brien</i>	9-9-04
15	OSF Actual Pressure	7450 psi	<i>David P. O'Brien</i>	9-9-04
16	OSF Actual Force = R15 x A x k	1578 kip	<i>David P. O'Brien</i>	9-9-04
17	OSF Elongation	17.60 in.	<i>David P. O'Brien</i>	9-9-04
18	Differential Force = R16 - R4	1346 kip	<i>David P. O'Brien</i>	9-9-04
19	Differential Elongation = R17 - R5	13.12 in.	<i>David P. O'Brien</i>	9-9-04

A353/A459

TMI - Unit 1
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Tendon ID V140

Surveillance No. 8

Part 3
Field End Re-Tensioning Data

Ram ID N/A

Ram Area, A N/A in²

Ram k N/A kip

NOTE

The number of effective wires entered in R1 must be the same as the number entered for the shop end in Table 2. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 3				
Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	186	<i>David P. O'Brien</i>	9-9-04
2	PTF Target Pressure	1,000 psi	↑	↑
3	PTF Actual Pressure	↑ psi	↑	↑
4	PTF Actual Force = $R3 \times A \times k$	kip		
5	PTF Elongation	in.		
6	OSF Maximum Force = $R1 \times 9.4$	kip		
7	OSF Max. Pressure = $(R6 + k) / A$	psi		
8	1/3 Pressure Interval = $R7 / 3 - 330$	psi		
9	Target 1/3 Pressure = $1,000 + R8$	psi		
10	Actual 1/3 Pressure	N/A psi		N/A
11	1/3 Elongation	in.	N/A	
12	Target 2/3 Pressure = $R9 + R8$	psi		
13	Actual 2/3 Pressure	psi		
14	2/3 Elongation	in.		
15	OSF Actual Pressure	psi		
16	OSF Actual Force = $R15 \times A \times k$	kip		
17	OSF Elongation	in.		
18	Differential Force = $R16 - R4$	kip		
19	Differential Elongation = $R17 - R5$	in.		

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Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID V140

Surveillance No. 8

Part 4
Elongation Comparison

Table 4

Row, R	Parameter	Value
1	Shop End Differential Force from Table 2, R18	1366 kip
2	Field End Differential Force from Table 3, R18	N/A kip
3	Average Differential Force = (R1 + R2) / 2	1366 kip
4	Shop End Differential Elongation from Table 2, R19	13.15 in.
5	Field End Differential Elongation from Table 3, R19	N/A in.
6	Total Elongation = R4 + R5	13.15 in.
7	Number of Effective Wires from Table 2, R1	168
8	Re-Tensioning Elongation Rate = R6 x R7 / R3	1.62
9	Original Elongation Rate from Table 1, R16	1.52 in-wire/kip
10	Fractional Difference in Rates = (R8 - R9) / R9	0.065

Absolute value of the above Fractional Difference in Rates ≤ 0.1

Yes X

No _____

Signature: David P. O'Neil

Date: 9-9-04

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Surveillance Procedure

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DATA SHEET 4

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Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

Tendon ID V141

Surveillance No. 8

Part 1
Original Stressing Data

NOTE

PTF force is that equivalent to a ram pressure of 1,000 psi. PTF removes tendon slack and is the starting point for elongation measurements. OSF force is 80% (may be less) of tendon ultimate strength. The tendon is loaded to OSF in order to provide the required force distribution. It is also the force at which final elongation is measured. PTF force / elongation, OSF force / elongation and number of effective wires are documented in construction records.

Table 1		
Row, R	Parameter	Value
1	Shop End PTF Force	210 kip
2	Field end PTF force	N/A*
3	Mean PTF Force = (R1 + R2) / 2	210* kip
4	Shop End PTF Elongation	N/A** in.
5	Field End PTF Elongation	N/A** in.
6	Total PTF Elongation = R4 + R5	N/A** in.
7	Shop End OSF Force	1517 kip
8	Field end OSF force	N/A* kip
9	Mean OSF Force = (R7 + R8) / 2	1517* kip
10	Shop End OSF Elongation	N/A** in.
11	Field End OSF Elongation	N/A** in.
12	Total OSF Elongation = R10 + R11	N/A** in.
13	Differential Force = R9 - R3	1307 kip
14	Differential Elongation = R12 - R6	11.93** in.
15	Number of Effective Wires	169
16	Elongation Rate = R14 x R15 / R13	1.54 in wire / kip

* MEAN FORCE = SHOP END FOR SINGLE END STRESSED VERTICAL TENDON
 ** ADJUSTED TOTAL ELONGATION AS REPORTED IN VM-TM-2485
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TMI - Unit 1
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Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID V141

Surveillance No. 8

Part 2
Shop End Re-Tensioning Data

Ram ID 9365

Ram Area, A 211.815 in²

Ram k -0.077 kip

NOTE

The number of effective wires entered in R1 must be the same as the number entered for the field end in Table 3. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 2 1ST TIME				
Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	169	[Signature]	11-18-04
2	PTF Target Pressure	1,000 psi	[Signature]	11-18-04
3	PTF Actual Pressure	1000 psi	[Signature]	11-18-04
4	PTF Actual Force = $R3 \times A - k$	212 kip	[Signature]	11-18-04
5	PTF Elongation	5.1 in.	[Signature]	11-18-04
6	OSF Maximum Force = $R1 \times 9.4$	1588.6 kip	[Signature]	11-18-04
7	OSF Max. Pressure = $(R6 + k) / A$	7499 psi	[Signature]	11-18-04
8	1/3 Pressure Interval = $R7 / 3 - 330$	2170 psi	[Signature]	11-18-04
9	Target 1/3 Pressure = $1,000 + R8$	3170 psi	[Signature]	11-18-04
10	Actual 1/3 Pressure	3170 psi	[Signature]	11-18-04
11	1/3 Elongation	9.3 in.	[Signature]	11-18-04
12	Target 2/3 Pressure = $R9 + R8$	5340 psi	[Signature]	11-18-04
13	Actual 2/3 Pressure	5340 psi	[Signature]	11-18-04
14	2/3 Elongation	13.5 in.	[Signature]	11-18-04
15	OSF Actual Pressure	7490 psi	[Signature]	11-18-04
16	OSF Actual Force = $R15 \times A - k$	1587 kip	[Signature]	11-18-04
17	OSF Elongation	18.5 in.	[Signature]	11-18-04
18	Differential Force = $R16 - R4$	1375 kip	[Signature]	11-18-04
19	Differential Elongation = $R17 - R5$	13.4 in.	[Signature]	11-18-04

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TMI - Unit 1
Surveillance Procedure

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DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID V141

Surveillance No. 8

Part 3

Field End Re-Tensioning Data

Ram ID N/A

Ram Area, A N/A in²

Ram k N/A kip

NOTE

The number of effective wires entered in R1 must be the same as the number entered for the shop end in Table 2. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 3		1 ST TIME		
Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	169	<i>[Signature]</i>	11-17-04
2	PTF Target Pressure	1,000 psi		
3	PTF Actual Pressure	psi		
4	PTF Actual Force = $R3 \times A - k$	kip		
5	PTF Elongation	in.		
6	OSF Maximum Force = $R1 \times 9.4$	kip		
7	OSF Max. Pressure = $(R6 + k) / A$	psi		
8	1/3 Pressure Interval = $R7 / 3 - 330$	psi		
9	Target 1/3 Pressure = $1,000 + R8$	psi		
10	Actual 1/3 Pressure	psi	<i>N/A</i>	<i>11-17-04</i>
11	1/3 Elongation	in.		
12	Target 2/3 Pressure = $R9 + R8$	psi		
13	Actual 2/3 Pressure	psi		
14	2/3 Elongation	in.		
15	OSF Actual Pressure	psi		
16	OSF Actual Force = $R15 \times A - k$	kip		
17	OSF Elongation	in.		
18	Differential Force = $R16 - R4$	kip		
19	Differential Elongation = $R17 - R5$	in		

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Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID V141

Surveillance No. 6

Part 4
Elongation Comparison

Table 4		1 ST TIME
Row, R	Parameter	Value
1	Shop End Differential Force from Table 2, R18	1375 kip
2	Field End Differential Force from Table 3, R18	N/A kip
3	Average Differential Force = (R1 + R2) / 2	1375 kip
4	Shop End Differential Elongation from Table 2, R19	13.4 in.
5	Field End Differential Elongation from Table 3, R19	N/A in.
6	Total Elongation = R4 + R5	13.4 in.
7	Number of Effective Wires from Table 2, R1	169
8	Re-Tensioning Elongation Rate = R6 x R7 / R3	1.65
9	Original Elongation Rate from Table 1, R16	1.54 IN/WIRE/KIP
10	Fractional Difference in Rates = (R8 - R9) / R9	.07

Absolute value of the above Fractional Difference in Rates ≤ 0.1

Yes
No

Signature: [Handwritten Signature]

Date: 11-18-04

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Surveillance Procedure

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DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID V141

Surveillance No. 8

Part 2

Shop End Re-Tensioning Data

Ram ID 9365

Ram Area, A 211.815 in²

Ram k -0.077 kip

NOTE

The number of effective wires entered in R1 must be the same as the number entered for the field end in Table 3. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 2 2ND Time				
Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	168	[Signature]	11-18-04
2	PTF Target Pressure	1,000 psi	[Signature]	11-18-04
3	PTF Actual Pressure	1000 psi	[Signature]	11-18-04
4	PTF Actual Force = $R3 \times A - k$	212 kip	[Signature]	11-18-04
5	PTF Elongation	4.5 in.	[Signature]	11-18-04
6	OSF Maximum Force = $R1 \times 9.4$	1579.2 kip	[Signature]	11-18-04
7	OSF Max. Pressure = $(R6 + k) / A$	7455 psi	[Signature]	11-18-04
8	1/3 Pressure Interval = $R7 / 3 - 330$	2155 psi	[Signature]	11-18-04
9	Target 1/3 Pressure = $1,000 + R8$	3155 psi	[Signature]	11-18-04
10	Actual 1/3 Pressure	3150 psi	[Signature]	11-18-04
11	1/3 Elongation	9.0 in.	[Signature]	11-18-04
12	Target 2/3 Pressure = $R9 + R8$	5310 psi	[Signature]	11-18-04
13	Actual 2/3 Pressure	5310 psi	[Signature]	11-18-04
14	2/3 Elongation	12.9 in.	[Signature]	11-18-04
15	OSF Actual Pressure	7450 psi	[Signature]	11-18-04
16	OSF Actual Force = $R15 \times A - k$	1578 kip	[Signature]	11-18-04
17	OSF Elongation	17.5 in.	[Signature]	11-18-04
18	Differential Force = $R16 - R4$	1366 kip	[Signature]	11-18-04
19	Differential Elongation = $R17 - R5$	13 in.	[Signature]	11-18-04

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Surveillance Procedure

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Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID V141

Surveillance No. E

Part 3

Field End Re-Tensioning Data

Ram ID n/a

Ram Area, A n/a in²

Ram k n/a kip

NOTE

The number of effective wires entered in R1 must be the same as the number entered for the shop end in Table 2. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 3			2 ND TIME	
Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	168	<i>[Signature]</i>	11-16-04
2	PTF Target Pressure	1,000 psi		
3	PTF Actual Pressure	psi		
4	PTF Actual Force = $R3 \times A - k$	kip		
5	PTF Elongation	in.		
6	OSF Maximum Force = $R1 \times 9.4$	kip		
7	OSF Max. Pressure = $(R6 + k) / A$	psi		
8	1/3 Pressure Interval = $R7 / 3 - 330$	psi		
9	Target 1/3 Pressure = $1,000 + R8$	psi		
10	Actual 1/3 Pressure	psi	<i>N/A</i>	11-16-04
11	1/3 Elongation	in.		
12	Target 2/3 Pressure = $R9 + R8$	psi		
13	Actual 2/3 Pressure	psi		
14	2/3 Elongation	in.		
15	OSF Actual Pressure	psi		
16	OSF Actual Force = $R15 \times A - k$	kip		
17	OSF Elongation	in.		
18	Differential Force = $R16 - R4$	kip		
19	Differential Elongation = $R17 - R5$	in.		

A3601 / A459
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TMI - Unit 1
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Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID V141

Surveillance No. 8

Part 4
Elongation Comparison

Table 4 2ND TIME		
Row, R	Parameter	Value
1	Shop End Differential Force from Table 2, R18	1366 kip
2	Field End Differential Force from Table 3, R18	H/A kip
3	Average Differential Force = (R1 + R2) / 2	1366 kip
4	Shop End Differential Elongation from Table 2, R19	13 in.
5	Field End Differential Elongation from Table 3, R19	H/A in.
6	Total Elongation = R4 + R5	13 in.
7	Number of Effective Wires from Table 2, R1	168
8	Re-Tensioning Elongation Rate = R6 x R7 / R3	1.60
9	Original Elongation Rate from Table 1, R16	1.54 IN WIRE/KIP
10	Fractional Difference in Rates = (R8 - R9) / R9	.04

Absolute value of the above Fractional Difference in Rates ≤ 0.1 Yes
No

Signature: *[Handwritten Signature]*

Date: 11-18-04

A302/A459

	Number
TMI - Unit 1 Surveillance Procedure	1301-9.1
Title	Revision No.
RB Structural Integrity Tendon Surveillance	18

DATA SHEET 4

Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

Tendon ID D 230

Surveillance No. 8

Part 1
Original Stressing Data

NOTE

PTF force is that equivalent to a ram pressure of 1,000 psi. PTF removes tendon slack and is the starting point for elongation measurements. OSF force is 80% (may be less) of tendon ultimate strength. The tendon is loaded to OSF in order to provide the required force distribution. It is also the force at which final elongation is measured. PTF force / elongation, OSF force / elongation and number of effective wires are documented in construction records.

Table 1		
Row, R	Parameter	Value
1	Shop End PTF Force	210 kip
2	Field end PTF force	210 kip
3	Mean PTF Force = (R1 + R2) / 2	210 kip
4	Shop End PTF Elongation	N/A* in.
5	Field End PTF Elongation	N/A* in.
6	Total PTF Elongation = R4 + R5	N/A* in.
7	Shop End OSF Force	1528 kip
8	Field end OSF force	1528 kip
9	Mean OSF Force = (R7 + R8) / 2	1528 kip
10	Shop End OSF Elongation	N/A* in.
11	Field End OSF Elongation	N/A* in.
12	Total OSF Elongation = R10 + R11	N/A* in.
13	Differential Force = R9 - R3	1318 kip
14	Differential Elongation = R12 - R6	10.3* in.
15	Number of Effective Wires	169
16	Elongation Rate = R14 x R15 / R13	1.32 in/wire/kip

*TOTAL ADJUSTED ELONGATION AS REPORTED IN VM-TM-2485

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TMI - Unit 1
Surveillance Procedure

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DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID D230

Surveillance No. 8

Part 2
Shop End Re-Tensioning Data

Ram ID 6001

Ram Area, A 191.784 in²

Ram k - 7.404 kip

NOTE

The number of effective wires entered in R1 must be the same as the number entered for the field end in Table 3. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 2				
Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	168	<i>[Signature]</i>	11-16-04
2	PTF Target Pressure	1,000 psi	<i>[Signature]</i>	11-16-04
3	PTF Actual Pressure	1000 psi	<i>[Signature]</i>	11-16-04
4	PTF Actual Force = $R3 \times A - k$	192 kip	<i>[Signature]</i>	11-16-04
5	PTF Elongation	2.9 in.	<i>[Signature]</i>	11-16-04
6	OSF Maximum Force = $R1 \times 9.4$	1579.2 kip	<i>[Signature]</i>	11-16-04
7	OSF Max. Pressure = $(R6 + k) / A$	8195 psi	<i>[Signature]</i>	11-16-04
8	1/3 Pressure Interval = $R7 / 3 - 330$	2402 psi	<i>[Signature]</i>	11-16-04
9	Target 1/3 Pressure = $1,000 + R8$	3402 psi	<i>[Signature]</i>	11-16-04
10	Actual 1/3 Pressure	3400 psi	<i>[Signature]</i>	11-16-04
11	1/3 Elongation	4.5 in.	<i>[Signature]</i>	11-16-04
12	Target 2/3 Pressure = $R9 + R8$	5804 psi	<i>[Signature]</i>	11-16-04
13	Actual 2/3 Pressure	5800 psi	<i>[Signature]</i>	11-16-04
14	2/3 Elongation	6.0 in.	<i>[Signature]</i>	11-16-04
15	OSF Actual Pressure	8190 psi	<i>[Signature]</i>	11-16-04
16	OSF Actual Force = $R15 \times A - k$	1571 kip	<i>[Signature]</i>	11-16-04
17	OSF Elongation	7.5 in.	<i>[Signature]</i>	11-16-04
18	Differential Force = $R16 - R4$	1379 kip	<i>[Signature]</i>	11-16-04
19	Differential Elongation = $R17 - R5$	4.6 in.	<i>[Signature]</i>	11-16-04

A304/A459

	Number
TMI - Unit 1 Surveillance Procedure	1301-9.1
Title	Revision No.
RB Structural Integrity Tendon Surveillance	18

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Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID D230

Surveillance No. 8

Part 4
Elongation Comparison

Table 4		
Row, R	Parameter	Value
1	Shop End Differential Force from Table 2, R18	1379 kip
2	Field End Differential Force from Table 3, R18	1382 kip
3	Average Differential Force = $(R1 + R2) / 2$	1381 kip
4	Shop End Differential Elongation from Table 2, R19	4.6 in.
5	Field End Differential Elongation from Table 3, R19	5.5 in.
6	Total Elongation = $R4 + R5$	10.1 in.
7	Number of Effective Wires from Table 2, R1	168
8	Re-Tensioning Elongation Rate = $R6 \times R7 / R3$	1.23
9	Original Elongation Rate from Table 1, R16	1.32 IN/WIRE/KIP
10	Fractional Difference in Rates = $(R8 - R9) / R9$	-0.068

Absolute value of the above Fractional Difference in Rates ≤ 0.1

Yes

No

Signature: *Phillip M. Pea*

Date: 11-16-04

A365/A459

	TMI - Unit 1 Surveillance Procedure	Number 1301-9.1
Title	RB Structural Integrity Tendon Surveillance	Revision No. 18

DATA SHEET 4

Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

Tendon ID D 230

Surveillance No. 8

Part 1
Original Stressing Data

NOTE

PTF force is that equivalent to a ram pressure of 1,000 psi. PTF removes tendon slack and is the starting point for elongation measurements. OSF force is 80% (may be less) of tendon ultimate strength. The tendon is loaded to OSF in order to provide the required force distribution. It is also the force at which final elongation is measured. PTF force / elongation, OSF force / elongation and number of effective wires are documented in construction records.

Table 1		
Row, R	Parameter	Value
1	Shop End PTF Force	210 kip
2	Field end PTF force	210 kip
3	Mean PTF Force = (R1 + R2) / 2	210 kip
4	Shop End PTF Elongation	N/A* in.
5	Field End PTF Elongation	N/A* in.
6	Total PTF Elongation = R4 + R5	N/A* in.
7	Shop End OSF Force	1528 kip
8	Field end OSF force	1528 kip
9	Mean OSF Force = (R7 + R8) / 2	1528 kip
10	Shop End OSF Elongation	N/A* in.
11	Field End OSF Elongation	N/A* in.
12	Total OSF Elongation = R10 + R11	N/A* in.
13	Differential Force = R9 - R3	1318 kip
14	Differential Elongation = R12 - R6	10.3* in.
15	Number of Effective Wires	169
16	Elongation Rate = R14 x R15 / R13	1.32 in/wire/kip

*TOTAL ADJUSTED ELONGATION AS REPORTED IN VM-TM-2485

A3006/A459
Number

TMI - Unit 1
Surveillance Procedure

1301-9.1

Revision No.

RB Structural Integrity Tendon Surveillance

18

DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

Page 3 of 4

Tendon ID D230

Surveillance No. 8

Part 3

Field End Re-Tensioning Data

Ram ID 6002

Ram Area, A 191.565 in²

Ram k -4.911 kip

NOTE

The number of effective wires entered in R1 must be the same as the number entered for the shop end in Table 2. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 3

Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	168	<i>H. Hendrickson</i>	11-16-04
2	PTF Target Pressure	1,000 psi	<i>H. Hendrickson</i>	11-16-04
3	PTF Actual Pressure	1000 psi	<i>H. Hendrickson</i>	11-16-04
4	PTF Actual Force = $R3 \times A \times k$	192 kip	<i>H. Hendrickson</i>	11-16-04
5	PTF Elongation	3.2 in.	<i>H. Hendrickson</i>	11-16-04
6	OSF Maximum Force = $R1 \times 9.4$	1579.2 kip	<i>H. Hendrickson</i>	11-16-04
7	OSF Max. Pressure = $(R6 + k) / A$	8218 psi	<i>H. Hendrickson</i>	11-16-04
8	1/3 Pressure Interval = $R7 / 3 - 330$	2409 psi	<i>H. Hendrickson</i>	11-16-04
9	Target 1/3 Pressure = $1,000 + R8$	3409 psi	<i>H. Hendrickson</i>	11-16-04
10	Actual 1/3 Pressure	3410 psi	<i>H. Hendrickson</i>	11-16-04
11	1/3 Elongation	4.9 in.	<i>H. Hendrickson</i>	11-16-04
12	Target 2/3 Pressure = $R9 + R8$	5818 psi	<i>H. Hendrickson</i>	11-16-04
13	Actual 2/3 Pressure	5820 psi	<i>H. Hendrickson</i>	11-16-04
14	2/3 Elongation	6.6 in.	<i>H. Hendrickson</i>	11-16-04
15	OSF Actual Pressure	8215 psi	<i>H. Hendrickson</i>	11-16-04
16	OSF Actual Force = $R15 \times A \times k$	1579 kip	<i>H. Hendrickson</i>	11-16-04
17	OSF Elongation	8.7 in.	<i>H. Hendrickson</i>	11-16-04
18	Differential Force = $R16 - R4$	1382 kip	<i>H. Hendrickson</i>	11-16-04
19	Differential Elongation = $R17 - R5$	5.5 in.	<i>H. Hendrickson</i>	11-16-04

**AFTER RETENSIONING
DATA SHEET 7**

1301-9.1
Revision 18
Page 1 of 1

**Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)**

Inspection Period 8th Tendon I.D. D-230

END LOCATION	MEASURE- MENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>D230</u>	1	<u>7100 1355</u>	<u>7100 1355</u>	<u>11-16-04</u>	<u>FAB 11-16-04</u>	<u>221 11-16-04</u>
<u>NEAR</u>	2	<u>7100 1355</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>BUTT #3</u>	3	<u>7100 1355</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>(SHOP</u>	4	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>OR</u>	5	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>(FIELD)</u>	6	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	7	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>RETENSION</u>	8	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	9	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	10	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

RUNNING AVERAGE:

GAUGE: FOMNET #5 | RHM 46002

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER

REVIEWED BY: [Signature] DATE: 27 FEB 05

POST DETENSIONING

A367/A459

A368/A459

DATA SHEET 6
Retensioning Criteria Confirmation

(1) TENDON ID	(2) NUMBER OF EFFECTIVE WIRES	(3) 70 % OF ULTIMATE STRENGTH [8.24 X (2)]	(4) PREDICTED BASE FORCE ¹	(5) AVERAGE [(3)+(4)]÷2	(6) LOCK- OFF FORCE	(7) (4)<(6)<(3) Yes / No
<u>DOME</u>						
<u>D230</u> SHOP END	<u>168</u>	<u>1384</u>	<u>1111</u>	<u>1248</u>	<u>1335</u>	<u>YES</u>
_____ FIELD END	<u>168</u>	<u>1384</u>	<u>1111</u>	<u>1248</u>	<u>1355</u>	<u>YES</u>
_____ SHOP END	_____	_____	_____	_____	_____	_____
_____ FIELD END	_____	_____	_____	_____	_____	_____
<u>VERTICAL</u>						
<u>V140</u> SHOP END	<u>168</u>	<u>1385</u>	<u>1174</u>	<u>1280</u>	<u>1355.5</u>	<u>YES</u>
_____ SHOP END	_____	_____	_____	_____	_____	_____
_____ SHOP END	_____	_____	_____	_____	_____	_____
<u>HOOP TENDONS</u>						
<u>H46-25</u> SHOP END	<u>168</u>	<u>1384</u>	<u>1063</u>	<u>1224</u>	<u>1306</u>	<u>YES</u>
_____ FIELD END	<u>168</u>	<u>1384</u>	<u>1063</u>	<u>1224</u>	<u>1317</u>	<u>YES</u>
_____ SHOP END	_____	_____	_____	_____	_____	_____
_____ FIELD END	_____	_____	_____	_____	_____	_____
_____ SHOP END	_____	_____	_____	_____	_____	_____
_____ FIELD END	_____	_____	_____	_____	_____	_____

Cognizant Mech/Struct Engineer
Reviewed By: _____

Date: 77 FEB 05

Performed By: _____

Date: 11-24-04

¹ Predicted Base Force from DC-5390-225.01-SE or separate calculation.

A3609/A459

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Revision 18
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DATA SHEET 6
Retensioning Criteria Confirmation

(1) TENDON ID	(2) NUMBER OF EFFECTIVE WIRES	(3) 70 % OF ULTIMATE STRENGTH [8.24 X (2)]	(4) PREDICTED BASE FORCE ¹	(5) AVERAGE [(3)+(4)]÷2	(6) LOCK- OFF FORCE	(7) (4)<(6)<(3) Yes / No
DOME						
SHOP END	_____	_____	_____	_____	_____	_____
FIELD END	_____	_____	N/A	11-19-04	_____	_____
SHOP END	_____	_____	_____	_____	_____	_____
FIELD END	_____	_____	_____	_____	_____	_____
VERTICAL						
V137 SHOP END	165	1360	1185	1273	1239	YES
N/A SHOP END	N/A	N/A	N/A	N/A	N/A	N/A
N/A SHOP END	N/A	N/A	N/A	N/A	N/A	N/A
ROOF TENDONS						
SHOP END	_____	_____	_____	_____	_____	_____
FIELD END	_____	_____	_____	_____	_____	_____
SHOP END	_____	_____	N/A	11-19-04	_____	_____
FIELD END	_____	_____	_____	_____	_____	_____
SHOP END	_____	_____	_____	_____	_____	_____
FIELD END	_____	_____	_____	_____	_____	_____

Cognizant Mech/Struct Engineer

Reviewed By: *[Signature]*

Date: 27 FEB 05

Performed By:

[Signature]

Date: 11-19-04

¹ Predicted Base Force from DC-5390-225.01-SE or separate calculation.

