



Our Ref. : NT/103231/18-10

Page No: 1 of 2
 Report No: NDT/RT/180197-01/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Pisces Engineering Sdn Bhd	Procedure No:	NT/RT/ASME Rev7.0
Project :	Crown 9 Tray High X ϕ 180" DTDC With ϕ 200" Dome.	IQI type :	ASTM 1B
Job No:	PCI - 180211	Film Manufacturer/Type :	FUJI 100(class II)
Material:	SA 516 GR 70	Density :	2.0 - 3.5
Welding Process :	FCAW	Sensitivity:	0.33mm(5 wires visible)
Examination Code :	ASME V	Source to Object Distance :	400mm
Acceptance Code:	ASME Sec VIII Div 1 - 2017 Ed.	Source Side of Object to Film Distance:	(19.05+3)mm
Examination Date:	15 March 2018	No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	SWSI
		Film Viewing Technique :	Single Wall Viewing
		Source Type/Size :	Iridium192 (3.2mm)
		Location Markers :	Film Side

Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
ϕ 180" Basket Tray-3 PV-2035 (Top)								
TPLS - 3 (W-22)	22.05	3	-	19.05	0 - 1	NRI	Accept	
					1 - 2	NRI	Accept	
					2 - 3	NRI	Accept	
					3 - 4	NRI	Accept	
					4 - 5	NRI	Accept	
					5 - 6	NRI	Accept	
					6 - 7	NRI	Accept	
					7 - 8	NRI	Accept	
					8 - 9	NRI	Accept	
					9 - 10	NRI	Accept	

Continue Next Page

Legend:

TI: Tungsten Inclusion	NRI: No Relevant Indication	Uc: Undercut	Por: Porosity	WT: Weld Thickness
SI: Slag Inclusion	LP: Lack of Penetration	Con: Concavity	BT: Burn Through	RT: Reinforcement Thickness
LF: Lack of Fusion	EP: Excess Penetration	AR: Artifact	Sur: Surface	

Personnel Particulars

Radiographer : Akbar Ramin - ASNT Level II
 Interpreted & Evaluated By: M.Nazib - NDT Level II
 Date: 16 March 2018



Client Representative:
 Name:
 Date:



Our Ref. : NT/103231/18-10
Job No: PCI - 180211

Page No: 2 of 2
Report No: NDT/RT/180197-01/18

Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
Ø180" Basket Tray-3 PV-2035 (Top)								
TPLS - 3 (W-22)	22.05	3	-	19.05	10 - 11	NRI	Accept	
					11 - 12	NRI	Accept	
					12 - 13	NRI	Accept	
					13 - 14	NRI	Accept	
					14 - 15	NRI	Accept	
				15 - 16	NRI	Accept		

End of Report





Our Ref. : NT/103231/18-10

Page No: 1 of 1
 Report No: NDT/RT/180197-02/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Pisces Engineering Sdn Bhd	Procedure No:	NT/RT/ASME Rev7.0
Project :	Crown 9 Tray High X ϕ 180" DTDC With ϕ 200" Dome.	IQI type :	ASTM 1B
Job No:	PCI - 180211	Film Manufacturer/Type :	FUJI 100(class II)
Material:	SA 516 GR 70	Density :	2.0 - 3.5
Welding Process :	FCAW	Sensitivity:	0.33mm(5 wires visible)
Examination Code :	ASME V	Source to Object Distance :	400mm
Acceptance Code:	ASME Sec VIII Div 1 - 2017 Ed.	Source Side of Object to Film Distance:	(19.05+3)mm
Examination Date:	15 March 2018	No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	SWSI
		Film Viewing Technique :	Single Wall Viewing
		Source Type/Size :	Iridium192 (3.2mm)
		Location Markers :	Film Side

Radiographic Examination Result

Weld Reference (Welder No)	WT	RT	Pipe Diameter	Material Thickness	Film Position	Film Interpretation	Result	Remarks
	(mm)	(mm)	(mm)	(mm)				
ϕ 180" Basket Tray-3 PV-2035 (Bottom)								
BPLS 3-1 (W-22)	22.05	3	-	19.05	0 - 1	Por	Accept	
					1 - 2	Por	Accept	
					2 - 3	NRI	Accept	
					3 - 4	Por	Accept	
					4 - 5	NRI	Accept	
					5 - 6	Por	Accept	

End of Report

Legend:

TI: Tungsten Inclusion	NRI: No Relevant Indication	Uc: Undercut	Por: Porosity	WT: Weld Thickness
SI: Slag Inclusion	LP: Lack of Penetration	Con: Concavity	BT: Burn Through	RT: Reinforcement Thickness
LF: Lack of Fusion	EP: Excess Penetration	AR: Artifact	Sur: Surface	

Personnel Particulars

Radiographer :	Akbar Ramin - ASNT Level II	Client Representative:	
Interpreted & Evaluated By:	M.Nazib - NDT Level II	Name:	
Date:	16 March 2018	Date:	





Our Ref. : NT/103231/18-10

Page No: 1 of 1

Report No: NDT/RT/180197-03/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Pisces Engineering Sdn Bhd	Procedure No:	NT/RT/ASME Rev7.0
Project :	Crown 9 Tray High X ϕ 180" DTDC With ϕ 200" Dome.	IQI type :	ASTM 1B
Job No:	PCI - 180211	Film Manufacturer/Type :	FUJI 100(class II)
Material:	SA 516 GR 70	Density :	2.0 - 3.5
Welding Process :	FCAW	Sensitivity:	0.33mm(5 wires visible)
Examination Code :	ASME V	Source to Object Distance :	400mm
Acceptance Code:	ASME Sec VIII Div 1 - 2017 Ed.	Source Side of Object to Film Distance:	(19.05+3)mm
Examination Date:	15 March 2018	No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	SWSI
		Film Viewing Technique :	Single Wall Viewing
		Source Type/Size :	Iridium192 (3.2mm)
		Location Markers :	Film Side

Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
ϕ 180" Basket Tray-3 PV-2035 (Bottom)								
BPLS 3-2 (W-22)	22.05	3	-	19.05	0 - 1	NRI	Accept	
					1 - 2	NRI	Accept	
					2 - 3	NRI	Accept	
					3 - 4	NRI	Accept	
					4 - 5	NRI	Accept	
					5 - 6	NRI	Accept	

End of Report

Legend:

TI: Tungsten Inclusion	NRI: No Relevant Indication	Uc: Undercut	Por: Porosity	WT: Weld Thickness
SI: Slag Inclusion	LP: Lack of Penetration	Con: Concavity	BT: Burn Through	RT: Reinforcement Thickness
LF: Lack of Fusion	EP: Excess Penetration	AR: Artifact	Sur: Surface	

Personnel Particulars

Radiographer : Akbar Ramin - ASNT Level II

Interpreted & Evaluated By: M.Nazib - NDT Level II

Date: 16 March 2018



Client Representative:

Name:

Date:



Our Ref. : NT/103231/18-10

Page No: 1 of 1

Report No: NDT/RT/180197-04/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Pisces Engineering Sdn Bhd	Procedure No:	NT/RT/ASME Rev7.0
Project :	Crown 9 Tray High X ϕ 180" DTDC With ϕ 200" Dome.	IQI type :	ASTM 1B
Job No:	PCI - 180211	Film Manufacturer/Type :	FUJI 100(class II)
Material:	SA 516 GR 70	Density :	2.0 - 3.5
Welding Process :	FCAW	Sensitivity:	0.33mm(5 wires visible)
Examination Code :	ASME V	Source to Object Distance :	400mm
Acceptance Code:	ASME Sec VIII Div 1 - 2017 Ed.	Source Side of Object to Film Distance:	(19.05+3)mm
Examination Date:	15 March 2018	No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	SWSI
		Film Viewing Technique :	Single Wall Viewing
		Source Type/Size :	Iridium192 (3.2mm)
		Location Markers :	Film Side

Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
ϕ 180" Basket Tray-3 PV-2035 (Bottom)								
BPLS 3-3 (W-22)	22.05	3	-	19.05	0 - 1	NRI	Accept	
					1 - 2	NRI	Accept	
					2 - 3	NRI	Accept	
					3 - 4	NRI	Accept	
					4 - 5	NRI	Accept	
					5 - 6	Por	Accept	

End of Report

Legend:

TI: Tungsten Inclusion	NRI: No Relevant Indication	Uc: Undercut	Por: Porosity	WT: Weld Thickness
SI: Slag Inclusion	LP: Lack of Penetration	Con: Concavity	BT: Burn Through	RT: Reinforcement Thickness
LF: Lack of Fusion	EP: Excess Penetration	AR: Artifact	Sur: Surface	