A370/A459

DATA SHEET 6
Retensioning Criteria Confirmation

(1) TENDON ID	(2) NUMBER OF EFFECTIVE WIRES	(3) 70 % OF ULTIMATE STRENGTH [8.24 X (2)]	(4) PREDICTED BASE FORCE ¹	(5) AVERAGE [(3)+(4)]÷2	(6) LOCK- OFF FORCE	(7) (4)<(6)<(3) Yes / No
DOME						
SHOP END						
FIELD END						
SHOP END						
FIELD END						
VERTICAL						
V141 SHOP END	169	1393	1225	1309	1307	YES
V141 SHOP END	168	1384	1225	1304.5	1317	YES
N/A SHOP END	N/A	N/A	N/A	N/A	N/A	N/A
HOOP TENDONS						
SHOP END						
FIELD END						
SHOP END						
FIELD END						
SHOP END						
FIELD END						

N A 2/11-12-04

N A 2/11-12-04

Cognizant Mech/Struct Engineer
Reviewed By: [Signature] Date: 27 FEB 05

Performed By: [Signature] Date: 11-19-04

¹ Predicted Base Force from DC-5390-225.01-SE or separate calculation.

DATA SHEET 10
Tendon Anchor Head Rotation Inspection

Inspection Period 8TH

Tendon No.	Location	LIFTOFF		DETENSIONING			RETENSIONING			Insp.By/ Date
		No. of Turns	Dir.*	Insp.By/ Date	No. of Turns	Dir.*	Insp.By/ Date	No. of Turns	Dir.*	
1. <u>V32</u>	<u>T</u>	<u>0</u>	<u>n/a</u>	<u>2009-7-04</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>
	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>2009-7-04</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>
2. <u>V53</u>	<u>T</u>	<u>0</u>	<u>n/a</u>	<u>2009-7-04</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>
	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>
3. <u>V66</u>	<u>T</u>	<u>0</u>	<u>n/a</u>	<u>2009-3-04</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>
	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>
4. <u>V140</u>	<u>T</u>	<u>1</u>	<u>CW</u>	<u>2009-9-04</u>	<u>1</u>	<u>CW</u>	<u>2009-9-04</u>	<u>1</u>	<u>CW</u>	<u>2009-9-04</u>
	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>
5. <u>D-213</u>	<u>S/6</u>	<u>0</u>	<u>n/a</u>	<u>2009-13-04</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>
	<u>F/2</u>	<u>0</u>	<u>n/a</u>	<u>2009-11-04</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>
6. <u>D-225</u>	<u>S/1</u>	<u>0</u>	<u>n/a</u>	<u>2009-14-04</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>
	<u>F/1</u>	<u>0</u>	<u>n/a</u>	<u>2009-14-04</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>

NOTE: Location:

Hoop Tendons: 1 to 6 -

Vertical Tendons: T or B -

Dome Tendons: 1 to 6 -

Buttress number at end of tendon

Top or Bottom

Number of buttress nearest to end of tendon

Cognizant QV Inspector

Verification By: [Signature] Date: 11-24-04

Cognizant Mech/Struct Engineer

Review By: [Signature] Date: 27 FEB 05

Turn = a revolution of anchorhead about axis of tendon.

* Direction - Clockwise (CW) or Counter Clockwise (CCW) when looking at anchor head.

A071/A459

DATA SHEET 10
Tendon Anchor Head Rotation Inspection

Inspection Period 8TH

Tendon No.	Location	LIFTOFF			DETENSIONING			RETENSIONING		
		No. of Turns	Dir.*	Insp.By/Date	No. of Turns	Dir.*	Insp.By/Date	No. of Turns	Dir.*	Insp.By/Date
1.	<u>V140</u> <u>2nd Run</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>1</u>	<u>CCW</u>	<u>2009-8-04</u>	<u>1</u>	<u>CCW</u>	<u>2009-8-04</u>
	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
2.										
3.										
4.										
5.										
6.										

NOTE: Location:
 Hoop Tendons: 1 to 6 - Buttress number at end of tendon
 Vertical Tendons: T or B - Top or Bottom
 Dome Tendons: 1 to 6 - Number of buttress nearest to end of tendon

Cognizant QV Inspector
 Verification By: [Signature] Date: 9-8-04
 Cognizant Mech/Struct Engineer
 Review By: [Signature] Date: 27 FEB 05

Turn = a revolution of anchorhead about axis of tendon.
 * Direction - Clockwise (CW) or Counter Clockwise (CCW) when looking at anchor head.

A372/A459

DATA SHEET 10
Tendon Anchor Head Rotation Inspection

Inspection Period 8TH

Tendon No.	Location	LIFTOFF			DETENSIONING			RETENSIONING		
		No. of Turns	Dir.*	Insp. By/ Date	No. of Turns	Dir.*	Insp. By/ Date	No. of Turns	Dir.*	Insp. By/ Date
1. H35-49	S/5	0	N/A	2009-16-04	N/A	N/A	N/A	N/A	N/A	N/A
	F/3	0	N/A	2009-15-04	N/A	N/A	N/A	N/A	N/A	N/A
2. H62-26	S/6	0	N/A	21.9.22.04 for DPO 9.21.04	N/A	N/A	N/A	N/A	N/A	N/A
	F/2	0	N/A	21.9.29.04	N/A	N/A	N/A	N/A	N/A	N/A
3. H46-25	S/6	0	N/A	21.11.9.04	0	N/A	21.11.9.04	0	N/A	21.11.10.04
	F/4	0	N/A	21.11.9.04	0	N/A	21.11.9.04	0	N/A	21.11.10.04
4. D230	S/5	0	N/A	21.11.15.04	0	N/A	21.11.15.04	0	N/A	21.11.16.04
	F/3	0	N/A	21.11.11.04	0	N/A	21.11.15.04	0	N/A	21.11.16.04
5. H62-18	S/6	0	N/A	21.11.8.04	N/A	N/A	N/A	N/A	N/A	N/A
	F/2	0	N/A	21.11.2.04	N/A	N/A	N/A	N/A	N/A	N/A
6. H13-11	S/1	0	N/A	21.11.20.04	N/A	N/A	N/A	N/A	N/A	N/A
	F/3	0	N/A	21.11.22.04	N/A	N/A	N/A	N/A	N/A	N/A

NOTE: Location:

Hoop Tendons: 1 to 6 -

Vertical Tendons: T or B -

Dome Tendons: 1 to 6 -

Buttress number at end of tendon

Top or Bottom

Number of buttress nearest to end of tendon

Cognizant QV Inspector

Verification By: [Signature]

Date: 11-24-04

Cognizant Mech/Struct Engineer

Review By: [Signature]

Date: 27 FEB 05

Turn = a revolution of anchorhead about axis of tendon.

* Direction - Clockwise (CW) or Counter Clockwise (CCW) when looking at anchor head.

A328/A459

DATA SHEET 10
Tendon Anchor Head Rotation Inspection

Inspection Period 8th

Tendon No.	Location	LIFTOFF			DETENSIONING			RETENSIONING		
		No. of Turns	Dir.*	Insp.By/Date	No. of Turns	Dir.*	Insp.By/Date	No. of Turns	Dir.*	Insp.By/Date
1.	V137 SHOP/TOP	0	N/A	V. 11-19-04	.25	CCW	V. 11-19-04	.25	CCW	11-19-04
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2.										
3.										
4.										
5.										
6.										

N/A V. 11-19-04

NOTE: Location:
 Hoop Tendons: 1 to 6 - Buttress number at end of tendon
 Vertical Tendons: T or B - Top or Bottom
 Dome Tendons: 1 to 6 - Number of buttress nearest to end of tendon.

Cognizant QV Inspector Verification By: [Signature] Date: 11-19-04

Cognizant Mech/Struct Engineer Review By: [Signature] Date: 27 FEB 05

Turn = a revolution of anchorhead about axis of tendon.
 * Direction - Clockwise (CW) or Counter Clockwise (CCW) when looking at anchor head.

A324/A459

DATA SHEET 10
Tendon Anchor Head Rotation Inspection

Inspection Period 8th

	Tendon No.	Location	LIFTOFF		DETENSIONING			RETENSIONING			Insp. By/ Date
			No. of Turns	Dir.*	Insp. By/ Date	No. of Turns	Dir.*	Insp. By/ Date	No. of Turns	Dir.*	
1 ST	1. V141	SHOP/TOP	0	N/A	cf. 11-17-04	1	CW	cf. 11-17-04	.50	CW	cf. 11-18-04
		H/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 ND	2. V141	SHOP/TOP	0	N/A	cf. 11-18-04	.75	CW	cf. 11-18-04	.50	CW	cf. 11-18-04
		H/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3.											
4.											
5.											
6.											

NOTE: Location:
 Hoop Tendons: 1 to 6 - Buttress number at end of tendon
 Vertical Tendons: T or B - Top or Bottom
 Dome Tendons: 1 to 6 - Number of buttress nearest to end of tendon

Cognizant QV Inspector Verification By: [Signature] Date: 11-18-04
 Cognizant Mech/Struct Engineer Review By: [Signature] Date: 27 FEB 05

Turn = a revolution of anchorhead about axis of tendon.
 * Direction - Clockwise (CW) or Counter Clockwise (CCW) when looking at anchor head.

A376/A459

A376/A459
Number

TMI - Unit 1
Surveillance Procedure

1301-9.1

Title
RB Structural Integrity Tendon Surveillance

Revision No.
18

DATA SHEET 4

Page 1 of 4

Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

Tendon ID V137

Surveillance No. 8

Part 1
Original Stressing Data

NOTE

PTF force is that equivalent to a ram pressure of 1,000 psi. PTF removes tendon slack and is the starting point for elongation measurements. OSF force is 80% (may be less) of tendon ultimate strength. The tendon is loaded to OSF in order to provide the required force distribution. It is also the force at which final elongation is measured. PTF force / elongation, OSF force / elongation and number of effective wires are documented in construction records.

Table 1		
Row, R	Parameter	Value
1	Shop End PTF Force	210 kip
2	Field end PTF force	N/A* kip
3	Mean PTF Force = (R1 + R2) / 2	210* kip
4	Shop End PTF Elongation	N/A** in.
5	Field End PTF Elongation	N/A** in.
6	Total PTF Elongation = R4 + R5	N/A** in.
7	Shop End OSF Force	1593 kip
8	Field end OSF force	N/A* kip
9	Mean OSF Force = (R7 + R8) / 2	1593* kip
10	Shop End OSF Elongation	N/A** in.
11	Field End OSF Elongation	N/A** in.
12	Total OSF Elongation = R10 + R11	N/A** in.
13	Differential Force = R9 - R3	1383 kip
14	Differential Elongation = R12 - R6	11.89** in.
15	Number of Effective Wires	169
16	Elongation Rate = R14 x R15 / R13	1.45 in./wire/kip

* MEAN FORCE = SHOP END FORCE FOR SINGLE END STRESSED VERTICAL TENDON
 ** ADJUSTED TOTAL ELONGATION AS REPORTED IN VM-TM-2485

A377/A459
Number

TMI - Unit 1
Surveillance Procedure

1301-9.1

RB Structural Integrity Tendon Surveillance

18

DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

Page 2 of 4

Tendon ID V137

Surveillance No. 8th

Part 2

Shop End Re-Tensioning Data

Ram ID 9365

Ram Area, A 211.815 in²

Ram k -0.071 kip

NOTE

The number of effective wires entered in R1 must be the same as the number entered for the field end in Table 3. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 2				
Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	165	[Signature]	11-19-04
2	PTF Target Pressure	1,000 psi	[Signature]	11-19-04
3	PTF Actual Pressure	1000 psi	[Signature]	11-19-04
4	PTF Actual Force = $R3 \times A - k$	212 kip	[Signature]	11-19-04
5	PTF Elongation	6.4 in.	[Signature]	11-19-04
6	OSF Maximum Force = $R1 \times 9.4$	1551 kip	[Signature]	11-19-04
7	OSF Max. Pressure = $(R6 + k) / A$	7322 psi	[Signature]	11-19-04
8	1/3 Pressure Interval = $R7 / 3 - 330$	2111 psi	[Signature]	11-19-04
9	Target 1/3 Pressure = $1,000 + R8$	3111 psi	[Signature]	11-19-04
10	Actual 1/3 Pressure	3110 psi	[Signature]	11-19-04
11	1/3 Elongation	10.2 in.	[Signature]	11-19-04
12	Target 2/3 Pressure = $R9 + R8$	5222 psi	[Signature]	11-19-04
13	Actual 2/3 Pressure	5220 psi	[Signature]	11-19-04
14	2/3 Elongation	14.1 in.	[Signature]	11-19-04
15	OSF Actual Pressure	7320 psi	[Signature]	11-19-04
16	OSF Actual Force = $R15 \times A - k$	1551 kip	[Signature]	11-19-04
17	OSF Elongation	18.0 in.	[Signature]	11-19-04
18	Differential Force = $R16 - R4$	1339 kip	[Signature]	11-19-04
19	Differential Elongation = $R17 - R5$	11.6 in.	[Signature]	11-19-04

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DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID V137

Surveillance No. 62

Part 3

Field End Re-Tensioning Data

Ram ID N/A

Ram Area, A N/A in²

Ram k N/A kip

NOTE

The number of effective wires entered in R1 must be the same as the number entered for the shop end in Table 2. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 3

Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	165	<i>[Signature]</i>	11-19-04
2	PTF Target Pressure	1,000 psi		
3	PTF Actual Pressure	psi		
4	PTF Actual Force = $R3 \times A \times k$	kip		
5	PTF Elongation	in.		
6	OSF Maximum Force = $R1 \times 9.4$	kip		
7	OSF Max. Pressure = $(R6 + k) / A$	psi		
8	1/3 Pressure Interval = $R7 / 3 - 330$	psi		
9	Target 1/3 Pressure = $1,000 + R8$	psi	<i>N/A</i>	25 11-19-04
10	Actual 1/3 Pressure	psi		
11	1/3 Elongation	in.		
12	Target 2/3 Pressure = $R9 + R8$	psi		
13	Actual 2/3 Pressure	psi		
14	2/3 Elongation	in.		
15	OSF Actual Pressure	psi		
16	OSF Actual Force = $R15 \times A \times k$	kip		
17	OSF Elongation	in.		
18	Differential Force = $R16 - R4$	kip		
19	Differential Elongation = $R17 - R5$	in.		

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Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID V137

Surveillance No. 82

Part 4
Elongation Comparison

Table 4		
Row, R	Parameter	Value
1	Shop End Differential Force from Table 2, R18	1339 kip
2	Field End Differential Force from Table 3, R18	N/A kip
3	Average Differential Force = (R1 + R2) / 2	1339 kip
4	Shop End Differential Elongation from Table 2, R19	11.6 in.
5	Field End Differential Elongation from Table 3, R19	N/A in.
6	Total Elongation = R4 + R5	11.6 in.
7	Number of Effective Wires from Table 2, R1	165
8	Re-Tensioning Elongation Rate = R6 x R7 / R3	1.43
9	Original Elongation Rate from Table 1, R16	1.45 ⁱⁿ / _{wire} / _{kip}
10	Fractional Difference in Rates = (R8 - R9) / R9	- .01

Absolute value of the above Fractional Difference in Rates ≤ 0.1

Yes
No

Signature: *[Handwritten Signature]*

Date: 11-19-09

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Number

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DATA SHEET 4

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Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

Tendon ID V140

Surveillance No. 8

Part 1
Original Stressing Data

NOTE

PTF force is that equivalent to a ram pressure of 1,000 psi. PTF removes tendon slack and is the starting point for elongation measurements. OSF force is 80% (may be less) of tendon ultimate strength. The tendon is loaded to OSF in order to provide the required force distribution. It is also the force at which final elongation is measured. PTF force / elongation, OSF force / elongation and number of effective wires are documented in construction records.

Table 1		
Row, R	Parameter	Value
1	Shop End PTF Force	210 kip
2	Field end PTF force	N/A*kip
3	Mean PTF Force = (R1 + R2) / 2	210*kip
4	Shop End PTF Elongation	N/A**in.
5	Field End PTF Elongation	N/A**in.
6	Total PTF Elongation = R4 + R5	N/A**in.
7	Shop End OSF Force	1548 kip
8	Field end OSF force	N/A*kip
9	Mean OSF Force = (R7 + R8) / 2	1548*kip
10	Shop End OSF Elongation	N/A**in.
11	Field End OSF Elongation	N/A**in.
12	Total OSF Elongation = R10 + R11	N/A**in.
13	Differential Force = R9 - R3	1338 kip
14	Differential Elongation = R12 - R6	12.0**in.
15	Number of Effective Wires	169
16	Elongation Rate = R14 x R15 / R13	1.52 IN/WIRE/KIP

* MEAN FORCE = SHOP END FORCE FOR SINGLE END STRESSED VERTICAL TENDON
 ** ADJUSTED TOTAL ELONGATION AS REPORTED IN VM-TM-2485

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DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID V140

Surveillance No. 8

Part 2

Shop End Re-Tensioning Data

Ram ID 9365

Ram Area, A 211.815 in²

Ram k -0.077 kip

NOTE

The number of effective wires entered in R1 must be the same as the number entered for the field end in Table 3. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 2

Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	168	<i>Daniel P. O'Neil</i>	9-9-04
2	PTF Target Pressure	1,000 psi	<i>Daniel P. O'Neil</i>	9-9-04
3	PTF Actual Pressure	1000 psi	<i>Daniel P. O'Neil</i>	9-9-04
4	PTF Actual Force = $R3 \times A - k$	212 kip	<i>Daniel P. O'Neil</i>	9-9-04
5	PTF Elongation	6.95 in.	<i>Daniel P. O'Neil</i>	9-9-04
6	OSF Maximum Force = $R1 \times 9.4$	1579 kip	<i>Daniel P. O'Neil</i>	9-9-04
7	OSF Max. Pressure = $(R6 + k) / A$	7455 psi	<i>Daniel P. O'Neil</i>	9-9-04
8	1/3 Pressure Interval = $R7 / 3 - 330$	2155 psi	<i>Daniel P. O'Neil</i>	9-9-04
9	Target 1/3 Pressure = $1,000 + R8$	3155 psi	<i>Daniel P. O'Neil</i>	9-9-04
10	Actual 1/3 Pressure	3150 psi	<i>Daniel P. O'Neil</i>	9-9-04
11	1/3 Elongation	1640 in.	<i>Daniel P. O'Neil</i>	9-9-04
12	Target 2/3 Pressure = $R9 + R8$	5310 psi	<i>Daniel P. O'Neil</i>	9-9-04
13	Actual 2/3 Pressure	5310 psi	<i>Daniel P. O'Neil</i>	9-9-04
14	2/3 Elongation	15.80 in.	<i>Daniel P. O'Neil</i>	9-9-04
15	OSF Actual Pressure	7450 psi	<i>Daniel P. O'Neil</i>	9-9-04
16	OSF Actual Force = $R15 \times A - k$	1578 kip	<i>Daniel P. O'Neil</i>	9-9-04
17	OSF Elongation	21.50 in.	<i>Daniel P. O'Neil</i>	9-9-04
18	Differential Force = $R16 - R4$	1366 kip	<i>Daniel P. O'Neil</i>	9-9-04
19	Differential Elongation = $R17 - R5$	14.55 in.	<i>Daniel P. O'Neil</i>	9-9-04

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RB Structural Integrity Tendon Surveillance

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DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID V140

Surveillance No. 8

Part 3
Field End Re-Tensioning Data

Ram ID N/A

Ram Area, A N/A in²

Ram k N/A kip

NOTE
The number of effective wires entered in R1 must be the same as the number entered for the shop end in Table 2. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 3				
Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	108	<i>[Signature]</i>	9-9-01
2	PTF Target Pressure	1,000 psi		
3	PTF Actual Pressure	psi		
4	PTF Actual Force = R3 x A = k	kip		
5	PTF Elongation	in.		
6	OSF Maximum Force = R1 x 9.4	kip		
7	OSF Max. Pressure = (R6 + k) / A	psi		
8	1/3 Pressure Interval = R7 / 3 - 330	psi		
9	Target 1/3 Pressure = 1,000 + R8	psi		
10	Actual 1/3 Pressure	N/A psi	N/A	N/A
11	1/3 Elongation	in.		
12	Target 2/3 Pressure = R9 + R8	psi		
13	Actual 2/3 Pressure	psi		
14	2/3 Elongation	in.		
15	OSF Actual Pressure	psi		
16	OSF Actual Force = R15 x A = k	kip		
17	OSF Elongation	in.		
18	Differential Force = R16 - R4	kip		
19	Differential Elongation = R17 - R5	in.		

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Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID V140

Surveillance No. 8

Part 4
Elongation Comparison

Table 4		
Row, R	Parameter	Value
1	Shop End Differential Force from Table 2, R18	1366 kip
2	Field End Differential Force from Table 3, R18	N/A kip
3	Average Differential Force = (R1 + R2) / 2	1364 kip
4	Shop End Differential Elongation from Table 2, R19	14.55 in.
5	Field End Differential Elongation from Table 3, R19	N/A in.
6	Total Elongation = R4 + R5	14.55 in.
7	Number of Effective Wires from Table 2, R1	168
8	Re-Tensioning Elongation Rate = R6 x R7 / R3	1.80
9	Original Elongation Rate from Table 1, R16	1.52 in-wire/kip
10	Fractional Difference in Rates = (R8 - R9) / R9	0.18

Absolute value of the above Fractional Difference in Rates ≤ 0.1

Yes _____

No X

Signature: [Handwritten Signature]

Date: 9-9-04

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Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

Tendon ID V140

Surveillance No. 8

Part 1
Original Stressing Data

NOTE

PTF force is that equivalent to a ram pressure of 1,000 psi. PTF removes tendon slack and is the starting point for elongation measurements. OSF force is 80% (may be less) of tendon ultimate strength. The tendon is loaded to OSF in order to provide the required force distribution. It is also the force at which final elongation is measured. PTF force / elongation, OSF force / elongation and number of effective wires are documented in construction records.

Table 1		
Row, R	Parameter	Value
1	Shop End PTF Force	210 kip
2	Field end PTF force	N/A*kip
3	Mean PTF Force = (R1 + R2) / 2	210*kip
4	Shop End PTF Elongation	N/A**in.
5	Field End PTF Elongation	N/A**in.
6	Total PTF Elongation = R4 + R5	N/A**in.
7	Shop End OSF Force	1548 kip
8	Field end OSF force	N/A*kip
9	Mean OSF Force = (R7 + R8) / 2	1548*kip
10	Shop End OSF Elongation	N/A**in.
11	Field End OSF Elongation	N/A**in.
12	Total OSF Elongation = R10 + R11	N/A**in.
13	Differential Force = R9 - R3	1338 kip
14	Differential Elongation = R12 - R6	12.0**in.
15	Number of Effective Wires	169
16	Elongation Rate = R14 x R15 / R13	1.52 IN/URE/KIP

* MEAN FORCE = SHOP END FORCE FOR SINGLE END STRESSED VERTICAL TENDON
 ** ADJUSTED TOTAL ELONGATION AS REPORTED IN VM-TM-2485

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Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID V140

Surveillance No. 8

Part 2
Shop End Re-Tensioning Data

Ram ID 9365

Ram Area, A 211.815 in²

Ram k -0.077 kip

NOTE

The number of effective wires entered in R1 must be the same as the number entered for the field end in Table 3. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 2				
Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	168	<i>Daniel P. O'Brien</i>	9-9-04
2	PTF Target Pressure	1,000 psi	<i>Daniel P. O'Brien</i>	9-9-04
3	PTF Actual Pressure	1000 psi	<i>Daniel P. O'Brien</i>	9-9-04
4	PTF Actual Force = R3 x A x k	212 kip	<i>Daniel P. O'Brien</i>	9-9-04
5	PTF Elongation	4.45 in.	<i>Daniel P. O'Brien</i>	9-9-04
6	OSF Maximum Force = R1 x 9.4	1579 kip	<i>Daniel P. O'Brien</i>	9-9-04
7	OSF Max. Pressure = (R6 + k) / A	7455 psi	<i>Daniel P. O'Brien</i>	9-9-04
8	1/3 Pressure Interval = R7 / 3 - 330	2155 psi	<i>Daniel P. O'Brien</i>	9-9-04
9	Target 1/3 Pressure = 1,000 + R8	3155 psi	<i>Daniel P. O'Brien</i>	9-9-04
10	Actual 1/3 Pressure	3150 psi	<i>Daniel P. O'Brien</i>	9-9-04
11	1/3 Elongation	8.99 in. 71.76	<i>Daniel P. O'Brien</i>	9-9-04
12	Target 2/3 Pressure = R9 + R8	5310 psi	<i>Daniel P. O'Brien</i>	9-9-04
13	Actual 2/3 Pressure	5310 psi	<i>Daniel P. O'Brien</i>	9-9-04
14	2/3 Elongation	12.95 in.	<i>Daniel P. O'Brien</i>	9-9-04
15	OSF Actual Pressure	7450 psi	<i>Daniel P. O'Brien</i>	9-9-04
16	OSF Actual Force = R15 x A x k	1578 kip	<i>Daniel P. O'Brien</i>	9-9-04
17	OSF Elongation	17.60 in.	<i>Daniel P. O'Brien</i>	9-9-04
18	Differential Force = R16 - R4	1366 kip	<i>Daniel P. O'Brien</i>	9-9-04
19	Differential Elongation = R17 - R5	13.15 in.	<i>Daniel P. O'Brien</i>	9-9-04

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Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID V140

Surveillance No. 8

Part 3

Field End Re-Tensioning Data

Ram ID N/A

Ram Area, A N/A in²

Ram k N/A kip

NOTE

The number of effective wires entered in R1 must be the same as the number entered for the shop end in Table 2. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 3

Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	186	<i>David P. Olson</i>	9-9-04
2	PTF Target Pressure	1,000 psi	↑	↑
3	PTF Actual Pressure	↑ psi	↑	↑
4	PTF Actual Force = $R3 \times A - k$	kip		
5	PTF Elongation	in.		
6	OSF Maximum Force = $R1 \times 9.4$	kip		
7	OSF Max. Pressure = $(R6 + k) / A$	psi		
8	1/3 Pressure Interval = $R7 / 3 - 330$	psi		
9	Target 1/3 Pressure = $1,000 + R8$	psi		
10	Actual 1/3 Pressure	N/A psi		N/A
11	1/3 Elongation	in.	N/A	
12	Target 2/3 Pressure = $R9 + R8$	psi		
13	Actual 2/3 Pressure	psi		
14	2/3 Elongation	in.		
15	OSF Actual Pressure	psi		
16	OSF Actual Force = $R15 \times A - k$	kip		
17	OSF Elongation	in.		
18	Differential Force = $R16 - R4$	kip		
19	Differential Elongation = $R17 - R5$	in.		