Personnel Particulars

Radiographer : Akbar Ramin - ASNT Level II

Interpreted & Evaluated By: M.Nazib - NDT Level II

Date: 16 March 2018



Client Representative:

Name:

Date:



Our Ref.: NT/103231/18-10

Page No: 1 of 1

Report No: NDT/RT/180197-05/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Pisces Engineering Sdn Bhd	Procedure No:	NT/RT/ASME Rev7.0
Project :	Crown 9 Tray High X ϕ 180" DTDC With ϕ 200" Dome.	IQI type :	ASTM 1B
Job No:	PCI - 180211	Film Manufacturer/Type :	FUJI 100(class II)
Material:	SA 516 GR 70	Density :	2.0 - 3.5
Welding Process :	FCAW	Sensitivity:	0.33mm(5 wires visible)
Examination Code :	ASME V	Source to Object Distance :	400mm
Acceptance Code:	ASME Sec VIII Div 1 - 2017 Ed.	Source Side of Object to Film Distance:	(19.05+3)mm
Examination Date:	15 March 2018	No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	SWSI
		Film Viewing Technique :	Single Wall Viewing
		Source Type/Size :	Iridium192 (3.2mm)
		Location Markers :	Film Side

Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
ϕ 180" Basket Tray-3 PV-2035 (Bottom)								
BPLS 3-4 (W-22)	22.05	3	-	19.05	0 - 1	NRI	Accept	
					1 - 2	NRI	Accept	
					2 - 3	NRI	Accept	
					3 - 4	NRI	Accept	
					4 - 5	NRI	Accept	
					5 - 6	NRI	Accept	

End of Report

Legend:

TI: Tungsten Inclusion	NRI: No Relevant Indication	Uc: Undercut	Por: Porosity	WT: Weld Thickness
SI: Slag Inclusion	LP: Lack of Penetration	Con: Concavity	BT: Burn Through	RT: Reinforcement Thickness
LF: Lack of Fusion	EP: Excess Penetration	AR: Artifact	Sur: Surface	

Personnel Particulars

Radiographer: Akbar Ramin - ASNT Level II

Interpreted & Evaluated By: M.Nazib - NDT Level II

Date: 16 March 2018



Client Representative:

Name:

Date:



Our Ref. : NT/103231/18-10

Page No: 1 of 1
 Report No: NDT/RT/180197-06/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Pisces Engineering Sdn Bhd	Procedure No:	NT/RT/ASME Rev7.0
Project :	Crown 9 Tray High X ϕ 180" DTDC With ϕ 200" Dome.	IQI type :	ASTM 1B
Job No:	PCI - 180211	Film Manufacturer/Type :	FUJI 100(class II)
Material:	SA 516 GR 70	Density :	2.0 - 3.5
Welding Process :	FCAW	Sensitivity:	0.33mm(5 wires visible)
Examination Code :	ASME V	Source to Object Distance :	400mm
Acceptance Code:	ASME Sec VIII Div 1 - 2017 Ed.	Source Side of Object to Film Distance:	(19.05+3)mm
Examination Date:	15 March 2018	No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	SWSI
		Film Viewing Technique :	Single Wall Viewing
		Source Type/Size :	Iridium192 (3.2mm)
		Location Markers :	Film Side

Radiographic Examination Result

Weld Reference (Welder No)	WT	RT	Pipe Diameter	Material Thickness	Film Position	Film Interpretation	Result	Remarks
	(mm)	(mm)	(mm)	(mm)				
ϕ 180" Basket Tray-2 PV-2034 (Bottom)								
BPLS 2-1 (W-22)	22.05	3	-	19.05	0 - 1	NRI	Accept	
					1 - 2	Por	Accept	
					2 - 3	NRI	Accept	
					3 - 4	Por	Accept	
					4 - 5	NRI	Accept	
					5 - 6	Por	Accept	

_____ End of Report _____

Legend:

TI : Tungsten Inclusion	NRI : No Relevant Indication	Uc : Undercut	Por : Porosity	WT : Weld Thickness
SI : Slag Inclusion	LP : Lack of Penetration	Con : Concavity	BT : Burn Through	RT : Reinforcement Thickness
LF : Lack of Fusion	EP : Excess Penetration	AR : Artifact	Sur : Surface	

Personnel Particulars

Radiographer : Akbar Ramin - ASNT Level II

Interpreted & Evaluated By: M.Nazib - NDT Level II

Date: 16 March 2018



Client Representative:

Name:

Date:



Our Ref. : NT/103231/18-10

Page No: 1 of 1
 Report No: NDT/RT/180197-07/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Pisces Engineering Sdn Bhd	Procedure No:	NT/RT/ASME Rev7.0
Project :	Crown 9 Tray High X ϕ 180" DTDC With ϕ 200" Dome.	IQI type :	ASTM 1B
Job No:	PCI - 180211	Film Manufacturer/Type :	FUJI 100(class II)
Material:	SA 516 GR 70	Density :	2.0 - 3.5
Welding Process :	FCAW	Sensitivity:	0.33mm(5 wires visible)
Examination Code :	ASME V	Source to Object Distance :	400mm
Acceptance Code:	ASME Sec VIII Div 1 - 2017 Ed.	Source Side of Object to Film Distance:	(19.05+3)mm
Examination Date:	15 March 2018	No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	SWSI
		Film Viewing Technique :	Single Wall Viewing
		Source Type/Size :	Iridium192 (3.2mm)
		Location Markers :	Film Side

Radiographic Examination Result

Weld Reference (Welder No)	WT	RT	Pipe Diameter	Material Thickness	Film Position	Film Interpretation	Result	Remarks
	(mm)	(mm)	(mm)	(mm)				
ϕ 180" Basket Tray-2 PV-2034 (Bottom)								
BPLS 2-2 (W-22)	22.05	3	-	19.05	0 - 1	Por	Accept	
					1 - 2	NRI	Accept	
					2 - 3	NRI	Accept	
					3 - 4	Por	Accept	
					4 - 5	Por	Accept	
					5 - 6	Por	Accept	

_____ End of Report _____

Legend:

TI: Tungsten Inclusion	NRI: No Relevant Indication	Uc: Undercut	Por: Porosity	WT: Weld Thickness
SI: Slag Inclusion	LP: Lack of Penetration	Con: Concavity	BT: Burn Through	RT: Reinforcement Thickness
LF: Lack of Fusion	EP: Excess Penetration	AR: Artifact	Sur: Surface	

Personnel Particulars

Radiographer : Akbar Ramin - ASNT Level II

Interpreted & Evaluated By: M.Nazib - NDT Level II

Date: 16 March 2018



Client Representative:

Name:

Date:



Our Ref. : NT/103231/18-10

Page No: 1 of 1
 Report No: NDT/RT/180197-08/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Pisces Engineering Sdn Bhd	Procedure No:	NT/RT/ASME Rev7.0
Project :	Crown 9 Tray High X ϕ 180" DTDC With ϕ 200" Dome.	IQI type :	ASTM 1B
Job No:	PCI - 180211	Film Manufacturer/Type :	FUJI 100(class II)
Material:	SA 516 GR 70	Density :	2.0 - 3.5
Welding Process :	FCAW	Sensitivity:	0.33mm(5 wires visible)
Examination Code :	ASME V	Source to Object Distance :	400mm
Acceptance Code:	ASME Sec VIII Div 1 - 2017 Ed.	Source Side of Object to Film Distance:	(19.05+3)mm
Examination Date:	15 March 2018	No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	SWSI
		Film Viewing Technique :	Single Wall Viewing
		Source Type/Size :	Iridium192 (3.2mm)
		Location Markers :	Film Side

Radiographic Examination Result

Weld Reference (Welder No)	WT	RT	Pipe Diameter	Material Thickness	Film Position	Film Interpretation	Result	Remarks
	(mm)	(mm)	(mm)	(mm)				
ϕ 180" Basket Tray-2 PV-2034 (Bottom)								
BPLS 2-3 (W-22)	22.05	3	-	19.05	0 - 1	Por	Accept	
					1 - 2	NRI	Accept	
					2 - 3	NRI	Accept	
					3 - 4	NRI	Accept	
					4 - 5	NRI	Accept	
					5 - 6	NRI	Accept	

End of Report

Legend:

TI: Tungsten Inclusion	NRI: No Relevant Indication	Uc: Undercut	Por: Porosity	WT: Weld Thickness
SI: Slag Inclusion	LP: Lack of Penetration	Con: Concavity	BT: Burn Through	RT: Reinforcement Thickness
LF: Lack of Fusion	EP: Excess Penetration	AR: Artifact	Sur: Surface	