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DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID V140Surveillance No. 8

Part 4
Elongation Comparison

Table 4		
Row, R	Parameter	Value
1	Shop End Differential Force from Table 2, R18	1366 kip
2	Field End Differential Force from Table 3, R18	N/A kip
3	Average Differential Force = $(R1 + R2) / 2$	1366 kip
4	Shop End Differential Elongation from Table 2, R19	13.15 in.
5	Field End Differential Elongation from Table 3, R19	N/A in.
6	Total Elongation = $R4 + R5$	13.15 in.
7	Number of Effective Wires from Table 2, R1	168
8	Re-Tensioning Elongation Rate = $R6 \times R7 / R3$	1.62
9	Original Elongation Rate from Table 1, R16	1.52 in-wire/kip
10	Fractional Difference in Rates = $(R8 - R9) / R9$	0.065

Absolute value of the above Fractional Difference in Rates ≤ 0.1 Yes No Signature: Daniel P. OllerDate: 9-9-04

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RB Structural Integrity Tendon Surveillance

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DATA SHEET 4

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Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

Tendon ID V141

Surveillance No. 8

Part 1
Original Stressing Data

NOTE

PTF force is that equivalent to a ram pressure of 1,000 psi. PTF removes tendon slack and is the starting point for elongation measurements. OSF force is 80% (may be less) of tendon ultimate strength. The tendon is loaded to OSF in order to provide the required force distribution. It is also the force at which final elongation is measured. PTF force / elongation, OSF force / elongation and number of effective wires are documented in construction records.

Table 1		
Row, R	Parameter	Value
1	Shop End PTF Force	210 kip
2	Field end PTF force	N/A*
3	Mean PTF Force = (R1 + R2) / 2	210* kip
4	Shop End PTF Elongation	N/A** in.
5	Field End PTF Elongation	N/A** in.
6	Total PTF Elongation = R4 + R5	N/A** in.
7	Shop End OSF Force	1517 kip
8	Field end OSF force	N/A* kip
9	Mean OSF Force = (R7 + R8) / 2	1517* kip
10	Shop End OSF Elongation	N/A** in.
11	Field End OSF Elongation	N/A** in.
12	Total OSF Elongation = R10 + R11	N/A** in.
13	Differential Force = R9 - R3	1307 kip
14	Differential Elongation = R12 - R6	11.93** in.
15	Number of Effective Wires	169
16	Elongation Rate = R14 x R15 / R13	1.54 in wires / kip

* MEAN FORCE = SHOP END FOR SINGLE END STRESSED VERTICAL TENDON
** ADJUSTED TOTAL ELONGATION ^{AS} REPORTED IN VM-TM-2485

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DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID V141

Surveillance No. 8

Part 2

Shop End Re-Tensioning Data

Ram ID 9365

Ram Area, A 211.815 in²

Ram k -0.077 kip

NOTE

The number of effective wires entered in R1 must be the same as the number entered for the field end in Table 3. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 2

1ST TIME

Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	169	[Signature]	11-18-04
2	PTF Target Pressure	1,000 psi	[Signature]	11-18-04
3	PTF Actual Pressure	1000 psi	[Signature]	11-18-04
4	PTF Actual Force = $R3 \times A - k$	212 kip	[Signature]	11-18-04
5	PTF Elongation	5.1 in.	[Signature]	11-18-04
6	OSF Maximum Force = $R1 \times 9.4$	1588.6 kip	[Signature]	11-18-04
7	OSF Max. Pressure = $(R6 + k) / A$	7499 psi	[Signature]	11-18-04
8	1/3 Pressure Interval = $R7 / 3 - 330$	2170 psi	[Signature]	11-18-04
9	Target 1/3 Pressure = $1,000 + R8$	3170 psi	[Signature]	11-18-04
10	Actual 1/3 Pressure	3170 psi	[Signature]	11-18-04
11	1/3 Elongation	9.3 in.	[Signature]	11-18-04
12	Target 2/3 Pressure = $R9 + R8$	5340 psi	[Signature]	11-18-04
13	Actual 2/3 Pressure	5340 psi	[Signature]	11-18-04
14	2/3 Elongation	13.5 in.	[Signature]	11-18-04
15	OSF Actual Pressure	7490 psi	[Signature]	11-18-04
16	OSF Actual Force = $R15 \times A - k$	1587 kip	[Signature]	11-18-04
17	OSF Elongation	18.5 in.	[Signature]	11-18-04
18	Differential Force = $R16 - R4$	1375 kip	[Signature]	11-18-04
19	Differential Elongation = $R17 - R5$	13.4 in.	[Signature]	11-18-04

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Tendon ID V14-1

Surveillance No. 8

Part 3

Field End Re-Tensioning Data

Ram ID H/A

Ram Area, A H/A in²

Ram k H/A kip

NOTE

The number of effective wires entered in R1 must be the same as the number entered for the shop end in Table 2. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 3				
Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	169	<i>[Signature]</i>	11-17-04
2	PTF Target Pressure	1,000 psi		
3	PTF Actual Pressure	psi		
4	PTF Actual Force = $R3 \times A \times k$	kip		
5	PTF Elongation	in.		
6	OSF Maximum Force = $R1 \times 9.4$	kip		
7	OSF Max. Pressure = $(R6 + k) / A$	psi		
8	1/3 Pressure Interval = $R7 / 3 - 330$	psi		
9	Target 1/3 Pressure = $1,000 + R8$	psi		
10	Actual 1/3 Pressure	psi	<i>N/A</i>	11-17-04
11	1/3 Elongation	in.		
12	Target 2/3 Pressure = $R9 + R8$	psi		
13	Actual 2/3 Pressure	psi		
14	2/3 Elongation	in.		
15	OSF Actual Pressure	psi		
16	OSF Actual Force = $R15 \times A \times k$	kip		
17	OSF Elongation	in.		
18	Differential Force = $R16 - R4$	kip		
19	Differential Elongation = $R17 - R5$	in.		

A391/A459
Number

TMI - Unit 1
Surveillance Procedure

1301-9.1

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RB Structural Integrity Tendon Surveillance

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DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID V141

Surveillance No. 6

Part 4
Elongation Comparison

Table 4		1 ST TIME
Row, R	Parameter	Value
1	Shop End Differential Force from Table 2, R18	1375 kip
2	Field End Differential Force from Table 3, R18	N/A kip
3	Average Differential Force = (R1 + R2) / 2	1375 kip
4	Shop End Differential Elongation from Table 2, R19	13.4 in.
5	Field End Differential Elongation from Table 3, R19	N/A in.
6	Total Elongation = R4 + R5	13.4 in.
7	Number of Effective Wires from Table 2, R1	169
8	Re-Tensioning Elongation Rate = R6 x R7 / R3	1.65
9	Original Elongation Rate from Table 1, R16	1.54 in/wire/kip
10	Fractional Difference in Rates = (R8 - R9) / R9	.07

Absolute value of the above Fractional Difference in Rates ≤ 0.1

Yes

No

Signature: [Signature]

Date: 11-18-04

A392/A459
Number

TMI - Unit 1
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DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID V141

Surveillance No. 8

Part 2

Shop End Re-Tensioning Data

Ram ID 9365

Ram Area, A 211.815 in²

Ram k -0.077 kip

NOTE

The number of effective wires entered in R1 must be the same as the number entered for the field end in Table 3. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 2		2 ND TIME		
Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	168	[Signature]	11-18-04
2	PTF Target Pressure	1,000 psi	[Signature]	11-18-04
3	PTF Actual Pressure	1000 psi	[Signature]	11-18-04
4	PTF Actual Force = R3 x A = k	212 kip	[Signature]	11-18-04
5	PTF Elongation	4.5 in.	[Signature]	11-18-04
6	OSF Maximum Force = R1 x 9.4	1579.2 kip	[Signature]	11-18-04
7	OSF Max. Pressure = (R6 + k) / A	7455 psi	[Signature]	11-18-04
8	1/3 Pressure Interval = R7 / 3 - 330	2155 psi	[Signature]	11-18-04
9	Target 1/3 Pressure = 1,000 + R8	3155 psi	[Signature]	11-18-04
10	Actual 1/3 Pressure	3150 psi	[Signature]	11-18-04
11	1/3 Elongation	9.0 in.	[Signature]	11-18-04
12	Target 2/3 Pressure = R9 + R8	5310 psi	[Signature]	11-18-04
13	Actual 2/3 Pressure	5310 psi	[Signature]	11-18-04
14	2/3 Elongation	12.9 in.	[Signature]	11-18-04
15	OSF Actual Pressure	7450 psi	[Signature]	11-18-04
16	OSF Actual Force = R15 x A = k	1578 kip	[Signature]	11-18-04
17	OSF Elongation	17.5 in.	[Signature]	11-18-04
18	Differential Force = R16 - R4	1366 kip	[Signature]	11-18-04
19	Differential Elongation = R17 - R5	13 in.	[Signature]	11-18-04

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DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID V141

Surveillance No. E

Part 3
Field End Re-Tensioning Data

Ram ID n/a

Ram Area, A n/a in²

Ram k n/a kip

NOTE

The number of effective wires entered in R1 must be the same as the number entered for the shop end in Table 2. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 3		2 ND TIME		
Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	168	<i>[Signature]</i>	11-18-04
2	PTF Target Pressure	1,000 psi		
3	PTF Actual Pressure	psi		
4	PTF Actual Force = $R3 \times A - k$	kip		
5	PTF Elongation	in.		
6	OSF Maximum Force = $R1 \times 9.4$	kip		
7	OSF Max. Pressure = $(R6 + k) / A$	psi		
8	1/3 Pressure Interval = $R7 / 3 - 330$	psi		
9	Target 1/3 Pressure = $1,000 + R8$	psi		
10	Actual 1/3 Pressure	psi	<i>n/a</i>	11-18-04
11	1/3 Elongation	in.		
12	Target 2/3 Pressure = $R9 + R8$	psi		
13	Actual 2/3 Pressure	psi		
14	2/3 Elongation	in.		
15	OSF Actual Pressure	psi		
16	OSF Actual Force = $R15 \times A - k$	kip		
17	OSF Elongation	in.		
18	Differential Force = $R16 - R4$	kip		
19	Differential Elongation = $R17 - R5$	in.		

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Surveillance Procedure

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Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID V141

Surveillance No. 8

Part 4
Elongation Comparison

Table 4		
Row, R	Parameter	Value
1	Shop End Differential Force from Table 2, R18	1366 kip
2	Field End Differential Force from Table 3, R18	N/A kip
3	Average Differential Force = (R1 + R2) / 2	1366 kip
4	Shop End Differential Elongation from Table 2, R19	13 in.
5	Field End Differential Elongation from Table 3, R19	N/A in.
6	Total Elongation = R4 + R5	13 in.
7	Number of Effective Wires from Table 2, R1	168
8	Re-Tensioning Elongation Rate = R6 x R7 / R3	1.60
9	Original Elongation Rate from Table 1, R16	1.54 IN WIRE/KIP
10	Fractional Difference in Rates = (R8 - R9) / R9	.04

2ND TIME

Absolute value of the above Fractional Difference in Rates ≤ 0.1

Yes
No

Signature: [Handwritten Signature]

Date: 11-18-04

A295/A459

	Number
TMI - Unit 1 Surveillance Procedure	1301-9.1
Title	Revision No.
RB Structural Integrity Tendon Surveillance	18

DATA SHEET 4

Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

Tendon ID D230

Surveillance No. 8

Part 1
Original Stressing Data

NOTE

PTF force is that equivalent to a ram pressure of 1,000 psi. PTF removes tendon slack and is the starting point for elongation measurements. OSF force is 80% (may be less) of tendon ultimate strength. The tendon is loaded to OSF in order to provide the required force distribution. It is also the force at which final elongation is measured. PTF force / elongation, OSF force / elongation and number of effective wires are documented in construction records.

Table 1		
Row, R	Parameter	Value
1	Shop End PTF Force	210 kip
2	Field end PTF force	210 kip
3	Mean PTF Force = (R1 + R2) / 2	210 kip
4	Shop End PTF Elongation	N/A* in.
5	Field End PTF Elongation	N/A* in.
6	Total PTF Elongation = R4 + R5	N/A* in.
7	Shop End OSF Force	1528 kip
8	Field end OSF force	1528 kip
9	Mean OSF Force = (R7 + R8) / 2	1528 kip
10	Shop End OSF Elongation	N/A* in.
11	Field End OSF Elongation	N/A* in.
12	Total OSF Elongation = R10 + R11	N/A* in.
13	Differential Force = R9 - R3	1318 kip
14	Differential Elongation = R12 - R6	10.3* in.
15	Number of Effective Wires	169
16	Elongation Rate = R14 x R15 / R13	1.32 in/wire/kip

*TOTAL ADJUSTED ELONGATION AS REPORTED IN VM-TM-2485

A390/A459
Number

TMI - Unit 1
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Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID D230

Surveillance No. 8

Part 2

Shop End Re-Tensioning Data

Ram ID 6001

Ram Area, A 191.784 in²

Ram k - 7.404 kip

NOTE

The number of effective wires entered in R1 must be the same as the number entered for the field end in Table 3. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 2

Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	168	[Signature]	11-16-04
2	PTF Target Pressure	1,000 psi	[Signature]	11-16-04
3	PTF Actual Pressure	1000 psi	[Signature]	11-16-04
4	PTF Actual Force = $R3 \times A - k$	192 kip	[Signature]	11-16-04
5	PTF Elongation	2.9 in.	[Signature]	11-16-04
6	OSF Maximum Force = $R1 \times 9.4$	1579.2 kip	[Signature]	11-16-04
7	OSF Max. Pressure = $(R6 + k) / A$	8195 psi	[Signature]	11-16-04
8	1/3 Pressure Interval = $R7 / 3 - 330$	2402 psi	[Signature]	11-16-04
9	Target 1/3 Pressure = $1,000 + R8$	3402 psi	[Signature]	11-16-04
10	Actual 1/3 Pressure	3400 psi	[Signature]	11-16-04
11	1/3 Elongation	4.5 in.	[Signature]	11-16-04
12	Target 2/3 Pressure = $R9 + R8$	5804 psi	[Signature]	11-16-04
13	Actual 2/3 Pressure	5800 psi	[Signature]	11-16-04
14	2/3 Elongation	6.0 in.	[Signature]	11-16-04
15	OSF Actual Pressure	8190 psi	[Signature]	11-16-04
16	OSF Actual Force = $R15 \times A - k$	1571 kip	[Signature]	11-16-04
17	OSF Elongation	7.5 in.	[Signature]	11-16-04
18	Differential Force = $R16 - R4$	1379 kip	[Signature]	11-16-04
19	Differential Elongation = $R17 - R5$	4.6 in.	[Signature]	11-16-04

A397/A459
Number

TMI - Unit 1
Surveillance Procedure

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Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID D230

Surveillance No. 8

Part 3
Field End Re-Tensioning Data

Ram ID 6002

Ram Area, A 191.565 in²

Ram k -4.911 kip

NOTE

The number of effective wires entered in R1 must be the same as the number entered for the shop end in Table 2. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 3

Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	168	H. H. H. H.	11-16-04
2	PTF Target Pressure	1,000 psi	H. H. H. H.	11-16-04
3	PTF Actual Pressure	1000 psi	H. H. H. H.	11-16-04
4	PTF Actual Force = $R3 \times A \times k$	192 kip	H. H. H. H.	11-16-04
5	PTF Elongation	3.2 in.	H. H. H. H.	11-16-04
6	OSF Maximum Force = $R1 \times 9.4$	1579.2 kip	H. H. H. H.	11-16-04
7	OSF Max. Pressure = $(R6 + k) / A$	8218 psi	H. H. H. H.	11-16-04
8	1/3 Pressure Interval = $R7 / 3 - 330$	2409 psi	H. H. H. H.	11-16-04
9	Target 1/3 Pressure = $1,000 + R8$	3409 psi	H. H. H. H.	11-16-04
10	Actual 1/3 Pressure	3410 psi	H. H. H. H.	11-16-04
11	1/3 Elongation	4.9 in.	H. H. H. H.	11-16-04
12	Target 2/3 Pressure = $R9 + R8$	5818 psi	H. H. H. H.	11-16-04
13	Actual 2/3 Pressure	5820 psi	H. H. H. H.	11-16-04
14	2/3 Elongation	6.6 in.	H. H. H. H.	11-16-04
15	OSF Actual Pressure	8215 psi	H. H. H. H.	11-16-04
16	OSF Actual Force = $R15 \times A \times k$	1579 kip	H. H. H. H.	11-16-04
17	OSF Elongation	8.7 in.	H. H. H. H.	11-16-04
18	Differential Force = $R16 - R4$	1382 kip	H. H. H. H.	11-16-04
19	Differential Elongation = $R17 - R5$	5.5 in.	H. H. H. H.	11-16-04

AB93/A459

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DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID D230

Surveillance No. 8

Part 4
Elongation Comparison

Row, R	Parameter	Value
1	Shop End Differential Force from Table 2, R18	1379 kip
2	Field End Differential Force from Table 3, R18	1382 kip
3	Average Differential Force = $(R1 + R2) / 2$	1381 kip
4	Shop End Differential Elongation from Table 2, R19	4.6 in.
5	Field End Differential Elongation from Table 3, R19	5.5 in.
6	Total Elongation = $R4 + R5$	10.1 in.
7	Number of Effective Wires from Table 2, R1	168
8	Re-Tensioning Elongation Rate = $R6 \times R7 / R3$	1.23
9	Original Elongation Rate from Table 1, R16	1.32 in/wire/kip
10	Fractional Difference in Rates = $(R8 - R9) / R9$	-0.068

Absolute value of the above Fractional Difference in Rates ≤ 0.1

Yes

No

Signature: [Handwritten Signature]

Date: 11-16-04

**AFTER RETENSIONING
DATA SHEET 7**

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Revision 18
Page 1 of 1

**Tendon Force Measurement Record
Gage Pressure (PSIG)/Force (KIPS)**

Inspection Period 8th Tendon I.D. D-230

END LOCATION	MEASURE- MENT NUMBER	FEELER GAGE WITHDRAWAL	RUNNING AVERAGE	DATE INSP.	INSP. BY CONTR. FOREMAN	VERIFIED BY COGNIZANT QV INSP.
1	2	4	8	9	10	11
<u>D230</u> NEAR BUTT #3 (SHOP OR (FIELD)) RETENSION	1	7100 1355	7100 1355	11-16-04	FB 11-16-04	ZD 11-16-04
	2	7100 1355				
	3	7100 1355				
	4					
	5					
	6					
	7					
	8					
	9					
	10					

RUNNING AVERAGE:

GAUGE: FOMNET #5 | RAM 46002

ENTER IN COLUMN 8 THE AVERAGE OF THE GAGE PRESSURES AND FORCES FROM COLUMN 4 OF THE CURRENT AND PREVIOUS TWO MEASUREMENTS. STOP LIFT-OFF FORCE MEASUREMENTS WHEN THE VALUES OF FORCE IN COLUMN 4 OF THE CURRENT AND TWO PREVIOUS MEASUREMENTS ARE ALL WITHIN 25 KIPS OF EACH OTHER. ENTER FINAL GAGE PRESSURE AND FORCE VALUE FROM COLUMN 8 IN COLUMN 6 AND 7 OF DATA SHEETS 1, 2, OR 3.

COGNIZANT MECH/STRUCT ENGINEER
REVIEWED BY: [Signature] DATE: 27 FEB 05

POST DETENSIONING

1309/1459

A400/A459

	TMI - Unit 1 Surveillance Procedure	Number 1301-9.1
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DATA SHEET 4

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Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

Tendon ID H46-25

Surveillance No. 8

Part 1
Original Stressing Data

NOTE

PTF force is that equivalent to a ram pressure of 1,000 psi. PTF removes tendon slack and is the starting point for elongation measurements. OSF force is 80% (may be less) of tendon ultimate strength. The tendon is loaded to OSF in order to provide the required force distribution. It is also the force at which final elongation is measured. PTF force / elongation, OSF force / elongation and number of effective wires are documented in construction records.

Table 1		
Row, R	Parameter	Value
1	Shop End PTF Force	210 kip
2	Field end PTF force	210 kip
3	Mean PTF Force = (R1 + R2) / 2	210 kip
4	Shop End PTF Elongation	N/A* in.
5	Field End PTF Elongation	N/A* in.
6	Total PTF Elongation = R4 + R5	N/A* in.
7	Shop End OSF Force	1564 kip
8	Field end OSF force	1564 kip
9	Mean OSF Force = (R7 + R8) / 2	1564 kip
10	Shop End OSF Elongation	N/A* in.
11	Field End OSF Elongation	N/A* in.
12	Total OSF Elongation = R10 + R11	N/A* in.
13	Differential Force = R9 - R3	1354 kip
14	Differential Elongation = R12 - R6	9.7* in.
15	Number of Effective Wires	169
16	Elongation Rate = R14 x R15 / R13	1.21 in-wire/kip

ADJUSTED TOTAL ELONGATION AS REPORTED IN VM-TM-2485

A401/A459
Number

TMI - Unit 1
Surveillance Procedure

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DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID H46-25

Surveillance No. 8

Part 2

Shop End Re-Tensioning Data

Ram ID 6001

Ram Area, A 191.784 in²

Ram k -7.404 kip

NOTE

The number of effective wires entered in R1 must be the same as the number entered for the field end in Table 3. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 2

Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	168	<i>J. Hedrickson</i>	11/9/04
2	PTF Target Pressure	1,000 psi	<i>J. Hedrickson</i>	11/9/04
3	PTF Actual Pressure	1000 psi	<i>J. Hedrickson</i>	11/9/04
4	PTF Actual Force = R3 x A = k	199 kip	<i>J. Hedrickson</i>	11/9/04
5	PTF Elongation	5.10 in.	<i>J. Hedrickson</i>	11/9/04
6	OSF Maximum Force = R1 x 9.4	1579.2 kip	<i>J. Hedrickson</i>	11/9/04
7	OSF Max. Pressure = (R6 + k) / A	8195 psi	<i>J. Hedrickson</i>	11/9/04
8	1/3 Pressure Interval = R7 / 3 - 330	2402 psi	<i>J. Hedrickson</i>	11/9/04
9	Target 1/3 Pressure = 1,000 + R8	3402 psi	<i>J. Hedrickson</i>	11/9/04
10	Actual 1/3 Pressure	3400 psi	<i>J. Hedrickson</i>	11/10/04
11	1/3 Elongation	7.00 in.	<i>J. Hedrickson</i>	11/10/04
12	Target 2/3 Pressure = R9 + R8	5804 psi	<i>J. Hedrickson</i>	11/10/04
13	Actual 2/3 Pressure	5800 psi	<i>J. Hedrickson</i>	11/10/04
14	2/3 Elongation	8.70 in.	<i>J. Hedrickson</i>	11/10/04
15	OSF Actual Pressure	8195 psi	<i>J. Hedrickson</i>	11/10/04
16	OSF Actual Force = R15 x A = k	1579.2 kip	<i>J. Hedrickson</i>	11/10/04
17	OSF Elongation	10.60 in.	<i>J. Hedrickson</i>	11/10/04
18	Differential Force = R16 - R4	1380 kip	<i>J. Hedrickson</i>	11/10/04
19	Differential Elongation = R17 - R5	5.50 in.	<i>J. Hedrickson</i>	11/10/04

A400/A459

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RB Structural Integrity Tendon Surveillance	18	

DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons.

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Tendon ID 1-46-25

Surveillance No. 8

Part 3
Field End Re-Tensioning Data

Ram ID 6002

Ram Area, A 191.565 in²

Ram k -4.911 kip

NOTE

The number of effective wires entered in R1 must be the same as the number entered for the shop end in Table 2. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 3				
Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	168	<i>[Signature]</i>	11-10-04
2	PTF Target Pressure	1,000 psi	<i>[Signature]</i>	11-10-04
3	PTF Actual Pressure	1000 psi	<i>[Signature]</i>	11-10-04
4	PTF Actual Force = R3 x A - k	192 kip	<i>[Signature]</i>	11-10-04
5	PTF Elongation	3.6 in.	<i>[Signature]</i>	11-10-04
6	OSF Maximum Force = R1 x 9.4	1579.2 kip	<i>[Signature]</i>	11-10-04
7	OSF Max. Pressure = (R6 + k) / A	8218 psi	<i>[Signature]</i>	11-10-04
8	1/3 Pressure Interval = R7 / 3 - 330	2409 psi	<i>[Signature]</i>	11-10-04
9	Target 1/3 Pressure = 1,000 + R8	3409 psi	<i>[Signature]</i>	11-10-04
10	Actual 1/3 Pressure	3416 psi	<i>[Signature]</i>	11-10-04
11	1/3 Elongation	5.1 in.	<i>[Signature]</i>	11-10-04
12	Target 2/3 Pressure = R9 + R8	5818 psi	<i>[Signature]</i>	11-10-04
13	Actual 2/3 Pressure	5820 psi	<i>[Signature]</i>	11-10-04
14	2/3 Elongation	6.7 in.	<i>[Signature]</i>	11-10-04
15	OSF Actual Pressure	8210 psi	<i>[Signature]</i>	11-10-04
16	OSF Actual Force = R15 x A - k	1573 kip	<i>[Signature]</i>	11-10-04
17	OSF Elongation	8.5 in.	<i>[Signature]</i>	11-10-04
18	Differential Force = R16 - R4	1381 kip	<i>[Signature]</i>	11-10-04
19	Differential Elongation = R17 - R5	4.9 in.	<i>[Signature]</i>	11-10-04

A403/A459

	Number
TMI - Unit 1 Surveillance Procedure	1301-9.1
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DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

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Tendon ID H/46-25

Surveillance No. 8

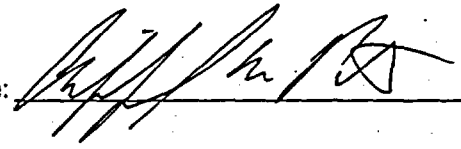
Part 4
Elongation Comparison

Table 4		
Row, R	Parameter	Value
1	Shop End Differential Force from Table 2, R18	1380 kip
2	Field End Differential Force from Table 3, R18	1381 kip
3	Average Differential Force = $(R1 + R2) / 2$	1380.5 kip
4	Shop End Differential Elongation from Table 2, R19	5.5 in.
5	Field End Differential Elongation from Table 3, R19	4.9 in.
6	Total Elongation = $R4 + R5$	10.4 in.
7	Number of Effective Wires from Table 2, R1	168
8	Re-Tensioning Elongation Rate = $R6 \times R7 / R3$	1.27
9	Original Elongation Rate from Table 1, R16	1.21
10	Fractional Difference in Rates = $(R8 - R9) / R9$.05

Absolute value of the above Fractional Difference in Rates ≤ 0.1

Yes

No

Signature: 

Date: 11-9-04 11-10-04

A404/A459

	Number
TMI - Unit 1 Surveillance Procedure	1301-9.1
Title	Revision No.
RB Structural Integrity Tendon Surveillance	18

DATA SHEET 4

Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

Tendon ID H46-25

Surveillance No. 8

Part 1
Original Stressing Data

NOTE

PTF force is that equivalent to a ram pressure of 1,000 psi. PTF removes tendon slack and is the starting point for elongation measurements. OSF force is 80% (may be less) of tendon ultimate strength. The tendon is loaded to OSF in order to provide the required force distribution. It is also the force at which final elongation is measured. PTF force / elongation, OSF force / elongation and number of effective wires are documented in construction records.

Table 1		
Row, R	Parameter	Value
1	Shop End PTF Force	210 kip
2	Field end PTF force	210 kip
3	Mean PTF Force = (R1 + R2) / 2	210 kip
4	Shop End PTF Elongation	N/A* in.
5	Field End PTF Elongation	N/A* in.
6	Total PTF Elongation = R4 + R5	N/A* in.
7	Shop End OSF Force	1564 kip
8	Field end OSF force	1564 kip
9	Mean OSF Force = (R7 + R8) / 2	1564 kip
10	Shop End OSF Elongation	N/A* in.
11	Field End OSF Elongation	N/A* in.
12	Total OSF Elongation = R10 + R11	N/A* in.
13	Differential Force = R9 - R3	1354 kip
14	Differential Elongation = R12 - R6	9.7* in.
15	Number of Effective Wires	169
16	Elongation Rate = R14 x R15 / R13	1.21 in-wire/kip

ADJUSTED TOTAL ELONGATION AS REPORTED IN VM-TM-2485

A405/A459
Number

TMI - Unit 1
Surveillance Procedure

1301-9.1

Revision No.

RB Structural Integrity Tendon Surveillance

18

DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

Page 2 of 4

Tendon ID H46-25

Surveillance No. 8

Part 2

Shop End Re-Tensioning Data

Ram ID 6001

Ram Area, A 191.784 in²

Ram k -7.404 kip

NOTE

The number of effective wires entered in R1 must be the same as the number entered for the field end in Table 3. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 2				
Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	168	<i>H. Hedrickson</i>	11/9/04
2	PTF Target Pressure	1,000 psi	<i>H. Hedrickson</i>	11/9/04
3	PTF Actual Pressure	1000 psi	<i>H. Hedrickson</i>	11/9/04
4	PTF Actual Force = $R3 \times A \times k$	199 kip	<i>H. Hedrickson</i>	11/9/04
5	PTF Elongation	5.10 in.	<i>H. Hedrickson</i>	11/9/04
6	OSF Maximum Force = $R1 \times 9.4$	1579.2 kip	<i>H. Hedrickson</i>	11/9/04
7	OSF Max. Pressure = $(R6 + k) / A$	8195 psi	<i>H. Hedrickson</i>	11/9/04
8	1/3 Pressure Interval = $R7 / 3 - 330$	2402 psi	<i>H. Hedrickson</i>	11/9/04
9	Target 1/3 Pressure = $1,000 + R8$	3402 psi	<i>H. Hedrickson</i>	11/9/04
10	Actual 1/3 Pressure	3400 psi	<i>H. Hedrickson</i>	11/10/04
11	1/3 Elongation	7.00 in.	<i>H. Hedrickson</i>	11/10/04
12	Target 2/3 Pressure = $R9 + R8$	5804 psi	<i>H. Hedrickson</i>	11/10/04
13	Actual 2/3 Pressure	5800 psi	<i>H. Hedrickson</i>	11/10/04
14	2/3 Elongation	8.70 in.	<i>H. Hedrickson</i>	11/10/04
15	OSF Actual Pressure	8195 psi	<i>H. Hedrickson</i>	11/10/04
16	OSF Actual Force = $R15 \times A \times k$	1579 kip	<i>H. Hedrickson</i>	11/10/04
17	OSF Elongation	10.60 in.	<i>H. Hedrickson</i>	11/10/04
18	Differential Force = $R16 - R4$	1380 kip	<i>H. Hedrickson</i>	11/10/04
19	Differential Elongation = $R17 - R5$	5.50 in.	<i>H. Hedrickson</i>	11/10/04

A400/A459

	TMI - Unit 1 Surveillance Procedure	Number 1301-9.1
Title		Revision No. 18
RB Structural Integrity Tendon Surveillance		

DATA SHEET 4

Page 1 of 4

Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

Tendon ID H46-25

Surveillance No. 8

Part 1
Original Stressing Data

NOTE

PTF force is that equivalent to a ram pressure of 1,000 psi. PTF removes tendon slack and is the starting point for elongation measurements. OSF force is 80% (may be less) of tendon ultimate strength. The tendon is loaded to OSF in order to provide the required force distribution. It is also the force at which final elongation is measured. PTF force / elongation, OSF force / elongation and number of effective wires are documented in construction records.

Table 1		
Row, R	Parameter	Value
1	Shop End PTF Force	210 kip
2	Field end PTF force	210 kip
3	Mean PTF Force = (R1 + R2) / 2	210 kip
4	Shop End PTF Elongation	N/A* in.
5	Field End PTF Elongation	N/A* in.
6	Total PTF Elongation = R4 + R5	N/A* in.
7	Shop End OSF Force	1564 kip
8	Field end OSF force	1564 kip
9	Mean OSF Force = (R7 + R8) / 2	1564 kip
10	Shop End OSF Elongation	N/A* in.
11	Field End OSF Elongation	N/A* in.
12	Total OSF Elongation = R10 + R11	N/A* in.
13	Differential Force = R9 - R3	1354 kip
14	Differential Elongation = R12 - R6	9.7* in.
15	Number of Effective Wires	169
16	Elongation Rate = R14 x R15 / R13	1.21 in/wire/kip

ADJUSTED TOTAL ELONGATION AS REPORTED IN VM-TM-2485

A407/A459

	TMI - Unit 1 Surveillance Procedure	Number 1301-9.1
Title		Revision No. 18
RB Structural Integrity Tendon Surveillance		

DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

Page 3 of 4

Tendon ID 146-25

Surveillance No. 8

Part 3
Field End Re-Tensioning Data

Ram ID 6002

Ram Area, A 191.565 in²

Ram k 4.911 kip

NOTE

The number of effective wires entered in R1 must be the same as the number entered for the shop end in Table 2. Also, the calculations identified in Rows 4, 16, 18 & 19 (shaded) may be done after stressing work at both ends of the tendon is complete.

Table 3				
Row, R	Parameter	Value	Signature	Date
1	Number of Effective Wires	168	<i>[Signature]</i>	11-10-04
2	PTF Target Pressure	1,000 psi	<i>[Signature]</i>	11-10-04
3	PTF Actual Pressure	1000 psi	<i>[Signature]</i>	11-10-04
4	PTF Actual Force = R3 x A - k	192 kip	<i>[Signature]</i>	11-10-04
5	PTF Elongation	3.6 in.	<i>[Signature]</i>	11-10-04
6	OSF Maximum Force = R1 x 9.4	1579.2 kip	<i>[Signature]</i>	11-10-04
7	OSF Max. Pressure = (R6 + k) / A	8218 psi	<i>[Signature]</i>	11-10-04
8	1/3 Pressure Interval = R7 / 3 - 330	2409 psi	<i>[Signature]</i>	11-10-04
9	Target 1/3 Pressure = 1,000 + R8	3409 psi	<i>[Signature]</i>	11-10-04
10	Actual 1/3 Pressure	3410 psi	<i>[Signature]</i>	11-10-04
11	1/3 Elongation	5.1 in.	<i>[Signature]</i>	11-10-04
12	Target 2/3 Pressure = R9 + R8	5818 psi	<i>[Signature]</i>	11-10-04
13	Actual 2/3 Pressure	5820 psi	<i>[Signature]</i>	11-10-04
14	2/3 Elongation	6.7 in.	<i>[Signature]</i>	11-10-04
15	OSF Actual Pressure	8210 psi	<i>[Signature]</i>	11-10-04
16	OSF Actual Force = R15 x A - k	1573 kip	<i>[Signature]</i>	11-10-04
17	OSF Elongation	8.5 in.	<i>[Signature]</i>	11-10-04
18	Differential Force = R16 - R4	1381 kip	<i>[Signature]</i>	11-10-04
19	Differential Elongation = R17 - R5	4.9 in.	<i>[Signature]</i>	11-10-04

A403/A459

	Number
TMI - Unit 1 Surveillance Procedure	1301-9.1
Title	Revision No.
RB Structural Integrity Tendon Surveillance	18

DATA SHEET 4
Elongation / Tendon Force Record
Re-Tensioning Data for De-Tensioned Tendons

Page 4 of 4

Tendon ID H/46-25

Surveillance No. 8

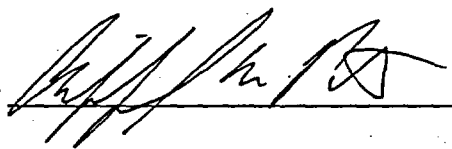
Part 4
Elongation Comparison

Table 4		
Row, R	Parameter	Value
1	Shop End Differential Force from Table 2, R18	1380 kip
2	Field End Differential Force from Table 3, R18	1381 kip
3	Average Differential Force = $(R1 + R2) / 2$	1380.5 kip
4	Shop End Differential Elongation from Table 2, R19	5.5 in.
5	Field End Differential Elongation from Table 3, R19	4.9 in.
6	Total Elongation = $R4 + R5$	10.4 in.
7	Number of Effective Wires from Table 2, R1	168
8	Re-Tensioning Elongation Rate = $R6 \times R7 / R3$	1.27
9	Original Elongation Rate from Table 1, R16	1.21
10	Fractional Difference in Rates = $(R8 - R9) / R9$.05

Absolute value of the above Fractional Difference in Rates ≤ 0.1

Yes

No

Signature: 

Date: 11-9-10-04 ✓ 11-10-04

A409/A459

WIRE REMOVAL INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND SURVEILLANCE YEAR: 30TH
TENDON NO. V140 TENDON END/BUTTRESS NO. SHOP/TOP UNIT 1
DATE OF REMOVAL 9-9-04 DATE OF INSPECTION 1-13-05

INSPECTED BY Daniel P. O'Hea (7.5.4.3.1) LENGTH OF WIRE 185'2"
(7.5.4.1.1) & (7.5.4.4.3)
BUTTONHEAD END

0'	A	A	SAMPLE 1 20'-29'	30'
30'	A	A	A	60'
60'	A	A	A	90'
90'	A	A	A	120'
120'	A	A	A	150'
150'	A	A	A	180'
180'	A	A	SAMPLE 3 160'-169'	210'
210'	A	END OF WIRE 185'2"	A	240'
240'				270'
270'				300'
300'				330'
				CUT END

Remember to add the 1 inch from the marked line to the length of the wire.
As the sample specimens are removed, mark the location of removal here.

(7.8)
Measuring Device 24" RULER I.D. R-22 Recal. Date 6-30-05
Wire Pulling Ram I.D. N/A

CORROSION LEVEL (Refer to PSC Procedure SQ 8.1)
A = EXCELLENT
B = GOOD
C = FAIR
D = USABLE
E = REJECTED (Pitted)
Document the Corrosion Level for each 10 foot segment.

(7.5.1) & (7.7)
Post the location of wire removal to Data Sheet 8.0

Q.C. Review Biv & Cato Level II Date 1-13-05
01-13-05

A410/A459

WIRE REMOVAL INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND SURVEILLANCE YEAR: 30TH
TENDON NO. D230 TENDON END/BUTTRESS NO. SHOP/NEAR BUTT 5 UNIT 1
DATE OF REMOVAL 11-15-04 DATE OF INSPECTION 1-13-05

INSPECTED BY David P. O'Hara (7.5.4.3.1) LENGTH OF WIRE 147' 9 1/2"
(7.5.4.1.1) & (7.5.4.4.3)

BUTTONHEAD END

0'	/	A	/	A	/	SAMPLE 1 20'-29'	/	30'
30'	/	A	/	A	/	A	/	60'
60'	/	SAMPLE 2 60'-69'	/	A	/	A	/	90'
90'	/	A	/	A	/	A	/	120'
120'	/	SAMPLE 3 72'-129'	/	A	/	A	/	150'
150'	/	A	/	A	/	A	/	180'
180'	/		/		/		/	210'
210'	/		/		/		/	240'
240'	/		/		/		/	270'
270'	/		/		/		/	300'
300'	/		/		/		/	330'

CUT END

Remember to add the 1 inch from the marked line to the length of the wire.
As the sample specimens are removed, mark the location of removal here.

(7.8)

Measuring Device 24" RULER I.D. R22 Recal. Date 6-30-05
Wire Pulling Ram I.D. N/A

CORROSION LEVEL (Refer to PSC Procedure SQ 8.1)

- A = EXCELLENT
- B = GOOD
- C = FAIR
- D = USABLE
- E = REJECTED (Pitted)

Document the Corrosion Level for each 10 foot segment.

(7.5.1) & (7.7)

Post the location of wire removal to Data Sheet 8.0

Q.C. Review Gov & Cato Level I Date 1-13-05

A411/A459

PSC PROCEDURE SQ 10.2
TEST WIRE REMOVAL
DATA SHEET 10.2
JULY 23, 2004
Page 1 of 1
REVISION 0

WIRE REMOVAL INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND SURVEILLANCE YEAR: 30TH
TENDON NO. H46-25 TENDON END/BUTTRESS NO. SNOP/BUTTE 6 UNIT 1
DATE OF REMOVAL 11-9-04 DATE OF INSPECTION 1-13-05

INSPECTED BY Daniel P. O'Neil (7.5.4.3.1) LENGTH OF WIRE 155' 4 3/4"
(7.5.4.1.1) & (7.5.4.4.3)

BUTTONHEAD END

0'	/	A	/	A	/	SAMPLE 1 20'-29'	/	A	/	30'
30'	/	A	/	A	/		/	A	/	60'
60'	/	A	/	A	/	SAMPLE 2 70'-79'	/	A	/	90'
90'	/	A	/	A	/		/	A	/	120'
120'	/	A	/	A	/		/	A	/	150'
150'	/	A	/	A	/	SAMPLE 3 130'-139'	/	A	/	180'
180'	/	A	/	A	/		/	A	/	210'
210'	/	A	/	A	/		/	A	/	240'
240'	/	A	/	A	/		/	A	/	270'
270'	/	A	/	A	/		/	A	/	300'
300'	/	A	/	A	/		/	A	/	330'

END OF WIRE
155' 4 3/4"

CUT END

Remember to add the 1 inch from the marked line to the length of the wire.

As the sample specimens are removed, mark the location of removal here.

(7.8)

Measuring Device 24" RULER I.D. R-22 Recal. Date 6-30-05
Wire Pulling Ram I.D. N/A

CORROSION LEVEL (Refer to PSC Procedure SQ 8.1)

- A = EXCELLENT
- B = GOOD
- C = FAIR
- D = USABLE
- E = REJECTED (Pitted)

Document the Corrosion Level for each 10 foot segment.

(7.5.1) & (7.7)

Post the location of wire removal to Data Sheet 8.0

Q.C. Review B.W. & Cate Level II Date 1-13-05

A412/A459

PROJECT: THREE MILE ISLAND SURVEILLANCE YEAR: 30TH UNIT: 1

TENDON NO. V140 TENDON END/BUTTRESS NO. SHR/TO

Q.C. SIGNOFF Philip P. O'Hara LEVEL II DATE 1-14-05

(8.1.4) Wire ID and Location of removal SAMPLE 1 20-29 feet Length 108 inches

(8.2.1) Wire Diameters: Tag End .251 in. Middle .251 in. Ram End .251 in. Avg. .251 in.

Measuring Device ID BC79 Recal Date 2-3-05

(8.3.2.1) Buttonhead Inspection: Tag End OK Ram End OK

(8.4.1) Gauge Length of Wire 100 in. Measuring Device ID RA2 Recal Date 6-30-05

(8.6.1) Preload force 2.45 kips

Preload Pressure 1400 psi Pressure Gauge ID 00125119 Recal Date DAIKYO 02/05

Ram Identification 7702 Ram Area 1.576 sq. in. K = 0.282 kips Recal Date JAN 05

(8.7.1) Force reduced to 0 OK

(8.8.1) Initial load of wire force 1.42 kips (0.1% elongation)

Initial load of pressure 750 psi Elongation 13.60 inches.

(8.9.1) Preset Dial Indicator OK (0.9% elongation) Indicator ID 66624 Recal Date 01/2/05

(8.10.1) Force at 1% elongation 10.22 kips ; Pressure 6340 psi

(8.11.1) "Rule" reading measurement at 1% elongation 14.50 inches

(8.12.1) Maximum elongation at failure, from "Rule" reading 18.90 inches

(8.12.2) Maximum force at failure 12.82 kips ; Pressure 7990 psi

(8.13.1) Type of break BRITTLE Location of break 20" OPPOSITE RAM inches

(8.14) CALCULATIONS:

(8.14.1) Ultimate Stress 259.180 ksi Max. Force ÷ (π Diam.² ÷ 4)

(8.14.2) Yield Stress at 1% elongation 206.625 ksi Force @ 1% ÷ (π Diam.² ÷ 4)

(8.14.3) % elong. at failure 5.4 % [1 in. + ("Rule" Dim @ Failure - "Rule" Dim @ 1%)]

(9) Sample: Accept X Unacceptable _____ Owner/Agent Notified MR

Q.C. Review Bill & Cato Level II Date 1-14-05

A413/A459

PROJECT: THREE MILE ISLAND SURVEILLANCE YEAR: 30TH UNIT: 1

TENDON NO. V140 TENDON END/BUTTRESS NO. SHOP/Top

Q.C. SIGNOFF Philip P. Patton LEVEL II DATE 1-14-05

(8.1.4) Wire ID and Location of removal SAMPLE 2 90-99 feet Length 108 inches

(8.2.1) Wire Diameters: Tag End .251 in. Middle .251 in. Ram End .257 in. Avg. .251 in.

Measuring Device ID OC79 Recal Date 2-3-05

(8.3.2.1) Buttonhead Inspection: Tag End OK Ram End OK

(8.4.1) Gauge Length of Wire 100 in. Measuring Device ID R22 Recal Date 6-30-05

(8.6.1) Preload force 2.45 kips

Preload Pressure 1400 psi Pressure Gauge ID CW25169 Recal Date 04/22/05

Ram Identification 7702 Ram Area 1.576 sq. in. K = 0.332 kips Recal Date Jan 05

(8.7.1) Force reduced to 0 OK

(8.8.1) Initial load of wire force 1.42 kips (0.1% elongation)

Initial load of pressure 750 psi Elongation 13.65 inches.

(8.9.1) Preset Dial Indicator OK (0.9% elongation) Indicator ID 56624 Recal Date 6-18-05

(8.10.1) Force at 1% elongation 10.09 kips ; Pressure 6260 psi

(8.11.1) "Rule" reading measurement at 1% elongation 14.55 inches

(8.12.1) Maximum elongation at failure, from "Rule" reading 18.80 inches

(8.12.2) Maximum force at failure 12.68 kips ; Pressure 7900 psi

(8.13.1) Type of break Ductile Location of break 34 1/2" RAM END inches

(8.14) CALCULATIONS:

(8.14.1) Ultimate Stress 256,313 ksi Max. Force \div (π Diam.² \div 4)

(8.14.2) Yield Stress at 1% elongation 204,077 ksi Force @ 1% \div (π Diam.² \div 4)

(8.14.3) % elong. at failure 5.25 % [1 in. + ("Rule" Dim @ Failure - "Rule" Dim @ 1%)]

(9) Sample: Accept X Unacceptable _____ Owner/Agent Notified N/A

Q.C. Review Steve L. Cato Level II Date 1-14-05

A414/A459

PROJECT: THREE MILE ISLAND SURVEILLANCE YEAR: 30TH UNIT: 1

TENDON NO. V140 TENDON END/BUTTRESS NO. SHOP/TOP

Q.C. SIGNOFF David P. O'Brien LEVEL II DATE 1-14-05

(8.1.4) Wire ID and Location of removal SAMPLE 3 160-169 feet Length 108" inches

(8.2.1) Wire Diameters: Tag End .251 in. Middle .251 in. Ram End .251 in. Avg. .251 in.

Measuring Device ID GC79 Recal Date 2-3-05

(8.3.2.1) Buttonhead Inspection: Tag End OK Ram End OK

(8.4.1) Gauge Length of Wire 100 in. Measuring Device ID R22 Recal Date 6-30-05

(8.6.1) Preload force 2.45 kips

Preload Pressure 1400 psi Pressure Gauge ID CC25169 Recal Date 3/15/05

Ram Identification 7702 Ram Area 1.576 sq. in. K = 0.232 kips Recal Date JOB END

(8.7.1) Force reduced to 0 OK

(8.8.1) Initial load of wire force 1.42 kips (0.1% elongation)

Initial load of pressure 750 psi Elongation 13.60 inches.

(8.9.1) Preset Dial Indicator OK (0.9% elongation) Indicator ID ECC24 Recal Date 6-18-05

(8.10.1) Force at 1% elongation 10.28 kips ; Pressure 6380 psi

(8.11.1) "Rule" reading measurement at 1% elongation 14.50 inches

(8.12.1) Maximum elongation at failure, from "Rule" reading 18.70 inches

(8.12.2) Maximum force at failure 12.74 kips ; Pressure 7940 psi

(8.13.1) Type of break JUSTICE Location of break 7 1/2" OPPOSITE RAM inches

(8.14) CALCULATIONS:

(8.14.1) Ultimate Stress 257,587 ksi Max. Force \div (π Diam.² \div 4)

(8.14.2) Yield Stress at 1% elongation 207,899 ksi Force @ 1% \div (π Diam.² \div 4)

(8.14.3) % elong. at failure 5.20 % [1 in. + ("Rule" Dim @ Failure - "Rule" Dim @ 1%)]

(9) Sample: Accept X Unacceptable _____ Owner/Agent Notified N/A

Q.C. Review David P. O'Brien Level II Date 1-14-05

A415/A459

PROJECT: THREE MILE ISLAND SURVEILLANCE YEAR: 30TH UNIT: 1

TENDON NO. D-230 TENDON END/BUTTRESS NO. SHOP/207R.5

Q.C. SIGNOFF Daniel P. O'Hara LEVEL II DATE 1-14-05

(8.1.4) Wire ID and Location of removal SAMPLE 1 20-29 feet Length 108 inches

(8.2.1) Wire Diameters: Tag End .251 in. Middle .251 in. Ram End .251 in. Avg. .251 in.

Measuring Device ID GC79 Recal Date 2-3-05

(8.3.2.1) Buttonhead Inspection: Tag End OK Ram End OK

(8.4.1) Gauge Length of Wire 100 in. Measuring Device ID R22 Recal Date 6-30-05

(8.6.1) Preload force 2.45 kips

Preload Pressure 1400 psi Pressure Gauge ID CC125162 Recal Date JANUARY 05

Ram Identification 7702 Ram Area 1.576 sq. in. K = 0.232 kips Recal Date JUN 05

(8.7.1) Force reduced to 0 OK

(8.8.1) Initial load of wire force 1.42 kips (0.1% elongation)

Initial load of pressure 750 psi Elongation 13.65 inches.

(8.9.1) Preset Dial Indicator OK (0.9% elongation) Indicator ID EX24 Recal Date 6-18-05

(8.10.1) Force at 1% elongation 10.58 kips ; Pressure 6570 psi

(8.11.1) "Rule" reading measurement at 1% elongation 14.55 inches

(8.12.1) Maximum elongation at failure, from "Rule" reading 18.20 inches

(8.12.2) Maximum force at failure 12.66 kips ; Pressure 7890 psi

(8.13.1) Type of break DUCTILE Location of break 45 1/8" RAM END inches

(8.14) CALCULATIONS:

(8.14.1) Ultimate Stress 255,925 ksi Max. Force ÷ (π Diam.² ÷ 4)

(8.14.2) Yield Stress at 1% elongation 213,951 ksi Force @ 1% ÷ (π Diam.² ÷ 4)

(8.14.3) % elong. at failure 4.65 % [1 in. + ("Rule" Dim @ Failure - "Rule" Dim @ 1%)]

(9) Sample: Accept X Unacceptable _____ Owner/Agent Notified N/A

Q.C. Review Bio J. Ceto Level II Date 1-14-05

A410/A459

PROJECT: THREE MILE ISLAND SURVEILLANCE YEAR: 30TH UNIT: 1

TENDON NO. D-230 TENDON END/BUTTRESS NO. 5408 / BUTT. 5

Q.C. SIGNOFF Daniel P. O'Brien LEVEL TL DATE 1-14-05

(8.1.4) Wire ID and Location of removal SAMPLE 2 60-69 feet Length 108" inches

(8.2.1) Wire Diameters: Tag End .251 in. Middle .251 in. Ram End .251 in. Avg. .251 in.

Measuring Device ID 0679 Recal Date 2-3-05

(8.3.2.1) Buttonhead Inspection: Tag End OK Ram End OK

(8.4.1) Gauge Length of Wire 100 in. Measuring Device ID R22 Recal Date 6-30-05

(8.6.1) Preload force 2.85 kips

Preload Pressure 1400 psi Pressure Gauge ID 66125169 Recal Date DAILY/USE

Ram Identification 7702 Ram Area 1.576 sq. in. K = 0.1232 kips Recal Date FOR END

(8.7.1) Force reduced to 0 OK

(8.8.1) Initial load of wire force 1.42 kips (0.1% elongation)

Initial load of pressure 750 psi Elongation 13.65 inches.

(8.9.1) Preset Dial Indicator OK (0.9% elongation) Indicator ID 50224 Recal Date 6-28-05

(8.10.1) Force at 1% elongation 10.64 kips ; Pressure 6610 psi

(8.11.1) "Rule" reading measurement at 1% elongation 14.55 inches

(8.12.1) Maximum elongation at failure, from "Rule" reading 17.60 inches

(8.12.2) Maximum force at failure 12.72 kips ; Pressure 7930 psi

(8.13.1) Type of break DUCTILE Location of break 1" RAM END inches

(8.14) CALCULATIONS:

(8.14.1) Ultimate Stress $\frac{257,239}{5.01-14.08}$ ksi Max. Force \div (π Diam.² \div 4)

(8.14.2) Yield Stress at 1% elongation 215,225 ksi Force @ 1% \div (π Diam.² \div 4)

(8.14.3) % elong. at failure 4.05 % [1 in. + ("Rule" Dim @ Failure - "Rule" Dim @ 1%)]

(9) Sample: Accept X Unacceptable _____ Owner/Agent Notified n/a

Q.C. Review Brian S. Cato Level AF Date 1-14-05

A417/A459

PROJECT: THREE MILE ISLAND SURVEILLANCE YEAR: 30TH UNIT: 1

TENDON NO. D-230 TENDON END/BUTTRESS NO. SNOP/NEAR BUTT 5

Q.C. SIGNOFF Philip P. O'Hara LEVEL II DATE 1-14-05

(8.1.4) Wire ID and Location of removal SAMPLE 3 120-129 feet Length 108 inches

(8.2.1) Wire Diameters: Tag End .251 in. Middle .251 in. Ram End .251 in. Avg. .251 in.
Measuring Device ID GC79 Recal Date 2-3-05

(8.3.2.1) Buttonhead Inspection: Tag End OK Ram End OK

(8.4.1) Gauge Length of Wire 100 in. Measuring Device ID R22 Recal Date 6-30-05

(8.6.1) Preload force 2.45 kips

Preload Pressure 1400 psi Pressure Gauge ID C225169 Recal Date DAKAWANUS

Ram Identification 7702 Ram Area 1.576 sq. in. K = 0.1282 kips Recal Date JOB END

(8.7.1) Force reduced to 0 OK

(8.8.1) Initial load of wire force 1.42 kips (0.1% elongation)
Initial load of pressure 750 psi Elongation 13.65 inches.

(8.9.1) Preset Dial Indicator OK (0.9% elongation) Indicator ID EC624 Recal Date 6-18-05

(8.10.1) Force at 1% elongation 10.74 kips ; Pressure 6670 psi

(8.11.1) "Rule" reading measurement at 1% elongation 14.55 inches

(8.12.1) Maximum elongation at failure, from "Rule" reading 19.80 inches

(8.12.2) Maximum force at failure 12.93 kips ; Pressure 8000 psi

(8.13.1) Type of break DUCTILE Location of break 1" OPPOSITE RAM inches

(8.14) CALCULATIONS:

(8.14.1) Ultimate Stress 261,409 ksi Max. Force ÷ (π Diam.² ÷ 4)

(8.14.2) Yield Stress at 1% elongation 217,136 ksi Force @ 1% ÷ (π Diam.² ÷ 4)

(8.14.3) % elong. at failure 4.75 % [1 in. + ("Rule" Dim @ Failure - "Rule" Dim @ 1%)]

(9) Sample: Accept X Unacceptable _____ Owner/Agent Notified N/A

Q.C. Review B.D.S. Cato Level II Date 1-14-05

A418/A459

PROJECT: THREE MILE ISLAND SURVEILLANCE YEAR: 30TH UNIT: 1

TENDON NO. H46-25 TENDON END/BUTTRESS NO. SHOP/BUT 6

Q.C. SIGNOFF David P. Office LEVEL II DATE 1-14-05

(8.1.4) Wire ID and Location of removal SAMPLE 1 20-29 feet Length 108 inches

(8.2.1) Wire Diameters: Tag End .250 in. Middle .250 in. Ram End .250 in. Avg. .250 in.

Measuring Device ID 0079 Recal Date 2-3-05

(8.3.2.1) Buttonhead Inspection: Tag End OK Ram End OK

(8.4.1) Gauge Length of Wire 100 in. Measuring Device ID R22 Recal Date 6-30-05

(8.6.1) Preload force 2.45 kips

Preload Pressure 1400 psi Pressure Gauge ID 0015169 Recal Date DAILY/05

Ram Identification 7707 Ram Area 0.576 sq. in. K = 0.232 kips Recal Date JAN 05

(8.7.1) Force reduced to 0 OK

(8.8.1) Initial load of wire force 1.42 kips (0.1% elongation)

Initial load of pressure 750 psi Elongation 13.65 inches.

(8.9.1) Preset Dial Indicator OK (0.9% elongation) Indicator ID 00024 Recal Date 4-18-05

(8.10.1) Force at 1% elongation 10.50 kips ; Pressure 6520 psi

(8.11.1) "Rule" reading measurement at 1% elongation 14.55 inches

(8.12.1) Maximum elongation at failure, from "Rule" reading 19.20 inches

(8.12.2) Maximum force at failure 12.79 kips ; Pressure 7970 psi

(8.13.1) Type of break DUCTILE Location of break OPPOSITE RAM inches

(8.14) CALCULATIONS:

(8.14.1) Ultimate Stress 260597 ksi Max. Force \div (π Diam.² \div 4)

(8.14.2) Yield Stress at 1% elongation 214,046 ksi Force @ 1% \div (π Diam.² \div 4)

(8.14.3) % elong. at failure 5.65 % [1 in. + ("Rule" Dim @ Failure - "Rule" Dim @ 1%)]

(9) Sample: Accept X Unacceptable _____ Owner/Agent Notified N/A

Q.C. Review B.D. Cate Level II Date 1-14-05

A419/A459

PROJECT: THREE MILE ISLAND SURVEILLANCE YEAR: 30TH UNIT: 1

TENDON NO. H46-25 TENDON END/BUTTRESS NO. STOP/BUTT 6

Q.C. SIGNOFF David P. O'Brien LEVEL II DATE 1-14-05

(8.1.4) Wire ID and Location of removal SAMPLE 2 70-79 feet Length 108 inches

(8.2.1) Wire Diameters: Tag End .250 in. Middle .250 in. Ram End .250 in. Avg. .250 in.

Measuring Device ID 8C79 Recal Date 2-2-05

(8.3.2.1) Buttonhead Inspection: Tag End OK Ram End OK

(8.4.1) Gauge Length of Wire 100 in. Measuring Device ID R22 Recal Date 6-29-05

(8.6.1) Preload force 2.45 kips

Preload Pressure 1400 psi Pressure Gauge ID CC25169 Recal Date DAILY/ANNUAL

Ram Identification 7702 Ram Area 1.576 sq. in. K = 0.232 kips Recal Date JUN 2002

(8.7.1) Force reduced to 0 OK

(8.8.1) Initial load of wire force 1.42 kips (0.1% elongation)

Initial load of pressure 750 psi Elongation 13.60 inches.

(8.9.1) Preset Dial Indicator OK (0.9% elongation) Indicator ID EC24 Recal Date 6-18-05

(8.10.1) Force at 1% elongation 10.47 kips ; Pressure 6500 psi

(8.11.1) "Rule" reading measurement at 1% elongation 17.50 inches

(8.12.1) Maximum elongation at failure, from "Rule" reading 18.80 inches

(8.12.2) Maximum force at failure 12.71 kips ; Pressure 7920 psi

(8.13.1) Type of break DUCTILE Location of break 1" FROM END inches

(8.14) CALCULATIONS:

(8.14.1) Ultimate Stress 258,992 ksi Max. Force ÷ (π Diam.² ÷ 4)

(8.14.2) Yield Stress at 1% elongation 213,403 ksi Force @ 1% ÷ (π Diam.² ÷ 4)

(8.14.3) % elong. at failure 5.3 % [1 in. + ("Rule" Dim @ Failure - "Rule" Dim @ 1%)]

(9) Sample: Accept X Unacceptable _____ Owner/Agent Notified N/A

Q.C. Review Bill A. Cato Level II Date 1-14-05

A420/A459

PROJECT: THREE MILE ISLAND SURVEILLANCE YEAR: 30TH UNIT: 1

TENDON NO. A46-25 TENDON END/BUTTRESS NO. SNOP/BUTT 6

Q.C. SIGNOFF [Signature] LEVEL II DATE 1-14-05

(8.1.4) Wire ID and Location of removal SAMPLE 3 130-139 feet Length 108 inches

(8.2.1) Wire Diameters: Tag End .250 in. Middle .250 in. Ram End .250 in. Avg. .250 in.

Measuring Device ID 0079 Recal Date 2-3-05

(8.3.2.1) Buttonhead Inspection: Tag End OK Ram End OK

(8.4.1) Gauge Length of Wire 100 in. Measuring Device ID R22 Recal Date 6-30-05

(8.6.1) Preload force 2.45 kips

Preload Pressure 1400 psi Pressure Gauge ID 00125109 Recal Date ONLY ON USE

Ram Identification 2702 Ram Area 1.576 sq. in. K = 0.232 kips Recal Date TOP END

(8.7.1) Force reduced to 0 OK

(8.8.1) Initial load of wire force 1.42 kips (0.1% elongation)

Initial load of pressure 750 psi Elongation 13.65 inches.

(8.9.1) Preset Dial Indicator OK (0.9% elongation) Indicator ID R0624 Recal Date 6/18/05

(8.10.1) Force at 1% elongation 10.36 kips ; Pressure 6430 psi

(8.11.1) "Rule" reading measurement at 1% elongation 14.55 inches

(8.12.1) Maximum elongation at failure, from "Rule" reading 18.90 inches

(8.12.2) Maximum force at failure 12.68 kips ; Pressure 7900 psi

(8.13.1) Type of break DUCTILE Location of break 37" RAM END inches

(8.14) CALCULATIONS:

(8.14.1) Ultimate Stress 258,349 ksi Max. Force ÷ (π Diam.² ÷ 4)

(8.14.2) Yield Stress at 1% elongation 216,156 ksi Force @ 1% ÷ (π Diam.² ÷ 4)

(8.14.3) % elong. at failure 5.35 % [1 in. + ("Rule" Dim @ Failure - "Rule" Dim @ 1%)]

(9) Sample: Accept X Unacceptable _____ Owner/Agent Notified N/A

Q.C. Review [Signature] Level II Date 1-14-05

A421/A459

TMI - Unit 1
Surveillance Procedure

Number

1301-9.1

Revision No.

RB Structural Integrity Tendon Surveillance

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ENCLOSURE 4
Data Sheet 1
Tendon Wire Inspection Data

Page 4 of 8

INSPECTION PERIOD 8TH

Tendon Identification: V140 SHOP END

0	<u>A</u>	25'
25'	<u>A</u>	50'
50'	<u>A</u>	75'
75'	<u>A</u>	100'
100'	<u>A</u>	125'
125'	<u>A</u>	150'
150'	<u>A</u>	175'
175'	<u>A</u>	180'
180'	<u>A</u>	190'

END OFF WIRE
185' 8"

NOTE: TEST WIRE CUT AT FIELD/BOTTOM END
AND PULLED FROM SHOP/TOP END ON 9-9-04
2008-9-04

Wire Sample Diameters

Sample for Tensile Test⁽²⁾

At 1/4-Points

At Breaking Points

Sample 1: 20 ft to 29 ft

.251 .251 .251

.243/.244

Sample 2: 90 ft to 99 ft

.251 .251 .251

.244/.244

Sample 3: 160 ft to 169 ft

.251 .251 .251

.244/.244

NOTE

1. Corrosion or any signs of deterioration shall be indicated full length as shown on the above chart.
2. Sample shall include areas representative of significant corrosion or pitting if they exist on removed tendon wire.
3. Diameter at Breaking Point is to be interpolated from 1/4-point diameters on either side of breaking points.

Laboratory Technician prepared by: REFER PSL DATASHEET SA 10.3 2001-11-05 Date _____

Laboratory Supervisor Verified by: REFER PSL DATASHEET SA 10.3 2001-11-05 Date _____

Cognizant Mech/Struct Engineer Approved by: [Signature] Date 27 FEB 05

A402/A459

TMI - Unit 1
Surveillance Procedure

Number

1301-9.1

Revision No.

RB Structural Integrity Tendon Surveillance

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ENCLOSURE 4
Data Sheet 1
Tendon Wire Inspection Data

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INSPECTION PERIOD 8+5

Tendon Identification: DZ30

0	<u>A</u>	25'
25'	<u>A</u>	50'
50'	<u>A</u>	75'
75'	<u>A</u>	100'
100'	<u>A</u>	125'
125'	<u>A</u>	150'
150'		175'
175'		180'

END OF WIRE 147' 9 1/2"

NOTE: TEST WIRE CUT AT
FIELD END / NEAR BUTT.#3 AND
PULLED FROM SHOP END /
NEAR BUTT.#5 ON 11-15-04.
J.
11-15-04

Wire Sample Diameters

Sample for Tensile Test⁽²⁾

At 1/4-Points

At Breaking Points

Sample 1: 20 ft to 29 ft

.251 .251 .251

.243/.243

Sample 2: 60 ft to 69 ft

.251 .251 .251

.246/.246

Sample 3: 120 ft to 129 ft

.251 .251 .251

.245/.245

NOTE

1. Corrosion or any signs of deterioration shall be indicated full length as shown on the above chart.
2. Sample shall include areas representative of significant corrosion or pitting if they exist on removed tendon wire.
3. Diameter at Breaking Point is to be interpolated from 1/4-point diameters on either side of breaking points.

Laboratory Technician prepared by: REEB PSC DATA SHEET 9110.3 2001-11-05 Date _____

Laboratory Supervisor Verified by: REEB PSC DATA SHEET 9110.3 2001-11-05 Date _____

Cognizant Mech/Struct Engineer Approved by: [Signature] Date 27 FEB 05

A423/A459

Number

TMI - Unit 1
Surveillance Procedure

1301-9.1

Revision No.

RB Structural Integrity Tendon Surveillance

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ENCLOSURE 4
Data Sheet 1

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Tendon Wire Inspection Data

INSPECTION PERIOD 8th

Tendon Identification: H46-25

0	<u>A</u>	25'
25'	<u>A</u>	50'
50'	<u>A</u>	75'
75'	<u>A</u>	100'
100'	<u>A</u>	125'
125'	<u>A</u>	150'
150'	<u>A</u> <u>END OF WIRE 155' 4 3/4"</u>	175'
175'		180'

NOTE: TEST WIRE CUT AT BUTTRESS #4 AND PULLED FROM BUTTRESS #6 ON 11-9-04.
JL
11-9-04

Wire Sample Diameters

Sample for Tensile Test ⁽²⁾	At 1/4-Points			At Breaking Points
	Sample 1: <u>20</u> ft to <u>29</u> ft	<u>.250</u>	<u>.250</u>	<u>.250</u>
Sample 2: <u>70</u> ft to <u>79</u> ft	<u>.250</u>	<u>.250</u>	<u>.250</u>	<u>.245/.245</u>
Sample 3: <u>130</u> ft to <u>139</u> ft	<u>.250</u>	<u>.250</u>	<u>.250</u>	<u>.243/.242</u>

NOTE

1. Corrosion or any signs of deterioration shall be indicated full length as shown on the above chart.
2. Sample shall include areas representative of significant corrosion or pitting if they exist on removed tendon wire.
3. Diameter at Breaking Point is to be interpolated from 1/4-point diameters on either side of breaking points.

Laboratory Technician prepared by: REFER TMI DATA SHEET SA 11.3 200114-05 Date _____

Laboratory Supervisor Verified by: REFER TMI DATA SHEET SA 11.3 200114-05 Date _____

Cognizant Mech/Struct Engineer Approved by: [Signature] Date 27 FEB 05

A424/A459



Certificate # 286.01
Certificate # 286.02

staveleyservices

MATERIALS TESTING

192 Internationale Blvd.
Glendale Heights, IL 60139
Telephone 630-681-0008
Facsimile 630-871-5520
www.staveleymt.com

TEST REPORT

PRECISION SURVEILLANCE 4984
CORP.
3468 WATLING ROAD
EAST CHICAGO IN 46312
BRIAN GIOMETTI

P.O. #

DESCR 01/17/05
V140 SHOP/TOP

REPORT DATE: 01/21/2005

LAB NO: 0119-045 / 01 RECEIVED DATE: 01/19/2005

JOB NO:

100' V140 SHOP/TOP

MECHANICAL TESTING RESULTS

DIAMETER: .251
YIELD STRENGTH lbs : 9,925.
ULT STRENGTH lbs : 12,216.
ELONG ON 2.00 IN. : .20

AREA: .0495
YIELD STRENGTH psi : 200,582
TENSILE psi : 246,883
ELONGATION % : 10.00

YIELD STRENGTH BY EXTENSOMETER 0.2% OFFSET

MODULUS OF ELASTICITY - 28,362 KSI

TEST METHODS: ASTM A370-03a ;

"SAFETY RELATED" 10CFR PART 21 APPLIES

Joe Hanson

Q.A. INSPECTOR

PAGE 1 OF 2

SAMPLE RESULTS RELATE ONLY TO THE SAMPLE TESTED

*THIS TEST RESULT IS NOT COVERED BY OUR CURRENT A2LA ACCREDITATION
THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN APPROVAL OF STAVELEY SERVICES MATERIALS TESTING.
KNOWINGLY OR WILLFULLY PALSIFYING OR CONCEALING MATERIAL FACT ON THIS FORM, OR MAKING FALSE, FICTITIOUS OR
FRAUDULENT STATEMENTS OR REPRESENTATIONS HEREIN COULD CONSTITUTE A FELONY PUNISHABLE UNDER FEDERAL STATUTES.

A425/A459



Certificate # 286.01
Certificate # 286.02

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MATERIALS TESTING

192 Internationale Blvd.
Glendale Heights, IL 60139
Telephone 630-681-0008
Facsimile 630-871-5520
www.staveleymt.com

TEST REPORT

PRECISION SURVEILLANCE 4984
CORP.
3468 WATLING ROAD
EAST CHICAGO IN 46312
BRIAN GIOMETTI

P.O.#
DESCR 01/17/05
V140 SHOP/TOP

REPORT DATE: 01/21/2006

LAB NO: 0119-045 / 02 RECEIVED DATE: 01/19/2005 JOB NO:
5 V140 SHOP/TOP

MECHANICAL TESTING RESULTS

DIAMETER:	.251	AREA:	.0491
YIELD STRENGTH lbs :	9,853.	YIELD STRENGTH psi :	199,127
ULT STRENGTH lbs :	12,180.	TENSILE psi :	246,155
ELONG ON 2.00 IN. :	.12	ELONGATION % :	6.00

YIELD STRENGTH BY EXTENSOMETER 0.2% OFFSET

TEST METHODS: ASTM A370-03a ;

MODULUS OF ELASTICITY = 30,070 KSI

"SAFETY RELATED" 10CFR PART 21 APPLIES

Joe Hansen
Q.A. INSPECTOR

PAGE 2 OF 2

SAMPLE RESULTS RELATE ONLY TO THE SAMPLE TESTED

*THIS TEST RESULT IS NOT COVERED BY OUR CURRENT A2LA ACCREDITATION
THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN APPROVAL OF STAVELEY SERVICES MATERIALS TESTING.
KNOWINGLY OR WILLFULLY FALSIFYING OR CONCEALING MATERIAL FACT ON THIS FORM OR MAKING FALSE, FICTITIOUS OR
FRAUDULENT STATEMENTS OR REPRESENTATIONS HEREIN COULD CONSTITUTE A FELONY PUNISHABLE UNDER FEDERAL STATUTES.

DATA SHEET 11
Tendon Surveillance Program

1301-9.1
Revision 18
Page 1 of 1

Inspection Period 8TH

Tendon No.	Gallons Removed*			Comments	Gallons Replaced*			Diff.** Between Removed & Replaced	Acceptable (Yes or No)
	Shop End	Field End	Shop & Field End		Shop End	Field End	Shop & Field End		
1. <u>V32</u>	<u>5^{3/4}</u>	<u>30^{3/4}</u>	<u>36^{1/2}</u>	<u>NONE</u>	<u>*N/A</u>	<u>37</u>	<u>37</u>	<u>1/2</u>	<u>YES</u>
2. <u>V53</u>	<u>5^{3/4}</u>	<u>69^{3/4}</u>	<u>75^{1/2}</u>	<u>NONE</u>	<u>*N/A</u>	<u>78^{1/2}</u>	<u>78^{1/2}</u>	<u>3</u>	<u>YES</u>
3. <u>V66</u>	<u>6^{1/4}</u>	<u>79</u>	<u>85^{1/4}</u>	<u>NONE</u>	<u>*N/A</u>	<u>87^{1/2}</u>	<u>87^{1/2}</u>	<u>2^{1/4}</u>	<u>YES</u>
4. <u>V140</u>	<u>6.25</u> <u>7.75</u> <small>U. 11-22-04</small>	<u>77.75</u>	<u>84</u>	<u>NONE</u>	<u>*N/A</u>	<u>85.75</u>	<u>85.75</u>	<u>1.75</u>	<u>YES</u>
5. <u>H13-11</u>	<u>7.75</u>	<u>7.25</u>	<u>15.0</u>	<u>NONE</u>	<u>8.75</u>	<u>8.75</u>	<u>17.50</u>	<u>2.50</u>	<u>YES</u>
6. <u>H35-49</u>	<u>6^{3/4}</u>	<u>5^{3/4}</u>	<u>12^{1/2}</u>	<u>NONE</u>	<u>8</u>	<u>8</u>	<u>16</u>	<u>3^{1/2}</u>	<u>YES</u>
7. <u>H46-25</u>	<u>8.0</u>	<u>8.25</u>	<u>16.25</u>	<u>NONE</u>	<u>10.5</u>	<u>8.75</u>	<u>19.25</u>	<u>3.0</u>	<u>YES</u>
8. <u>H62-18</u>	<u>8.5</u>	<u>8.0</u>	<u>16.50</u>	<u>NONE</u>	<u>8.75</u>	<u>9.0</u>	<u>17.75</u>	<u>1.25</u>	<u>YES</u>
9. <u>H62-26</u>	<u>6^{3/4}</u>	<u>6^{3/4}</u>	<u>13^{1/2}</u>	<u>NONE</u>	<u>8^{1/2}</u>	<u>8^{1/2}</u>	<u>17</u>	<u>3^{1/2}</u>	<u>YES</u>
10. <u>D-213</u>	<u>37^{3/4}</u>	<u>17</u>	<u>54^{3/4}</u>	<u>NONE</u>	<u>10^{1/2}</u>	<u>47^{3/4}</u>	<u>59^{1/4}</u>	<u>3^{1/2}</u>	<u>YES</u>
11. <u>D-225</u>	<u>6^{1/4}</u>	<u>7^{1/4}</u>	<u>13^{1/2}</u>	<u>NONE</u>	<u>7</u>	<u>8^{3/4}</u>	<u>15^{3/4}</u>	<u>2^{1/4}</u>	<u>YES</u>

* NOTE: VERTICAL TENDONS PRESSURE PUMPED FROM FIELD/BOTTOM END

* Only one end of vertical tendons may be used for removal and replacement of grease.
** Differences greater than 4 gallons require TMI-1 evaluation.

Cognizant QV Inspector: [Signature] Date: 11-24-04
Verification By: [Signature]
Cognizant Mech/Struct Engineer: [Signature]
Review By: [Signature] Date: 27 FEB 05

Due to the relatively high coefficient of thermal expansion of the grease that is installed at a high temperature, experience during surveillances has been that the quantity of replacement grease frequently exceeds the arbitrary acceptance criteria. Exceeding the acceptance criteria is primarily an indication that an inspection and assessment for possible grease leakage within the structure is necessary. The visual examination of the anchorage and wire will determine whether the corrosion protection system is functioning effectively.

AP10/PH54

DATA SHEET 11
Tendon Surveillance Program

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Inspection Period 8th

Tendon No.	Gallons Removed*			Comments	Gallons Replaced*			Diff.** Between Removed & Replaced	Acceptable (Yes or No)
	Shop End	Field End	Shop & Field End		Shop End	Field End	Shop & Field End		
1. <u>D-230</u>	<u>15.75</u>	<u>7.25</u>	<u>23.0</u>	<u>NONE</u>	<u>10.5</u>	<u>8.75</u>	<u>19.25</u>	<u>3.75</u>	<u>YES</u>
2. <u>D-342</u>	<u>N/A</u>	<u>8.25</u>	<u>8.25</u>	<u>NONE</u>	<u>N/A</u>	<u>8.75</u>	<u>8.75</u>	<u>.50</u>	<u>YES</u>
3.									
4.									
5.									
6.									
7.									
8.									
9.									
10.									
11.									

* Only one end of vertical tendons may be used for removal and replacement of grease.
** Differences greater than 4 gallons require TMI-1 evaluation.

Cognizant QV Inspector: [Signature]
Verification By: [Signature] Date: 11-24-04
Cognizant Mech/Struct Engineer: [Signature]
Review By: [Signature] Date: 27 FEB 05

Due to the relatively high coefficient of thermal expansion of the grease that is installed at a high temperature, experience during surveillances has been that the quantity of replacement grease frequently exceeds the arbitrary acceptance criteria. Exceeding the acceptance criteria is primarily an indication that an inspection and assessment for possible grease leakage within the structure is necessary. The visual examination of the anchorage and wire will determine whether the corrosion protection system is functioning effectively.

A402/A459

DATA SHEET 11
Tendon Surveillance Program

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Inspection Period _____

	Tendon No.	Gallons Removed*			Comments	Gallons Replaced*			Diff.** Between Removed & Replaced	Acceptable (Yes or No)
		Shop End	Field End	Shop & Field End		Shop End	Field End	Shop & Field End		
1.	V137	5.50	45.75	51.25	NONE	N/A	54.0	54.0	2.75	YES
2.	V141	5.25	54.75	60	NONE	N/A	62.75	62.75	2.75	YES
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										
11.										

- * Only one end of vertical tendons may be used for removal and replacement of grease.
- ** Differences greater than 4 gallons require TMI-1 evaluation.

Cognizant QV Inspector
 Verification By: C. LEBER for Tbecom ^{R. Siorrett} Date: 2/1/05
 Cognizant Mech/Struct Engineer
 Review By: [Signature] Date: 27 FEB 05

Due to the relatively high coefficient of thermal expansion of the grease that is installed at a high temperature, experience during surveillances has been that the quantity of replacement grease frequently exceeds the arbitrary acceptance criteria. Exceeding the acceptance criteria is primarily an indication that an inspection and assessment for possible grease leakage within the structure is necessary. The visual examination of the anchorage and wire will determine whether the corrosion protection system is functioning effectively.

A428/A459

A4201/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. 1.35-132 ^{N/A 8-25-04} TENDON END/BUTTRESS NO. SHOP/TOP

Q.C

Signoff

(8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 5 3/4 Gal.

2/21/9/29/04
for 2.P. 9-2-04
2/21/9/29/04
for 2.P. 9-2-04

(8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 30 3/4 Gal.

(8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal.

2/21/9-25-04

(8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal.

2/21/9-29-04

(8.8.1) TOTAL TENDON GREASE LOSS 36 1/2 Gal.

2/21/9-29-04

(8.9) Ambient Temp. 80 F. Thermo. ID PK42 ^{N/A 8-25-04} Recal Date 8-2-05 ^{N/A 8-25-04}

2/21/9-29-04

(8.10) Cap Removal 8-31-04 Grease Replacement 9-28-04 Days Elapsed 29

2/21/9-29-04

(9.8.3.1) Pump Gauge N/A Dimension N/A Gallons per inch

2/21/9-29-04

(9.8.4.1) Grease Height in Drum BEFORE N/A (9.8.5.1) AFTER N/A

Calculations: N/A Total N/A

(9.8.4.1) Temperature of grease N/A °F Thermo. ID N/A Recal Date N/A

2/21/9-29-04

(10.1.4) Quantity of grease HAND PUMPED into THIS tendon end N/A Gal.

(10.1.4) Grease level below vent hole 2 Top end inches

2/21/9-29-04

(10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end N/A Gal.

2/21/9-29-04

(10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end N/A Gal.

2/21/9-29-04

Thermo. No. N/A Recal Date N/A Grease Temp. N/A

2/21/9-29-04

(10.2.6) Quantity of Exiting Outflow Grease 2 Gal.

2/21/9-29-04

(10.2.7) Quantity of grease Hand Pumped into OTHER tendon end N/A Gal.

(10.2.7) Grease level below vent hole N/A 2 Top end inches

2/21/9-29-04

(10.2.8) TOTAL TENDON QUANTITY REPLACED 37 Gal.

2/21/9-29-04

(10.2.9) PERCENT VARIATION DIFFERENCE 0.4 %

2/21/9-29-04

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1)

37 36.5

x 100

NET VOLUME TENDON VOID (SQ 12.2) 121.0 gal.

(11.2) Grease Leaks: YES or NO

2/21/9-29-04

(11.3) REFILL ACCEPTABLE: YES or NO

2/21/9-29-04

IF TOTAL TENDON REFILL difference more than 10%:

Owner Notified N/A NCR # N/A

2/21/9-29-04

(11.4) COMMENTS: GREASE PRESSURE PUMPED FROM FIELD/BOTTOM END 2/21/9-29-04

Q.C. REVIEW [Signature] LEVEL II DATE 1-26-05

A430/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. V32 TENDON END/BUTTRESS NO. FIELD/BOTTOM

Q.C

Signoff

(8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 30^{3/4} Gal.

Handwritten notes:
2/28/04
from P.P.O. 9-2-04
2/28/04
from P.P.O. 9-2-04

(8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 5^{3/4} Gal.

(8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal.

2/28/04

(8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal.

2/28/04

(8.8.1) TOTAL TENDON GREASE LOSS 36^{1/2} Gal.

2/28/04

(8.9) Ambient Temp. 80 °F. Thermo. ID PK42 Recal Date 8-2-05

2/28/04

(8.10) Cap Removal 9-2-04 Grease Replacement 9-28-04 Days Elapsed 27

2/28/04

(9.8.3.1) Pump Gauge 6601 Dimension 1.77 Gallons per inch

2/28/04

(9.8.4.1) Grease Height in Drum BEFORE 17"-5" (9.8.5.1) AFTER 12"-3"

Calculations: $17"-5" = 12" \times 1.77 = 21.24$
 $12"-3" = 9" \times 1.77 = 15.93$
Total 38.94

(9.8.4.1) Temperature of grease 190 °F Thermo. ID PK42 Recal Date 8-2-05

2/28/04

(10.1.4) Quantity of grease HAND PUMPED into THIS tendon end N/A Gal.

(10.1.4) Grease level below vent hole N/A inches

2/28/04

(10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end N/A Gal.

2/28/04

(10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end 39 Gal.

2/28/04

Thermo. No. PK42 Recal Date 8-2-05 Grease Temp. 190

2/28/04

(10.2.6) Quantity of Exiting Outflow Grease 2 Gal.

2/28/04

(10.2.7) Quantity of grease Hand Pumped into OTHER tendon end N/A Gal.

(10.2.7) Grease level below vent hole 2 inches

2/28/04

(10.2.8) TOTAL TENDON QUANTITY REPLACED 37 Gal.

2/28/04

(10.2.9) PERCENT VARIATION DIFFERENCE 0.4 %

2/28/04

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1)

37 - 36^{1/2} x 100

NET VOLUME TENDON VOID (SQ 12.2) 121.0 gal.

(11.2) Grease Leaks: YES or NO

2/28/04

(11.3) REFILL ACCEPTABLE: YES or NO

2/28/04

If TOTAL TENDON REFILL difference more than 10%:

Owner Notified N/A NCR # N/A

2/28/04

(11.4) COMMENTS: None

Q.C. REVIEW Bruce S. Cato LEVEL II DATE 1-26-05

A431/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. V53 TENDON END/BUTTRESS NO. SHOE/TOP

Q.C

Signoff

(8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 5³/₄ Gal.

~~809-22-04~~

(8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 49³/₄ Gal.

~~809-22-04~~

(8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal.

~~809-22-04~~

(8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal.

~~809-22-04~~

(8.8.1) TOTAL TENDON GREASE LOSS 75¹/₂ Gal.

~~809-22-04~~

(8.9) Ambient Temp. n/a °F. Thermo. ID n/a Recal Date n/a

~~809-22-04~~

(8.10) Cap Removal 8-31-04 Grease Replacement 9-22-04 Days Elapsed 22

~~809-22-04~~

(9.8.3.1) Pump Gauge n/a Dimension n/a Gallons per inch

~~809-22-04~~

(9.8.4.1) Grease Height in Drum BEFORE n/a (9.8.5.1) AFTER n/a

Calculations: n/a Total n/a

(9.8.4.1) Temperature of grease n/a °F Thermo. ID n/a Recal Date n/a

~~809-22-04~~

(10.1.4) Quantity of grease HAND PUMPED into THIS tendon end n/a Gal.

(10.1.4) Grease level below vent hole 2 inches

~~809-22-04~~

(10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end n/a Gal.

~~809-22-04~~

(10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end n/a Gal.

~~809-22-04~~

Thermo. No. n/a Recal Date n/a Grease Temp. n/a

~~809-22-04~~

(10.2.6) Quantity of Exiting Outflow Grease 1 Gal.

~~809-22-04~~

(10.2.7) Quantity of grease Hand Pumped into OTHER tendon end n/a Gal.

(10.2.7) Grease level below vent hole n/a inches

~~809-22-04~~

(10.2.8) TOTAL TENDON QUANTITY REPLACED 78¹/₂ Gal.

~~809-22-04~~

(10.2.9) PERCENT VARIATION DIFFERENCE 2.5 %

~~809-22-04~~

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1)

x 100

NET VOLUME TENDON VOID (SQ 12.2) (120.32)

(11.2) Grease Leaks: YES or NO

~~809-22-04~~

(11.3) REFILL ACCEPTABLE: YES or NO

~~809-22-04~~

If TOTAL TENDON REFILL difference more than 10%:

Owner Notified n/a NCR # n/a

~~809-22-04~~

(11.4) COMMENTS: GREASE PRESSURE PUMPED FROM FIELD/BOTTOM END 809-22-04

Q.C. REVIEW ASD D. Cate LEVEL II DATE 1-26-05

A432/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. V53 TENDON END/BUTTRESS NO. Field/Bottom

Q.C
Signoff

- (8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 69³/₄ Gal. X09-22-04
- (8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 5³/₄ Gal. X09-22-04
- (8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal. X09-22-04
- (8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal. X09-22-04
- (8.8.1) TOTAL TENDON GREASE LOSS 75¹/₂ Gal. X09-22-04
- (8.9) Ambient Temp. 84 °F. Thermo. ID PK42 Recal Date 8-2-05 X09-22-04
- (8.10) Cap Removal 9-2-04 Grease Replacement 9-22-04 Days Elapsed 20 X09-22-04
- (9.8.3.1) Pump Gauge 6601 Dimension 1.77 Gallons per inch X09-22-04
- (9.8.4.1) Grease Height in Drum BEFORE 22.7 (9.8.5.1) AFTER 12.10 X09-22-04
- Calculations: 31-3 = 28 x 1.77 = 49.56 27-10 = 17 x 1.77 = 30.09 = 79.65 Total 79.65
- (9.8.4.1) Temperature of grease 200 °F Thermo. ID PK42 Recal Date 8-2-05 X09-22-04
- (10.1.4) Quantity of grease HAND PUMPED into THIS tendon end n/a Gal. X09-22-04
- (10.1.4) Grease level below vent hole 2 inches X09-22-04
- (10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end n/a Gal. X09-22-04
- (10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end 79¹/₂ Gal. X09-22-04
- Thermo. No. PK42 Recal Date 8-2-05 Grease Temp. 200 X09-22-04
- (10.2.6) Quantity of Exiting Outflow Grease 1 Gal. X09-22-04
- (10.2.7) Quantity of grease Hand Pumped into OTHER tendon end n/a Gal. X09-22-04
- (10.2.7) Grease level below vent hole 2 inches X09-22-04
- (10.2.8) TOTAL TENDON QUANTITY REPLACED 78¹/₂ Gal. X09-22-04
- (10.2.9) PERCENT VARIATION DIFFERENCE 2.5 % X09-22-04

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1)

x 100

NET VOLUME TENDON VOID (SQ 12.2) (120.32)

- (11.2) Grease Leaks: YES or NO X09-22-04
- (11.3) REFILL ACCEPTABLE: YES or NO X09-22-04
- IF TOTAL TENDON REFILL difference more than 10%:
Owner Notified n/a NCR # n/a X09-22-04
- (11.4) COMMENTS: n/a

Q.C. REVIEW Bed & Cat LEVEL II DATE 1-26-05

A433/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. 166 TENDON END/BUTTRESS NO. SHOR/TOP

Q.C

Signo

(8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 6 1/4 Gal.

~~X09-22-04~~

(8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 79 Gal.

~~X09-22-04~~

(8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal.

~~X09-22-04~~

(8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal.

~~X09-22-04~~

(8.8.1) TOTAL TENDON GREASE LOSS 6 1/4 Gal.

~~X09-22-04~~

(8.9) Ambient Temp. 68 °F. Thermo. ID 9K42 Recal Date 8-2-05

~~X09-22-04~~

(8.10) Cap Removal 8-31-04 Grease Replacement 9-22-04 Days Elapsed 22

~~X09-22-04~~

(9.8.3.1) Pump Gauge n/a Dimension 1.77 Gallons per inch

~~X09-22-04~~

(9.8.4.1) Grease Height in Drum BEFORE n/a (9.8.5.1) AFTER n/a

Calculations: n/a Total n/a

(9.8.4.1) Temperature of grease n/a °F Thermo. ID n/a Recal Date n/a

~~X09-22-04~~

(10.1.4) Quantity of grease HAND PUMPED into THIS tendon end n/a Gal.

(10.1.4) Grease level below vent hole 2 inches

~~X09-22-04~~

(10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end n/a Gal.

~~X09-22-04~~

(10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end n/a Gal.

~~X09-22-04~~

Thermo. No. n/a Recal Date n/a Grease Temp. n/a

~~X09-22-04~~

(10.2.6) Quantity of Exiting Outflow Grease 1 Gal.

~~X09-22-04~~

(10.2.7) Quantity of grease Hand Pumped into OTHER tendon end n/a Gal.

(10.2.7) Grease level below vent hole n/a inches

~~X09-22-04~~

(10.2.8) TOTAL TENDON QUANTITY REPLACED 8 7/2 Gal.

~~X09-22-04~~

(10.2.9) PERCENT VARIATION DIFFERENCE 1.88 %

~~X09-22-04~~

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1)

x 100

NET VOLUME TENDON VOID (SQ 12.2) (100.93)

(11.2) Grease Leaks: YES or (NO)

~~X09-22-04~~

(11.3) REFILL ACCEPTABLE: (YES) or NO

~~X09-22-04~~

If TOTAL TENDON REFILL difference more than 10%:

Owner Notified n/a NCR # n/a

~~X09-22-04~~

(11.4) COMMENTS: TENDON PRESSURE PUMPED FROM FIELD/BOTTOM END - 9/20/04

Q.C. REVIEW BUD J. Cato LEVEL II DATE 1-26-05

A434/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. V66 TENDON END/BUTTRESS NO. V66 Field/BOTTOM
8/22-04

Q.C
Signoff

- (8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 79 Gal. X09-22-04
- (8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 644 Gal. X09-22-04
- (8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal. X09-22-04
- (8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal. X09-22-04
- (8.8.1) TOTAL TENDON GREASE LOSS 82 1/2 Gal. X09-22-04
- (8.9) Ambient Temp. 84 °F. Thermo. ID PK42 Recal Date 8-2-05 X09-22-04
- (8.10) Cap Removal 9-2-04 Grease Replacement 9-22-04 Days Elapsed 20 X09-22-04
- (9.8.3.1) Pump Gauge 6601 Dimension 1.77 Gallons per inch X09-22-04
- (9.8.4.1) Grease Height in Drum BEFORE 30" = 30" (9.8.5.1) AFTER 28" = 28"
- Calculations: $30 - 2 = 28 \times 1.77 = 49.56 = 88.5$ Total 88 1/2
- $30 - 8 = 22 \times 1.77 = 38.94 = 88.5$
- (9.8.4.1) Temperature of grease 200 °F Thermo. ID PK42 Recal Date 8-2-05 X09-22-04
- (10.1.4) Quantity of grease HAND PUMPED into THIS tendon end n/a Gal.
- (10.1.4) Grease level below vent hole n/a inches X09-22-04
- (10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end n/a Gal. X09-22-04
- (10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end 88 1/2 Gal. X09-22-04
- Thermo. No. PK42 Recal Date 8-2-05 Grease Temp. 200 X09-22-04
- (10.2.6) Quantity of Exiting Outflow Grease 1 Gal. X09-22-04
- (10.2.7) Quantity of grease Hand Pumped into OTHER tendon end n/a Gal.
- (10.2.7) Grease level below vent hole 2 inches X09-22-04
- (10.2.8) TOTAL TENDON QUANTITY REPLACED 87 1/2 Gal. X09-22-04
- (10.2.9) PERCENT VARIATION DIFFERENCE 1.48 % X09-22-04
- TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1)

x 100

NET VOLUME TENDON VOID (SQ 12.2) (120.83)

- (11.2) Grease Leaks: YES or (NO) X09-22-04
- (11.3) REFILL ACCEPTABLE: (YES) or NO X09-22-04
- IF TOTAL TENDON REFILL difference more than 10%:
Owner Notified n/a NCR # n/a X09-22-04
- (11.4) COMMENTS: none

Q.C. REVIEW B.D.S. Cate LEVEL II DATE 1-26-05

A435/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH
TENDON NO. V86 TENDON END/BUTTRESS NO. SHOP/TOP

Q.C
Signoff

- (8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end .50 Gal. 2/11/23-04
- (8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end N/A Gal. 2/11/26-05
- (8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal. 2/11-23-04
- (8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal. 2/11-23-04
- (8.8.1) TOTAL TENDON GREASE LOSS .50 Gal. 2/11-23-04
- (8.9) Ambient Temp. N/A °F. Thermo. ID N/A Recal Date N/A 2/12-6-04
- (8.10) Cap Removal N/A Grease Replacement N/A Days Elapsed N/A 2/12-6-04
- (9.8.3.1) Pump Gauge N/A Dimension N/A Gallons per inch 2/12-6-04
- (9.8.4.1) Grease Height in Drum BEFORE N/A (9.8.5.1) AFTER N/A
- Calculations: N/A Total N/A
- (9.8.4.1) Temperature of grease N/A °F Thermo. ID N/A Recal Date N/A 2/12-6-04
- (10.1.4) Quantity of grease HAND PUMPED into THIS tendon end 0 Gal.
- (10.1.4) Grease level below vent hole 1 1/2" inches 2/12-6-04
- (10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end N/A Gal. 2/12-6-04
- (10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end N/A Gal. 2/12-6-04
- Thermo. No. N/A Recal Date N/A Grease Temp. N/A 2/12-6-04
- (10.2.6) Quantity of Exiting Outflow Grease N/A Gal. 2/12-6-04
- (10.2.7) Quantity of grease Hand Pumped into OTHER tendon end N/A Gal.
- (10.2.7) Grease level below vent hole N/A inches 2/12-6-04
- (10.2.8) TOTAL TENDON QUANTITY REPLACED 0 Gal. 2/12-6-04
- (10.2.9) PERCENT VARIATION DIFFERENCE N/A % 2/12-06-04

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1)
----- x 100

NET VOLUME TENDON VOID (SQ 12.2)

- (11.2) Grease Leaks: YES or NO 2/12-6-04
- (11.3) REFILL ACCEPTABLE YES or NO 2/12-6-04

If TOTAL TENDON REFILL difference more than 10%:

Owner Notified N/A NCR # N/A 2/12-6-04

(11.4) COMMENTS: No GREASE REQUIRED, VERIFIED TO BE WITHIN 2" FROM TOP. 2/12-6-04

Q.C. REVIEW [Signature] LEVEL II DATE 1-26-05

A430/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. V137 TENDON END/BUTTRESS NO. Field / Bottom
SHOP / TOP 8/26/05

Q.C
Signoff

- (8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 5.50 Gal. cf. 11-24-04
- (8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 45.75 Gal. cf. 11-24-04
- (8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal. cf. 11-24-04
- (8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal. cf. 11-24-04
- (8.8.1) TOTAL TENDON GREASE LOSS 51.25 Gal. cf. 11-24-04
- (8.9) Ambient Temp. 75 °F. Thermo. ID TK 42 Recal Date 8-2-05 cf. 11-24-04
- (8.10) Cap Removal 11-11-04 Grease Replacement 11-24-04 Days Elapsed 13 cf. 11-24-04
- (9.8.3.1) Pump Gauge 6A-03 Dimension 1.77 Gallons per inch cf. 11-24-04
- (9.8.4.1) Grease Height in Drum BEFORE n/a (9.8.5.1) AFTER n/a cf. 11-24-04
- Calculations: n/a Total n/a
- (9.8.4.1) Temperature of grease n/a °F Thermo. ID n/a Recal Date n/a cf. 11-24-04
- (10.1.4) Quantity of grease HAND PUMPED into THIS tendon end n/a Gal.
- (10.1.4) Grease level below vent hole n/a inches cf. 11-24-04
- (10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end n/a Gal. cf. 11-24-04
- (10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end n/a Gal. cf. 11-24-04
- Thermo. No. n/a Recal Date n/a Grease Temp. n/a cf. 11-24-04
- (10.2.6) Quantity of Exiting Outflow Grease 1 Gal. cf. 11-24-04
- (10.2.7) Quantity of grease Hand Pumped into OTHER tendon end n/a Gal.
- (10.2.7) Grease level below vent hole 2" inches cf. 11-24-04
- (10.2.8) TOTAL TENDON QUANTITY REPLACED 54.0 Gal. From Bottom cf. 11-24-04
- (10.2.9) PERCENT VARIATION DIFFERENCE +2.58% cf. 11-24-04
- TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1)

x 100

NET VOLUME TENDON VOID (SQ 12.2)

- (11.2) Grease Leaks: YES or NO cf. 11-24-04
- (11.3) REFILL ACCEPTABLE: YES or NO cf. 11-24-04

IF TOTAL TENDON REFILL difference more than 10%:

Owner Notified n/a NCR # n/a cf. 11-24-04

(11.4) COMMENTS: NONE

Q.C. REVIEW [Signature] LEVEL II DATE 12/6/05

A437/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. V137 TENDON END/BUTTRESS NO. FIELD/BOTTOM

Q.C.
Signoff

- (8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 45.75 Gal. cf. 11-24-04
- (8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 5.50 Gal. cf. 11-24-04
- (8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal. cf. 11-24-04
- (8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal. cf. 11-24-04
- (8.8.1) TOTAL TENDON GREASE LOSS 51.25 Gal. cf. 11-24-04
- (8.9) Ambient Temp. 75 °F. Thermo. ID PK42 Recal Date 8-2-05 cf. 11-24-04
- (8.10) Cap Removal 11-19-04 Grease Replacement 11-24-04 Days Elapsed 5 cf. 11-24-04
- (9.8.3.1) Pump Gauge 6603 Dimension 1.77 Gallons per inch cf. 11-24-04
- (9.8.4.1) Grease Height in Drum BEFORE 31' (9.8.5.1) AFTER 0
- Calculations: 31" - 0" = 31" x 1.77 Total 54.87
- (9.8.4.1) Temperature of grease N/A °F Thermo. ID N/A Recal Date N/A cf. 11-24-04
- (10.1.4) Quantity of grease HAND PUMPED into THIS tendon end N/A Gal.
- (10.1.4) Grease level below vent hole N/A inches cf. 11-24-04
- (10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end N/A Gal. cf. 11-24-04
- (10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end 55.0 Gal. cf. 11-24-04
- Thermo. No. PK42 Recal Date 8-2-05 Grease Temp. 190 cf. 11-24-04
- (10.2.6) Quantity of Exiting Outflow Grease 1 Gal. cf. 11-24-04
- (10.2.7) Quantity of grease Hand Pumped into OTHER tendon end N/A Gal.
- (10.2.7) Grease level below vent hole 2" TOP inches cf. 11-24-04
- (10.2.8) TOTAL TENDON QUANTITY REPLACED 54.0 Gal. cf. 11-24-04
- (10.2.8) TOTAL TENDON QUANTITY REPLACED 55.0 Gal. cf. 11-24-04
- (10.2.9) PERCENT VARIATION DIFFERENCE +2.30% cf. 11-24-04

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1) _____ x 100

NET VOLUME TENDON VOID (SQ 12.2)

- (11.2) Grease Leaks: YES or NO cf. 11-24-04
- (11.3) REFILL ACCEPTABLE: YES or NO cf. 11-24-04
- If TOTAL TENDON REFILL difference more than 10%:
Owner Notified N/A NCR # N/A cf. 11-24-04
- (11.4) COMMENTS: NONE

Q.C. REVIEW [Signature] LEVEL II DATE 1/26/05

A438/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. V140 TENDON END/BUTTRESS NO. SHOT/TOP

Q.C

Signoff

(8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 6 1/4 Gal.

N.H. 8-28-04
for P.R.O. 9-2-04
2/11/9-28-04
for P.R.O. 9-2-04

(8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 27 3/4 Gal.

(8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal.

N.H. 9-28-04

(8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal.

N.H. 9-28-04

(8.8.1) TOTAL TENDON GREASE LOSS 84 Gal.

N.H. 9-29-04

(8.9) Ambient Temp. N/A °F. Thermo. ID N/A Recal Date N/A

N.H. 9-29-04

(8.10) Cap Removal 7-31-04 Grease Replacement 9-28-04 Days Elapsed 29

N.H. 9-29-04

(9.8.3.1) Pump Gauge N/A Dimension N/A Gallons per inch

N.H. 9-28-04

(9.8.4.1) Grease Height in Drum BEFORE N/A (9.8.5.1) AFTER N/A

Calculations: N/A Total N/A

(9.8.4.1) Temperature of grease N/A °F Thermo. ID N/A Recal Date N/A

N.H. 9-28-04

(10.1.4) Quantity of grease HAND PUMPED into THIS tendon end N/A Gal.

(10.1.4) Grease level below vent hole 2 1/2 inches

N.H. 9-28-04

(10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end N/A Gal.

N.H. 9-28-04

(10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end N/A Gal.

N.H. 9-28-04

Thermo. No. N/A Recal Date N/A Grease Temp. N/A

N.H. 9-28-04

(10.2.6) Quantity of Exiting Outflow Grease 1 Gal.

N.H. 9-28-04

(10.2.7) Quantity of grease Hand Pumped into OTHER tendon end 85.73 Gal.

N/A N.H. 9-28-04
85.73

(10.2.7) Grease level below vent hole 2 1/2 inches

N.H. 9-28-04

(10.2.8) TOTAL TENDON QUANTITY REPLACED 85.73 Gal.

N.H. 9-28-04

(10.2.9) PERCENT VARIATION DIFFERENCE 1.4 %

N.H. 9-28-04

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1)

85.73

84

x 100

NET VOLUME TENDON VOID (SQ 12.2) 120.69 gal.

(11.2) Grease Leaks: YES or NO

N.H. 9-28-04

(11.3) REFILL ACCEPTABLE: YES or NO

N.H. 9-28-04

IF TOTAL TENDON REFILL difference more than 10%:

Owner Notified N/A NCR # N/A

N.H. 9-28-04

(11.4) COMMENTS: GREASE PRESSURE PUMPED FROM FIELD/BOTTOM END N.H. 9-28-04

Q.C. REVIEW [Signature] LEVEL II DATE 1-26-05

A439/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. V140 TENDON END/BUTTRESS NO. FIELD/BOTTOM

Q.C

(8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 77 3/4 Gal. 77 3/4 8-28-04

Signoff
W.F. 8-28-04

(8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 644 Gal.

W.F. 8-28-04

(8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal.

W.F. 8-28-04

(8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal.

W.F. 8-28-04

(8.8.1) TOTAL TENDON GREASE LOSS 84 Gal. 84 8-28-04

W.F. 8-28-04

(8.9) Ambient Temp. 80 °F. Thermo. ID PK42 Recal Date 8-2-05

W.F. 8-28-04

(8.10) Cap Removal 9-2-04 Grease Replacement 9-28-04 Days Elapsed 27

W.F. 8-28-04

(9.8.3.1) Pump Gauge 6601 Dimension 1.77 Gallons per inch

W.F. 8-28-04

(9.8.4.1) Grease Height in Drum BEFORE 33"-33" (9.8.5.1) AFTER 41"-41"

Calculations: $33"-33" = 30" \times 1.77 = 53.10 = 53.10$ Total 86.23

(9.8.4.1) Temperature of grease 190 °F Thermo. ID PK42 Recal Date 8-2-05

W.F. 8-28-04

(10.1.4) Quantity of grease HAND PUMPED into THIS tendon end N/A Gal.

(10.1.4) Grease level below vent hole N/A inches

W.F. 8-28-04

(10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end N/A Gal.

W.F. 8-28-04

(10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end 86.23 Gal. 86.23 9-28-04

W.F. 8-28-04

Thermo. No. PK42 Recal Date 8-2-05 Grease Temp. 790

W.F. 8-28-04

(10.2.6) Quantity of Exiting Outflow Grease 1 Gal.

W.F. 8-28-04

(10.2.7) Quantity of grease Hand Pumped into OTHER tendon end N/A Gal.

(10.2.7) Grease level below vent hole 2" top end inches

W.F. 8-28-04

(10.2.8) TOTAL TENDON QUANTITY REPLACED 85.23 Gal.

W.F. 8-28-04

(10.2.9) PERCENT VARIATION DIFFERENCE 1.4 %

W.F. 8-28-04

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1)

84 85.23 84

x 100

NET VOLUME TENDON VOID (SQ 12.2) 120.69 gal.

(11.2) Grease Leaks: YES or (NO) W.F. 8-28-04

(11.3) REFILL ACCEPTABLE: (YES) or NO W.F. 8-28-04

IF TOTAL TENDON REFILL difference more than 10%:

Owner Notified N/A NCR # N/A W.F. 8-28-04

(11.4) COMMENTS: NONE

Q.C. REVIEW Bill J. Cato LEVEL II DATE 1-26-05

A440/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. V141 TENDON END/BUTTRESS NO. SHOP/TOP

Q.C
Signof

- (8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 5.25 Gal. cf. 11-23-04
- (8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 54.75 Gal. cf. 11-23-04
- (8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal. cf. 11-23-04
- (8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal. cf. 11-23-04
- (8.8.1) TOTAL TENDON GREASE LOSS 60 Gal. cf. 11-23-04
- (8.9) Ambient Temp. 45 °F. Thermo. ID PK 42 Recal Date 8-2-05 cf. 11-23-04
- (8.10) Cap Removal 11-1-04 Grease Replacement 11-19-04 Days Elapsed 8 cf. 11-23-04
- (9.8.3.1) Pump Gauge N/A Dimension N/A Gallons per inch cf. 11-23-04
- (9.8.4.1) Grease Height in Drum BEFORE N/A (9.8.5.1) AFTER N/A
- Calculations: N/A Total N/A
- (9.8.4.1) Temperature of grease N/A °F Thermo. ID N/A Recal Date N/A cf. 11-23-04
- (10.1.4) Quantity of grease HAND PUMPED into THIS tendon end N/A Gal.
- (10.1.4) Grease level below vent hole N/A inches cf. 11-23-04
- (10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end N/A Gal. cf. 11-23-04
- (10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end N/A Gal. cf. 11-23-04
- Thermo. No. N/A Recal Date N/A Grease Temp. N/A cf. 11-23-04
- (10.2.6) Quantity of Exiting Outflow Grease 1 Gal. cf. 11-23-04
- (10.2.7) Quantity of grease Hand Pumped into OTHER tendon end N/A Gal.
- (10.2.7) Grease level below vent hole 2" inches cf. 11-23-04
- (10.2.8) TOTAL TENDON QUANTITY REPLACED 62.75 Gal. From Bottom cf. 11-23-04
- (10.2.9) PERCENT VARIATION DIFFERENCE +2.28 % cf. 11-23-04

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1)

x 100

NET VOLUME TENDON VOID (SQ 12.2)

- (11.2) Grease Leaks: YES or NO cf. 11-23-04
- (11.3) REFILL ACCEPTABLE YES or NO cf. 11-23-04
- If TOTAL TENDON REFILL difference more than 10%:
Owner Notified N/A NCR # N/A cf. 11-23-04
- (11.4) COMMENTS: NONE

Q.C. REVIEW [Signature] LEVEL II DATE 1-26-05

A441/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. V141 TENDON END/BUTTRESS NO. FIELD/BOTTOM

Q.C
Signoff

- (8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 54.75 Gal. cf. 11-23-04
- (8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 5.25 Gal. cf. 11-23-04
- (8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal. cf. 11-23-04
- (8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal. cf. 11-23-04
- (8.8.1) TOTAL TENDON GREASE LOSS 60 Gal. cf. 11-23-04
- (8.9) Ambient Temp. 78 °F. Thermo. ID PK 42 Recal Date 8-2-05 cf. 11-23-04
- (8.10) Cap Removal 11-17-04 Grease Replacement 11-23-04 Days Elapsed 6 cf. 11-23-04
- (9.8.3.1) Pump Gauge AG-03 Dimension 1.77 Gallons per inch cf. 11-23-04
- (9.8.4.1) Grease Height in Drum BEFORE 31" (9.8.5.1) AFTER 20"
 $31" - 20" = 11" \times 1.77 =$ 19.47
 $31" - 6" = 25" \times 1.77 =$ 44.25
 Total 63.75
- (9.8.4.1) Temperature of grease N/A °F Thermo. ID N/A Recal Date N/A cf. 11-23-04
- (10.1.4) Quantity of grease HAND PUMPED into THIS tendon end N/A Gal.
- (10.1.4) Grease level below vent hole N/A inches cf. 11-23-04
- (10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end N/A Gal. cf. 11-23-04
- (10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end 63.75 Gal. cf. 11-23-04
 Thermo. No. PK 42 Recal Date 8-2-05 Grease Temp. 200 cf. 11-23-04
- (10.2.6) Quantity of Exiting Outflow Grease 1 TOP Gal. cf. 11-23-04
- (10.2.7) Quantity of grease Hand Pumped into OTHER tendon end N/A Gal.
- (10.2.7) Grease level below vent hole 2" TOP inches cf. 11-23-04
- (10.2.8) TOTAL TENDON QUANTITY REPLACED 62.75 Gal. cf. 11-23-04
- (10.2.9) PERCENT VARIATION DIFFERENCE +2.28 % cf. 11-23-04

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1) _____ x 100

NET VOLUME TENDON VOID (SQ 12.2)

- (11.2) Grease Leaks: YES or NO cf. 11-23-04
- (11.3) REFILL ACCEPTABLE: YES or NO cf. 11-23-04
- IF TOTAL TENDON REFILL difference more than 10%:
 Owner Notified N/A NCR # N/A cf. 11-23-04
- (11.4) COMMENTS: None

Q.C. REVIEW [Signature] LEVEL II DATE 1-26-05

A442/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. H13-11 TENDON END/BUTTRESS NO. SHOP / BUTT. #1

Q.C
Signoff

- (8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 7.75 Gal. cf. 11-20-04
- (8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 7.25 Gal. cf. 11-22-04
- (8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal. cf. 11-20-04
- (8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal. cf. 11-22-04
- (8.8.1) TOTAL TENDON GREASE LOSS 15.0 Gal. cf. 11-22-04
- (8.9) Ambient Temp. 74 °F. Thermo. ID PK42 Recal Date 8-2-05 cf. 11-20-04
- (8.10) Cap Removal 11-4-04 Grease Replacement 11-20-04 Days Elapsed 16 cf. 11-20-04
- (9.8.3.1) Pump Gauge N/A Dimension 1.77 Gallons per inch cf. 11-20-04
- (9.8.4.1) Grease Height in Drum BEFORE 20" (9.8.5.1) AFTER 15"
Calculations: 20" - 15" = 5" x 1.77 = Total 8.85
- (9.8.4.1) Temperature of grease ¹¹⁻²⁰⁻⁰⁴ PK42 °F Thermo. ID PK42 Recal Date 8-2-05 cf. 11-20-04
- (10.1.4) Quantity of grease HAND PUMPED into THIS tendon end 8.75 Gal.
- (10.1.4) Grease level below vent hole 2" inches cf. 11-20-04
- (10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end 8.75 Gal. cf. 11-22-04
- (10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end N/A Gal. cf. 11-20-04
Thermo. No. N/A Recal Date N/A Grease Temp. N/A cf. 11-20-04
- (10.2.6) Quantity of Exiting Outflow Grease N/A Gal. cf. 11-20-04
- (10.2.7) Quantity of grease Hand Pumped into OTHER tendon end N/A Gal.
- (10.2.7) Grease level below vent hole N/A inches cf. 11-20-04
- (10.2.8) TOTAL TENDON QUANTITY REPLACED 17.50 Gal. cf. 11-22-04
- (10.2.9) PERCENT VARIATION DIFFERENCE +2.25 % cf. 11-22-04

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1) _____ x 100

NET VOLUME TENDON VOID (SQ 12.2)

- (11.2) Grease Leaks: YES or (NO) cf. 11-22-04
- (11.3) REFILL ACCEPTABLE (YES) or NO cf. 11-22-04

IF TOTAL TENDON REFILL difference more than 10%:

Owner Notified N/A NCR # N/A cf. 11-22-04

(11.4) COMMENTS: None

Q.C. REVIEW Daniel P. O'Neil LEVEL II DATE 1-26-05

A443/

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. H 13-11 TENDON END/BUTTRESS NO. FIELD / Butt. #3

Q.C
Signoff

- (8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 7.25 Gal. cf 11-22-04
- (8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 7.75 Gal. cf 11-22-04
- (8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal. cf 11-22-04
- (8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal. cf 11-22-04
- (8.8.1) TOTAL TENDON GREASE LOSS 15.0 Gal. cf 11-22-04
- (8.9) Ambient Temp. 75 °F. Thermo. ID PK 42 Recal Date 8-2-05 cf 11-22-04
- (8.10) Cap Removal 11-12-04 Grease Replacement 11-22-04 Days Elapsed 10 cf 11-22-04
- (9.8.3.1) Pump Gauge H/A Dimension 1.77 Gallons per inch cf 11-22-04
- (9.8.4.1) Grease Height in Drum BEFORE 15" (9.8.5.1) AFTER 10"
Calculations: 15" - 10" = 5" x 1.77 = Total 8.85
- (9.8.4.1) Temperature of grease 200 °F Thermo. ID PK 42 Recal Date 8-2-05 cf 11-22-04
- (10.1.4) Quantity of grease HAND PUMPED into THIS tendon end 8.75 Gal.
- (10.1.4) Grease level below vent hole 2" inches cf 11-22-04
- (10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end 8.75 Gal. cf 11-22-04
- (10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end H/A Gal. cf 11-22-04
Thermo. No. H/A Recal Date H/A Grease Temp. H/A cf 11-22-04
- (10.2.6) Quantity of Exiting Outflow Grease H/A Gal. cf 11-22-04
- (10.2.7) Quantity of grease Hand Pumped into OTHER tendon end H/A Gal.
- (10.2.7) Grease level below vent hole H/A inches cf 11-22-04
- (10.2.8) TOTAL TENDON QUANTITY REPLACED - 17.50 Gal. cf 11-22-04
- (10.2.9) PERCENT VARIATION DIFFERENCE +2.25 % cf 11-22-04

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1) _____ x 100

NET VOLUME TENDON VOID (SQ 12.2)

- (11.2) Grease Leaks: YES or (NO) cf 11-22-04
- (11.3) REFILL ACCEPTABLE (YES) or NO cf 11-22-04

If TOTAL TENDON REFILL difference more than 10%:
Owner Notified H/A NCR # H/A cf 11-22-04

(11.4) COMMENTS: NONE

Q.C. REVIEW David P. O'Brien LEVEL I DATE 1-26-05

A444/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. H35-49 TENDON END/BUTTRESS NO. SHR/BUTT. 5

Q.C.
Signo

- (8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 6³/₄ Gal. 9/29/01
- (8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 5³/₄ Gal. 9/29/01
- (8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal. 9/29/01
- (8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal. 9/29/01
- (8.8.1) TOTAL TENDON GREASE LOSS 12¹/₂ Gal. 9/29/01
- (8.9) Ambient Temp. 74 °F. Thermo. ID PK42 Recal Date 8-2-05 9/29/01
- (8.10) Cap Removal 9-16-04 Grease Replacement 9-16-04 Days Elapsed 0 9/29/01
- (9.8.3.1) Pump Gauge N/A Dimension 1.77 Gallons per inch 9/29/01
- (9.8.4.1) Grease Height in Drum BEFORE 25¹/₂ (9.8.5.1) AFTER 21
 Calculations: 25¹/₂ - 21 = 4¹/₂ x 1.77 = Total 7.96
- (9.8.4.1) Temperature of grease 210 °F Thermo. ID PK42 Recal Date 8-2-05 9/29/01
- (10.1.4) Quantity of grease HAND PUMPED into THIS tendon end 8 Gal.
- (10.1.4) Grease level below vent hole 2 inches 9/29/01
- (10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end 8 Gal. 9/29/01
- (10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end N/A Gal. 9/29/01
- Thermo. No. N/A Recal Date N/A Grease Temp. N/A 9/29/01
- (10.2.6) Quantity of Exiting Outflow Grease N/A Gal. 9/29/01
- (10.2.7) Quantity of grease Hand Pumped into OTHER tendon end N/A Gal.
- (10.2.7) Grease level below vent hole N/A inches 9/29/01
- (10.2.8) TOTAL TENDON QUANTITY REPLACED 16 ^{BOTH ENDS TOTAL} Gal. 9/29/01
- (10.2.9) PERCENT VARIATION DIFFERENCE + 3.2 % 9/29/01

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1)

x 100

NET VOLUME TENDON VOID (SQ 12.2) 110.54

- (11.2) Grease Leaks: YES or NO 9/29/01
- (11.3) REFILL ACCEPTABLE: YES or NO 9/29/01
- IF TOTAL TENDON REFILL difference more than 10%:
 Owner Notified N/A NCR # N/A 9/29/01
- (11.4) COMMENTS: _____

Q.C. REVIEW SW J. CTW LEVEL II DATE 1-26-05

A445/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. H35-19 TENDON END/BUTTRESS NO. FIELD/BUTT 3

Q.C
 Signo

(8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 5³/₄ Gal.

~~2809-15-01~~

(8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 6³/₄ Gal.

~~2809-16-01~~

(8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal.

~~2809-15-01~~

(8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal.

~~2809-16-01~~

(8.8.1) TOTAL TENDON GREASE LOSS 12¹/₂ Gal.

~~2809-16-01~~

(8.9) Ambient Temp. 78 °F. Thermo. ID PK42 Recal Date 8-2-05

~~2809-15-01~~

(8.10) Cap Removal 9-15-04 Grease Replacement 9-15-04 Days Elapsed 0

~~2809-15-01~~

(9.8.3.1) Pump Gauge n/a Dimension 1.77 Gallons per inch

~~2809-15-01~~

(9.8.4.1) Grease Height in Drum BEFORE 36" (9.8.5.1) AFTER 25¹/₂"

Calculations: -30 - 25¹/₂ = 4¹/₂ x 1.77 = Total 7.96

(9.8.4.1) Temperature of grease 200 °F Thermo. ID PK42 Recal Date 8-2-05

~~2809-15-01~~

(10.1.4) Quantity of grease HAND PUMPED into THIS tendon end 8 Gal.

(10.1.4) Grease level below vent hole 2 inches

~~2809-15-01~~

(10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end 8 Gal.

~~2809-16-01~~

(10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end n/a Gal.

~~2809-15-01~~

Thermo. No. n/a Recal Date n/a Grease Temp. n/a

~~2809-15-01~~

(10.2.6) Quantity of Exiting Outflow Grease n/a Gal.

~~2809-15-01~~

(10.2.7) Quantity of grease Hand Pumped into OTHER tendon end n/a Gal.

(10.2.7) Grease level below vent hole n/a inches

~~2809-15-01~~

(10.2.8) TOTAL TENDON QUANTITY REPLACED 16 Gal. BOTH ENDS TOTAL

~~2809-16-01~~

(10.2.9) PERCENT VARIATION DIFFERENCE +3.2 %

~~2809-16-01~~

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1)

x 100

NET VOLUME TENDON VOID (SQ 12.2) 110.54

(11.2) Grease Leaks: YES or NO

~~2809-15-01~~

(11.3) REFILL ACCEPTABLE: YES or NO

~~2809-16-01~~

IF TOTAL TENDON REFILL difference more than 10%:

Owner Notified n/a NCR # n/a

~~2809-16-01~~

(11.4) COMMENTS: NONE

Q.C. REVIEW Sid A. Cato LEVEL II DATE 1-26-05

A446/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. 146-25 TENDON END/BUTTRESS NO. SHOP / BUTT. Co

Q.C

Signoff

- (8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 8.0 Gal. 2/11/04
- (8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 8.25 Gal. 2/11-10-04
- (8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal. 2/11-10-04
- (8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal. 2/11-10-04
- (8.8.1) TOTAL TENDON GREASE LOSS 16.25 Gal. 2/11-10-04
- (8.9) Ambient Temp. 42 °F. Thermo. ID PK42 Recal Date 8-2-05 2/11-10-04
- (8.10) Cap Removal 11-5-04 Grease Replacement 11-11-04 Days Elapsed 6 2/11-11-04
- (9.8.3.1) Pump Gauge N/A Dimension 1.77 Gallons per inch 2/11-10-04
- (9.8.4.1) Grease Height in Drum BEFORE 12" (9.8.5.1) AFTER 6"
 Calculations: 12" - 6" = 6" X 1.77 = Total 10.62
- (9.8.4.1) Temperature of grease 190 °F Thermo. ID PK42 Recal Date 8-2-05 2/11-11-04
- (10.1.4) Quantity of grease HAND PUMPED into THIS tendon end 10.50 Gal.
- (10.1.4) Grease level below vent hole 2" inches 2/11-11-04
- (10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end 8.75 Gal. 2/11-11-04
- (10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end N/A Gal. 2/11-10-04
- Thermo. No. N/A Recal Date N/A Grease Temp. N/A 2/11-10-04
- (10.2.6) Quantity of Exiting Outflow Grease N/A Gal. 2/11-10-04
- (10.2.7) Quantity of grease Hand Pumped into OTHER tendon end N/A Gal.
- (10.2.7) Grease level below vent hole N/A inches 2/11-10-04
- (10.2.8) TOTAL TENDON QUANTITY REPLACED -19.25 Gal. 2/11-11-04
- (10.2.9) PERCENT VARIATION DIFFERENCE +2.70 % 2/11-11-04

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1)
 ----- x 100

NET VOLUME TENDON VOID (SQ 12.2)

- (11.2) Grease Leaks: YES or NO 2/11-11-04
- (11.3) REFILL ACCEPTABLE YES or NO 2/11-11-04

IF TOTAL TENDON REFILL difference more than 10%:
 Owner Notified N/A NCR # N/A 2/11-11-04

(11.4) COMMENTS: None

Q.C. REVIEW Daniel P. O'Brien LEVEL II DATE 1-26-05

A447/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH
TENDON NO. H46-25 TENDON END/BUTTRESS NO. FIELD / BUTT. 4

Q.C
Signof

- (8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 8.25 Gal. ✓ 11-10-04
- (8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 8.00 Gal. ✓ 11-10-04
- (8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal. ✓ 11-10-04
- (8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal. ✓ 11-10-04
- (8.8.1) TOTAL TENDON GREASE LOSS 16.25 Gal. ✓ 11-10-04
- (8.9) Ambient Temp. 42 °F. Thermo. ID PK 42 Recal Date 8-2-05 ✓ 11-10-04
- (8.10) Cap Removal 11-8-04 Grease Replacement 11-2-04 Days Elapsed 2 ✓ 11-10-04
- (9.8.3.1) Pump Gauge N/A Dimension 1.77 Gallons per inch ✓ 11-10-04
- (9.8.4.1) Grease Height in Drum BEFORE 9.5 (9.8.5.1) AFTER 4.5
Calculations: 9.5" - 4.5" = 5" x 1.77 = Total 8.85
- (9.8.4.1) Temperature of grease 190 °F Thermo. ID PK 82 Recal Date 8-2-05 ✓ 11-10-04
- (10.1.4) Quantity of grease HAND PUMPED into THIS tendon end 8.75 Gal.
- (10.1.4) Grease level below vent hole 1.75 inches ✓ 11-10-04
- (10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end 10.50 Gal. ✓ 11-11-04
- (10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end N/A Gal. ✓ 11-10-04
Thermo. No. N/A Recal Date N/A Grease Temp. N/A ✓ 11-10-04
- (10.2.6) Quantity of Exiting Outflow Grease N/A Gal. ✓ 11-10-04
- (10.2.7) Quantity of grease Hand Pumped into OTHER tendon end N/A Gal.
- (10.2.7) Grease level below vent hole N/A inches ✓ 11-10-04
- (10.2.8) TOTAL TENDON QUANTITY REPLACED 19.25 Gal. ✓ 11-11-04
- (10.2.9) PERCENT VARIATION DIFFERENCE +2.70 % ✓ 11-11-04

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1) _____ x 100

NET VOLUME TENDON VOID (SQ 12.2)

- (11.2) Grease Leaks: YES or NO ✓ 11-11-04
- (11.3) REFILL ACCEPTABLE YES or NO ✓ 11-11-04

If TOTAL TENDON REFILL difference more than 10%:

Owner Notified N/A NCR # N/A ✓ 11-11-04

(11.4) COMMENTS: None

Q.C. REVIEW David P. O'Neil LEVEL # _____ DATE 1-26-05

A448/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. H62-18 TENDON END/BUTTRESS NO. SHOP / BUTT. 6

Q.C

Signof

- (8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 8.50 Gal. 2/11-8-04
- (8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 8.0 Gal. 2/11-8-04
- (8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal. 2/11-8-04
- (8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal. 2/11-8-04
- (8.8.1) TOTAL TENDON GREASE LOSS 16.50 Gal. 2/11-8-04
- (8.9) Ambient Temp. 45 °F. Thermo. ID PK42 Recal Date 8-2-05 2/11-8-04
- (8.10) Cap Removal 11-5-04 Grease Replacement 11-8-04 Days Elapsed 3 2/11-8-04
- (9.8.3.1) Pump Gauge M/A Dimension 1.77 Gallons per inch 2/11-8-04
- (9.8.4.1) Grease Height in Drum BEFORE 17" (9.8.5.1) AFTER 12"
- Calculations: 17" - 12" = 5" x 1.77 = Total 8.85
- (9.8.4.1) Temperature of grease 190 °F Thermo. ID PK42 Recal Date 8-2-05 2/11-8-04
- (10.1.4) Quantity of grease HAND PUMPED into THIS tendon end 8.75 Gal.
- (10.1.4) Grease level below vent hole 2" inches 2/11-8-04
- (10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end 9.0 Gal. 2/11-8-04
- (10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end M/A Gal. 2/11-8-04
- Thermo. No. M/A Recal Date M/A Grease Temp. M/A 2/11-8-04
- (10.2.6) Quantity of Exiting Outflow Grease M/A Gal. 2/11-8-04
- (10.2.7) Quantity of grease Hand Pumped into OTHER tendon end M/A Gal.
- (10.2.7) Grease level below vent hole M/A inches 2/11-8-04
- (10.2.8) TOTAL TENDON QUANTITY REPLACED 17.75 Gal. 2/11-8-04
- (10.2.9) PERCENT VARIATION DIFFERENCE +1.13 % 2/11-8-04

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1)

x 100

NET VOLUME TENDON VOID (SQ 12.2)

- (11.2) Grease Leaks: YES or NO 2/11-8-04
- (11.3) REFILL ACCEPTABLE: YES or NO 2/11-8-04
- IF TOTAL TENDON REFILL difference more than 10%:
Owner Notified M/A NCR # M/A 2/11-8-04
- (11.4) COMMENTS: NONE

Q.C. REVIEW David P. O'Brien LEVEL II DATE 1-26-05

A449/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. H62-18 TENDON END/BUTTRESS NO. FIELD / BUTT. 2

Q.C

Signoff

- (8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 8.0 Gal. cf. 11-3-04
- (8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 8.50 Gal. cf. 11-8-04
- (8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal. cf. 11-3-04
- (8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal. cf. 11-8-04
- (8.8.1) TOTAL TENDON GREASE LOSS 16.50 Gal. cf. 11-8-04
- (8.9) Ambient Temp. 75 °F. Thermo. ID PK82 Recal Date 8-2-05 cf. 11-3-04
- (8.10) Cap Removal 11-2-04 Grease Replacement 11-3-04 Days Elapsed 1 cf. 11-3-04
- (9.8.3.1) Pump Gauge H/A Dimension 1.77 Gallons per inch cf. 11-3-04
- (9.8.4.1) Grease Height in Drum BEFORE 22" (9.8.5.1) AFTER 17"
 Calculations: 22" - 17" = 5" x 1.77 = Total 8.85
- (9.8.4.1) Temperature of grease 200 °F Thermo. ID PK42 Recal Date 8-2-05 cf. 11-3-04
- (10.1.4) Quantity of grease HAND PUMPED into THIS tendon end 9.0 Gal.
- (10.1.4) Grease level below vent hole 2" inches cf. 11-3-04
- (10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end 8.75 Gal. cf. 11-8-04
- (10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end H/A Gal. cf. 11-3-04
 Thermo. No. H/A Recal Date H/A Grease Temp. H/A cf. 11-3-04
- (10.2.6) Quantity of Exiting Outflow Grease H/A Gal. cf. 11-3-04
- (10.2.7) Quantity of grease Hand Pumped into OTHER tendon end H/A Gal.
- (10.2.7) Grease level below vent hole H/A inches cf. 11-8-04
- (10.2.8) TOTAL TENDON QUANTITY REPLACED 17.75 Gal. cf. 11-8-04
- (10.2.9) PERCENT VARIATION DIFFERENCE +1.13 % cf. 11-8-04
- TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1)

x 100

NET VOLUME TENDON VOID (SQ 12.2)

- (11.2) Grease Leaks: YES or NO cf. 11-8-04
- (11.3) REFILL ACCEPTABLE: YES or NO cf. 11-8-04
- If TOTAL TENDON REFILL difference more than 10%:
 Owner Notified H/A NCR# H/A cf. 11-8-04
- (11.4) COMMENTS: None

Q.C. REVIEW David P. O'Hara LEVEL II DATE 1-26-05

A450/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. H62-26 TENDON END/BUTTRESS NO. SHOP/BUTT. 6

Q.C

(8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 6 3/4 Gal.

Signoff
Z.H. P. 27-04
8-22-04

(8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 1 3/4 Gal.

Z.H. P. 27-04

(8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal.

Z.H. P. 27-04

(8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal.

Z.H. P. 27-04

(8.8.1) TOTAL TENDON GREASE LOSS 13 1/2 Gal.

Z.H. P. 27-04

(8.9) Ambient Temp. 80°F. Thermo. ID PK42 Recal Date 8-2-05

ZB 10-1-0

(8.10) Cap Removal 9-22-04 Grease Replacement 10-1-04 Days Elapsed 9

Z.H. 11-2-04

(9.8.3.1) Pump Gauge N/A Dimension 1.77 Gallons per inch

ZB 10-1-0

(9.8.4.1) Grease Height in Drum BEFORE 14 5/8" (9.8.5.1) AFTER 19 1/2"

Calculations: 1.77 x 4.875 Total: 8.63 gal

(9.8.4.1) Temperature of grease 95°F Thermo. ID PK42 Recal Date 8-2-05

ZB 10-1-0

(10.1.4) Quantity of grease HAND PUMPED into THIS tendon end 8.63 Gal.

(10.1.4) Grease level below vent hole 1 1/2 inches

ZB 10-1-0

(10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end 8.0 Gal.

Z.H. 11-2-04

(10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end N/A Gal.

Z.H. 11-2-04

Thermo. No. N/A Recal Date N/A Grease Temp. N/A

Z.H. 11-2-04

(10.2.6) Quantity of Exiting Outflow Grease N/A Gal.

Z.H. 11-2-04

(10.2.7) Quantity of grease Hand Pumped into OTHER tendon end N/A Gal.

(10.2.7) Grease level below vent hole N/A inches

Z.H. 11-2-04

(10.2.8) TOTAL TENDON QUANTITY REPLACED 16.25 Gal.

Z.H. 11-2-04

(10.2.9) PERCENT VARIATION DIFFERENCE +2.50 %

Z.H. 11-2-04

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1)

x 100

NET VOLUME TENDON VOID (SQ 12.2)(110.57)

(11.2) Grease Leaks: YES or (NO)

Z.H. 11-2-04

(11.3) REFILL ACCEPTABLE: (YES) or NO

Z.H. 11-2-04

If TOTAL TENDON REFILL difference more than 10%:

Owner Notified N/A NCR # N/A

Z.H. 11-2-04

(11.4) COMMENTS: _____

* Approx. 2 Quart of Grease was spilt ZB 10-1-04

Q.C. REVIEW [Signature] LEVEL II DATE 1-26-05

ZB = Laura Brown

A451/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. H62-26 TENDON END/BUTTRESS NO. FIELD / BUTT #2

Q.C

Signoff

- (8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 6.75 Gal. ✓ 11-2-04
- (8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 6.75 Gal. ✓ 11-2-04
- (8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal. ✓ 11-2-04
- (8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal. ✓ 11-2-04
- (8.8.1) TOTAL TENDON GREASE LOSS 13.50 Gal. ✓ 11-2-04
- (8.9) Ambient Temp. 80 °F. Thermo. ID PK42 Recal Date 8-2-05 ✓ 11-2-04
- (8.10) Cap Removal 9-27-04 Grease Replacement 11-2-05 Days Elapsed 7 ✓ 11-2-04
- (9.8.3.1) Pump Gauge N/A Dimension 1.77 Gallons per inch ✓ 11-2-04
- (9.8.4.1) Grease Height in Drum BEFORE 26" (9.8.5.1) AFTER 21.5"
 Calculations: 26" - 21.5" = 4.50" x 1.77 Total 7.97 GAL.
- (9.8.4.1) Temperature of grease 200 °F Thermo. ID PK42 Recal Date 8-2-05 ✓ 11-2-04
- (10.1.4) Quantity of grease HAND PUMPED into THIS tendon end 8.0 Gal.
- (10.1.4) Grease level below vent hole 1.75" inches ✓ 11-2-04
- (10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end 8.25 Gal. ✓ 11-2-04
- (10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end 8.00 Gal. N/A ✓ 11-2-04
- Thermo. No. N/A Recal Date N/A Grease Temp. N/A ✓ 11-2-04
- (10.2.6) Quantity of Exiting Outflow Grease N/A Gal. ✓ 11-2-04
- (10.2.7) Quantity of grease Hand Pumped into OTHER tendon end N/A Gal.
- (10.2.7) Grease level below vent hole N/A inches ✓ 11-2-04
- (10.2.8) TOTAL TENDON QUANTITY REPLACED 16.25 Gal. ✓ 11-2-04
- (10.2.9) PERCENT VARIATION DIFFERENCE +2.50 % ✓ 11-2-04

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1)

x 100

NET VOLUME TENDON VOID (SQ 12.2)

- (11.2) Grease Leaks: YES or (NO) ✓ 11-2-04
- (11.3) REFILL ACCEPTABLE (YES) or NO ✓ 11-2-04
- IF TOTAL TENDON REFILL difference more than 10%:
 Owner Notified N/A NCR # N/A ✓ 11-2-04
- (11.4) COMMENTS: NONE

Q.C. REVIEW [Signature] LEVEL IF DATE 1-26-05

A452/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. H62-26 TENDON END/BUTTRESS NO. FIELD/BUTT²

Q.C
Signoff

(8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 6 3/4 Gal.

MM 9-27-04
NH 9-27-04
for R.P. 9-22-04

(8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 6 3/4 Gal.

(8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal.

NH 9-27-04

(8.7) Estimated grease losses from leaks for OTHER tendon end 9 Gal.

NH 9-27-04

(8.8.1) TOTAL TENDON GREASE LOSS 13 1/2 Gal.

NH 9-27-04

(8.9) Ambient Temp. 88 °F. Thermo. ID PK42 Recal Date 8-2-05

L.B 10-1-0

(8.10) Cap Removal 9-27-04 Grease Replacement 10-1-04 Days Elapsed _____

(9.8.3.1) Pump Gauge N/A Dimension 1.77 Gallons per inch

AB 10-1-0

(9.8.4.1) Grease Height in Drum BEFORE 3 24/32" (9.8.5.1) AFTER 8 1/2"

Calculations: 4.75 x 1.77 Total 8.40

(9.8.4.1) Temperature of grease 190 °F Thermo. ID PK42 Recal Date 8-2-05

LB 10-1-0

* (10.1.4) Quantity of grease HAND PUMPED into THIS tendon end 8.40 Gal.

(10.1.4) Grease level below vent hole 1.5 inches

LB 10-1-0

(10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end _____ Gal.

(10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end N/A Gal.

Thermo. No. N/A Recal Date N/A Grease Temp. N/A

(10.2.6) Quantity of Exiting Outflow Grease N/A Gal.

(10.2.7) Quantity of grease Hand Pumped into OTHER tendon end _____ Gal.

(10.2.7) Grease level below vent hole N/A inches

(10.2.8) TOTAL TENDON QUANTITY REPLACED _____ Gal.

(10.2.9) PERCENT VARIATION DIFFERENCE _____ %

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1)

x 100

NET VOLUME TENDON VOID (SQ 12.2) (110.57)

(11.2) Grease Leaks: YES or NO

(11.3) REFILL ACCEPTABLE: YES or NO

4. 11-2-04 SUPERSEDED BY
11-2-04 SUPERSEDED BY

If TOTAL TENDON REFILL difference more than 10%: SQ 12.1 DATED 11-2-04

Owner Notified _____ NCR # _____

4. 11-2-04

(11.4) COMMENTS: _____

* Grease was poured (not hand pumped) LB 10-1-04

Q.C. REVIEW _____ LEVEL _____ DATE _____

A453/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. D-213 TENDON END/BUTTRESS NO. SHOP/NW

Q.C

Signo

(8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 37³/₄ Gal. X09-21-04

(8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 17 Gal. X09-21-04

(8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal. X09-21-04

(8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal. X09-21-04

(8.8.1) TOTAL TENDON GREASE LOSS 54³/₄ Gal. X09-21-04

(8.9) Ambient Temp. 68 °F. Thermo. ID PK42 Recal Date 8-2-05 X09-21-04

(8.10) Cap Removal 9-13-04 Grease Replacement 9-21-04 Days Elapsed 8 X09-21-04

(9.8.3.1) Pump Gauge N/A Dimension 1.77 Gallons per inch X09-21-04

(9.8.4.1) Grease Height in Drum BEFORE 30 (9.8.5.1) AFTER 24

Calculations: 30 - 24 = 6 x 1.77 = Total 10.62

(9.8.4.1) Temperature of grease 200 °F Thermo. ID PK42 Recal Date 8-2-05 X09-21-04

(10.1.4) Quantity of grease HAND PUMPED into THIS tendon end 10¹/₂ Gal.

(10.1.4) Grease level below vent hole 1¹/₂ inches X09-21-04

(10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end N/A Gal. X09-21-04

(10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end N/A Gal. X09-21-04

Thermo. No. N/A Recal Date N/A Grease Temp. N/A X09-21-04

(10.2.6) Quantity of Exiting Outflow Grease N/A Gal. X09-21-04

(10.2.7) Quantity of grease ^{PRESSURE} Hand Pumped into OTHER tendon end 47³/₄ Gal. X09-21-04

(10.2.7) Grease level below vent hole 1¹/₂ inches X09-21-04

(10.2.8) TOTAL TENDON QUANTITY REPLACED 58¹/₄ Gal. X09-21-04

(10.2.9) PERCENT VARIATION DIFFERENCE 3.7 % X09-21-04

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1)

x 100

NET VOLUME TENDON VOID (SQ 12.2) (93.38)

(11.2) Grease Leaks: YES or NO X09-21-04

(11.3) REFILL ACCEPTABLE: YES or NO X09-21-04

If TOTAL TENDON REFILL difference more than 10%:

Owner Notified N/A NCR # N/A X09-21-04

(11.4) COMMENTS: NONE

Q.C. REVIEW ROD S. C. C. LEVEL II DATE 1-26-05

A454/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. D-213 TENDON END/BUTTRESS NO. FIELD/SE

Q.C.
Signo

(8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 17 Gal.

~~2009-11-04~~

(8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 37^{3/4} Gal.

~~2009-11-04~~

(8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal.

~~2009-11-04~~

(8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal.

~~2009-11-04~~

(8.8.1) TOTAL TENDON GREASE LOSS 54^{3/4} Gal.

~~2009-11-04~~

(8.9) Ambient Temp. 82 °F. Thermo. ID PK42 Recal Date 8-2-05

~~2009-11-04~~

(8.10) Cap Removal 9-11-04 Grease Replacement 9-14-04 Days Elapsed 3

~~2009-11-04~~

(9.8.3.1) Pump Gauge GG-1 Dimension 1.77 Gallons per inch

~~2009-11-04~~

(9.8.4.1) Grease Height in Drum BEFORE 30" (9.8.5.1) AFTER 3"

Calculations: 30 - 3 = 27 x 1.77 = 47.79 Total 47.79

(9.8.4.1) Temperature of grease 200 °F Thermo. ID PK42 Recal Date 8-2-05

~~2009-11-04~~

(10.1.4) Quantity of grease HAND PUMPED into THIS tendon end 14 Gal.

(10.1.4) Grease level below vent hole n/a inches

~~2009-11-04~~

(10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end n/a Gal.

~~2009-11-04~~

(10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end 47^{3/4} Gal.

~~2009-11-04~~

Thermo. No. PK42 Recal Date 8-2-05 Grease Temp. 210

~~2009-11-04~~

(10.2.6) Quantity of Exiting Outflow Grease DID NOT EXIST Gal.

~~2009-11-04~~

(10.2.7) Quantity of grease Hand Pumped into OTHER tendon end 10^{1/2} Gal.

(10.2.7) Grease level below vent hole n/a inches

~~2009-11-04~~

(10.2.8) TOTAL TENDON QUANTITY REPLACED 58^{1/4} Gal.

~~2009-11-04~~

(10.2.9) PERCENT VARIATION DIFFERENCE 3.7 %

~~2009-11-04~~

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1)

x 100

NET VOLUME TENDON VOID (SQ 12.2) (93.38)

(11.2) Grease Leaks: YES or NO

~~2009-11-04~~

(11.3) REFILL ACCEPTABLE: YES or NO

~~2009-11-04~~

IF TOTAL TENDON REFILL difference more than 10%:

Owner Notified n/a NCR # n/a

~~2009-11-04~~

(11.4) COMMENTS: NONE

~~2009-11-04~~

Q.C. REVIEW SID & Ceto LEVEL II DATE 1-26-05

A455/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. D-225 TENDON END/BUTTRESS NO. SHOP/NW

Q.C
Signof

- (8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 6 1/4 Gal. 9/29-17-04
- (8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 7 1/4 Gal. 9/29-17-04
- (8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal. 9/29-17-04
- (8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal. 9/29-17-04
- (8.8.1) TOTAL TENDON GREASE LOSS 13 1/2 Gal. 9/29-17-04
- (8.9) Ambient Temp. 76 °F. Thermo. ID PK42 Recal Date 8-2-05 9/29-17-04
- (8.10) Cap Removal 9-14-04 Grease Replacement 9-17-04 Days Elapsed 3 9/29-17-04
- (9.8.3.1) Pump Gauge N/A Dimension 1.77 Gallons per inch 9/29-17-04
- (9.8.4.1) Grease Height in Drum BEFORE 25 (9.8.5.1) AFTER 21
- Calculations: 25 - 21 = 4 x 1.77 = 7.08 Total 7.08
- (9.8.4.1) Temperature of grease 200 °F Thermo. ID PK42 Recal Date 8-2-05 9/29-17-04
- (10.1.4) Quantity of grease HAND PUMPED into THIS tendon end 7 Gal.
- (10.1.4) Grease level below vent hole 2 inches 9/29-17-04
- (10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end 8 3/4 Gal. 9/29-17-04
- (10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end N/A Gal. 9/29-17-04
- Thermo. No. N/A Recal Date N/A Grease Temp. N/A 9/29-17-04
- (10.2.6) Quantity of Exiting Outflow Grease N/A Gal. 9/29-17-04
- (10.2.7) Quantity of grease Hand Pumped into OTHER tendon end N/A Gal.
- (10.2.7) Grease level below vent hole N/A inches 9/29-17-04
- (10.2.8) TOTAL TENDON QUANTITY REPLACED 15 3/4 Gal. 9/29-17-04
- (10.2.9) PERCENT VARIATION DIFFERENCE 2.28 % 9/29-17-04
- TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1)

x 100

NET VOLUME TENDON VOID (SQ 12.2) 98.5

- (11.2) Grease Leaks: YES or NO 9/29-17-04
- (11.3) REFILL ACCEPTABLE: YES or NO 9/29-17-04
- IF TOTAL TENDON REFILL difference more than 10%:
Owner Notified N/A NCR # N/A 9/29-17-04
- (11.4) COMMENTS: N/A

Q.C. REVIEW B. D. V. Cato LEVEL TL DATE 1-26-05

A456/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. D-225 TENDON END/BUTTRESS NO. FIELD/SW

Q.C

Signoff

(8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 7 1/4 Gal.

~~8/29/15-04~~

(8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 6 1/4 Gal.

~~8/29/15-04~~

(8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal.

~~8/29/15-04~~

(8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal.

~~8/29/15-04~~

(8.8.1) TOTAL TENDON GREASE LOSS 13 1/2 Gal.

~~8/29/15-04~~

(8.9) Ambient Temp. 74 °F. Thermo. ID PK42 Recal Date 8-2-05

~~8/29/15-04~~

(8.10) Cap Removal 9-11-04 Grease Replacement 9-15-04 Days Elapsed 1

~~8/29/15-04~~

(9.8.3.1) Pump Gauge n/a Dimension 1.77 Gallons per inch

~~8/29/15-04~~

(9.8.4.1) Grease Height in Drum BEFORE 30 1/2 (9.8.5.1) AFTER 25 1/2

Calculations: 30 1/2 - 25 1/2 = 5 x 1.77 = Total 8.85

(9.8.4.1) Temperature of grease 200 °F Thermo. ID PK42 Recal Date 8-2-05

~~8/29/15-04~~

(10.1.4) Quantity of grease HAND PUMPED into THIS tendon end 8 3/4 Gal.

(10.1.4) Grease level below vent hole 2 inches

~~8/29/15-04~~

(10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end 7 Gal.

~~8/29/17-04~~

(10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end n/a Gal.

~~8/29/15-04~~

Thermo. No. n/a Recal Date n/a Grease Temp. n/a

~~8/29/15-04~~

(10.2.6) Quantity of Exiting Outflow Grease n/a Gal.

~~8/29/15-04~~

(10.2.7) Quantity of grease Hand Pumped into OTHER tendon end n/a Gal.

(10.2.7) Grease level below vent hole n/a inches

~~8/29/15-04~~

(10.2.8) TOTAL TENDON QUANTITY REPLACED 15 3/4 Gal.

~~8/29/17-04~~

(10.2.9) PERCENT VARIATION DIFFERENCE 2.28 %

~~8/29/17-04~~

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1)

x 100

NET VOLUME TENDON VOID (SQ 12.2) 98.3

(11.2) Grease Leaks: YES or NO

~~8/29/15-04~~

(11.3) REFILL ACCEPTABLE: YES or NO

~~8/29/17-04~~

IF TOTAL TENDON REFILL difference more than 10%:

Owner Notified n/a NCR # n/a

~~8/29/17-04~~

(11.4) COMMENTS: NONE

Q.C. REVIEW Bio & Cato LEVEL II DATE 1-26-05

A457/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH
TENDON NO. D-230 TENDON END/BUTTRESS NO. SHOP / NEAR BUTT.#5

Q.C

Signo:

- (8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 15.75 Gal. 2/11-16-04
- (8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 7.25 Gal. 2/11-16-04
- (8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal. 2/11-16-04
- (8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal. 2/11-16-04
- (8.8.1) TOTAL TENDON GREASE LOSS 23.0 Gal. 2/11-16-04
- (8.9) Ambient Temp. 58 °F. Thermo. ID PK42 Recal Date 8-2-05 2/11-16-04
- (8.10) Cap Removal 11-11-04 Grease Replacement 11-16-04 Days Elapsed 5 2/11-16-04
- (9.8.3.1) Pump Gauge N/A Dimension 1.77 Gallons per inch 2/11-16-04
- (9.8.4.1) Grease Height in Drum BEFORE 16" (9.8.5.1) AFTER 10"
Calculations: 16" - 10" = 6" x 1.77 = Total 10.62
- (9.8.4.1) Temperature of grease 200 °F Thermo. ID PK42 Recal Date 8-2-05 2/11-16-04
- (10.1.4) Quantity of grease HAND PUMPED into THIS tendon end 10.5 Gal.
- (10.1.4) Grease level below vent hole 2" inches 2/11-16-04
- (10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end 8.75 Gal. 2/11-16-04
- (10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end N/A Gal. 2/11-16-04
Thermo. No. N/A Recal Date N/A Grease Temp. N/A 2/11-16-04
- (10.2.6) Quantity of Exiting Outflow Grease N/A Gal. 2/11-16-04
- (10.2.7) Quantity of grease Hand Pumped into OTHER tendon end N/A Gal.
- (10.2.7) Grease level below vent hole N/A inches 2/11-16-04
- (10.2.8) TOTAL TENDON QUANTITY REPLACED 19.25 Gal. 2/11-16-04
- (10.2.9) PERCENT VARIATION DIFFERENCE -3.86 % 2/11-16-04

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1) _____ x 100

NET VOLUME TENDON VOID (SQ 12.2)

- (11.2) Grease Leaks: YES or (NO) 2/11-16-04
- (11.3) REFILL ACCEPTABLE: (YES) or NO 2/11-16-04

If TOTAL TENDON REFILL difference more than 10%:

Owner Notified N/A NCR # N/A 2/11-16-04

(11.4) COMMENTS: NONE

Q.C. REVIEW [Signature] LEVEL II DATE 1-26-04

A458/A459

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH

TENDON NO. D-230 TENDON END/BUTTRESS NO. FIELD/BUTT #3

Q.C

Signo

- (8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 7.25 Gal. 11/2/04
- (8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end 15.75 Gal. 11-16-04
- (8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal. 11-16-04
- (8.7) Estimated grease losses from leaks for OTHER tendon end 0 Gal. 11-16-04
- (8.8.1) TOTAL TENDON GREASE LOSS 23.0 Gal. 11-16-04
- (8.9) Ambient Temp. 58 °F. Thermo. ID PK42 Recal Date 8-2-05 11-16-04
- (8.10) Cap Removal 11-11-04 Grease Replacement 11-16-04 Days Elapsed 5 11-16-04
- (9.8.3.1) Pump Gauge N/A Dimension 1.77 Gallons per inch 11-16-04
- (9.8.4.1) Grease Height in Drum BEFORE 11" (9.8.5.1) AFTER 6"
Calculations: 11" - 6" = 5" x 1.77 = Total 8.85
- (9.8.4.1) Temperature of grease 200 °F Thermo. ID PK42 Recal Date 8-2-05 11-16-04
- (10.1.4) Quantity of grease HAND PUMPED into THIS tendon end 8.75 Gal.
- (10.1.4) Grease level below vent hole 2" inches 11-16-04
- (10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end 10.5 Gal. 11-16-04
- (10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end N/A Gal. 11-16-04
Thermo. No. N/A Recal Date N/A Grease Temp. N/A
- (10.2.6) Quantity of Exiting Outflow Grease N/A Gal. 11-16-04
- (10.2.7) Quantity of grease Hand Pumped into OTHER tendon end N/A Gal.
- (10.2.7) Grease level below vent hole N/A inches 11-16-04
- (10.2.8) TOTAL TENDON QUANTITY REPLACED - 19.25 Gal. 11-16-04
- (10.2.9) PERCENT VARIATION DIFFERENCE - 3.86 % 11-16-04

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1)

x 100

NET VOLUME TENDON VOID (SQ 12.2)

- (11.2) Grease Leaks: YES or (NO) 11-16-04
- (11.3) REFILL ACCEPTABLE (YES) or NO 11-16-04
- IF TOTAL TENDON REFILL difference more than 10%:
Owner Notified N/A NCR # N/A 11-16-04
- (11.4) COMMENTS: NONE

Q.C. REVIEW [Signature] LEVEL II DATE 1-26-05

A459/A459⁹

GREASE REPLACEMENT - INSPECTION DOCUMENTATION

PROJECT: THREE MILE ISLAND UNIT 1 SURVEILLANCE YEAR: 30TH
TENDON NO. D342 TENDON END/BUTTRESS NO. FIELD / NEAR BUTT. 4

Q.C
Signoff

- (8.4) TOTAL GREASE LOSS from Data Sheet 6.0 for THIS tendon end 8.25 Gal. 2/11-4-04
- (8.5) TOTAL GREASE LOSS from Data Sheet 6.0 for OTHER tendon end N/A Gal. 2/11-4-04
- (8.6) Estimated grease losses from leaks for THIS tendon end 0 Gal. 2/11-4-04
- (8.7) Estimated grease losses from leaks for OTHER tendon end N/A Gal. 2/11-4-04
- (8.8.1) TOTAL TENDON GREASE LOSS 8.25 Gal. 2/11-4-04
- (8.9) Ambient Temp. 40 °F. Thermo. ID PK42 Recal Date 8-2-05 2/11-4-04
- (8.10) Cap Removal 11-3-04 Grease Replacement 11-4-04 Days Elapsed 1 2/11-4-04
- (9.8.3.1) Pump Gauge N/A Dimension 1.77 Gallons per inch 2/11-4-04
- (9.8.4.1) Grease Height in Drum BEFORE 15" (9.8.5.1) AFTER 10"
Calculations: 15" - 10" = 5" x 1.77 = Total 8.85
- (9.8.4.1) Temperature of grease 200 °F Thermo. ID PK42 Recal Date 11-4-04 2/11-4-04
- (10.1.4) Quantity of grease HAND PUMPED into THIS tendon end 8.75 Gal.
- (10.1.4) Grease level below vent hole 2" inches 2/11-4-04
- (10.1.5) Quantity of grease HAND PUMPED into OTHER tendon end N/A Gal. 2/11-4-04
- (10.2.5) Quantity of grease PRESSURE PUMPED into THIS tendon end N/A Gal. 2/11-4-04
Thermo. No. N/A Recal Date N/A Grease Temp. N/A 2/11-4-04
- (10.2.6) Quantity of Exiting Outflow Grease N/A Gal. 2/11-4-04
- (10.2.7) Quantity of grease Hand Pumped into OTHER tendon end N/A Gal.
- (10.2.7) Grease level below vent hole N/A inches 2/11-4-04
- (10.2.8) TOTAL TENDON QUANTITY REPLACED 8.75 Gal. 2/11-4-04
- (10.2.9) PERCENT VARIATION DIFFERENCE +56 % 2/11-4-04

TOTAL TENDON QUANTITY REPLACED (10.2.8) - TOTAL TENDON GREASE LOSS (8.8.1) _____ x 100

NET VOLUME TENDON VOID (SQ 12.2)

- (11.2) Grease Leaks: YES or NO 2/11-4-04
- (11.3) REFILL ACCEPTABLE YES or NO 2/11-4-04
- IF TOTAL TENDON REFILL difference more than 10%:
Owner Notified N/A NCR # N/A 2/11-4-04
- (11.4) COMMENTS: None

Q.C. REVIEW [Signature] LEVEL II DATE 1-26-05