Personnel Particulars

Radiographer : Akbar Ramin - ASNT Level II

Interpreted & Evaluated By: M.Nazib - NDT Level II

Date: 16 March 2018



Client Representative:

Name:

Date:



Our Ref. : NT/103231/18-10

Page No: 1 of 1
 Report No: NDT/RT/180197-09/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Pisces Engineering Sdn Bhd	Procedure No:	NT/RT/ASME Rev7.0
Project :	Crown 9 Tray High X ϕ 180" DTDC With ϕ 200" Dome.	IQI type :	ASTM 1B
Job No:	PCI - 180211	Film Manufacturer/Type :	FUJI 100(class II)
Material:	SA 516 GR 70	Density :	2.0 - 3.5
Welding Process :	FCAW	Sensitivity:	0.33mm(5 wires visible)
Examination Code :	ASME V	Source to Object Distance :	400mm
Acceptance Code:	ASME Sec VIII Div 1 - 2017 Ed.	Source Side of Object to Film Distance:	(19.05+3)mm
Examination Date:	15 March 2018	No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	SWSI
		Film Viewing Technique :	Single Wall Viewing
		Source Type/Size :	Iridium192 (3.2mm)
		Location Markers :	Film Side

Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
ϕ 180" Basket Tray-2 PV-2034 (Bottom)	BPLS 2-4 (W-22)	3	-	19.05	0 - 1	NRI	Accept	
					1 - 2	NRI	Accept	
					2 - 3	NRI	Accept	
					3 - 4	NRI	Accept	
					4 - 5	NRI	Accept	
					5 - 6	NRI	Accept	

End of Report

Legend:

TI: Tungsten Inclusion	NRI: No Relevant Indication	Uc: Undercut	Por: Porosity	WT: Weld Thickness
SI: Slag Inclusion	LP: Lack of Penetration	Con: Concavity	BT: Burn Through	RT: Reinforcement Thickness
LF: Lack of Fusion	EP: Excess Penetration	AR: Artifact	Sur: Surface	

Personnel Particulars

Radiographer : Akbar Ramin - ASNT Level II

Client Representative:

Interpreted & Evaluated By: M.Nazib - NDT Level II

Date: 16 March 2018

Name:

Date:





Our Ref. : NT/103231/18-10

Page No: 1 of 1
 Report No: NDT/RT/180197-10/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Pisces Engineering Sdn Bhd	Procedure No:	NT/RT/ASME Rev7.0
Project :	Crown 9 Tray High X ϕ 180" DTDC With ϕ 200" Dome.	IQI type :	ASTM 1B
Job No:	PCI - 180211	Film Manufacturer/Type :	FUJI 100(class II)
Material:	SA 516 GR 70	Density :	2.0 - 3.5
Welding Process :	FCAW	Sensitivity:	0.33mm(5 wires visible)
Examination Code :	ASME V	Source to Object Distance :	400mm
Acceptance Code:	ASME Sec VIII Div 1 - 2017 Ed.	Source Side of Object to Film Distance:	(19.05+3)mm
Examination Date:	15 March 2018	No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	SWSI
		Film Viewing Technique :	Single Wall Viewing
		Source Type/Size :	Iridium192 (3.2mm)
		Location Markers :	Film Side

Radiographic Examination Result

Weld Reference (Welder No)	WT	RT	Pipe Diameter	Material Thickness	Film Position	Film Interpretation	Result	Remarks
	(mm)	(mm)	(mm)	(mm)				
ϕ 180" Basket Tray-1 PV-2033 (Bottom)								
BPLS 1-2 RS (W-22)	22.05	3	—	19.05	2 - 3	Cracks	Reject	

_____ End of Report _____

Legend:

TI: Tungsten Inclusion	NRI: No Relevant Indication	Uc: Undercut	Por: Porosity	WT: Weld Thickness
SI: Slag Inclusion	LP: Lack of Penetration	Con: Concavity	BT: Burn Through	RT: Reinforcement Thickness
LF: Lack of Fusion	EP: Excess Penetration	AR: Artifact	Sur: Surface	

Personnel Particulars

Radiographer : Akbar Ramin - ASNT Level II

Interpreted & Evaluated By: M.Nazib - NDT Level II

Date: 16 March 2018



Client Representative:

Name:

Date: