



NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)

No. 5, Jalan Anggerik Mokara 31/45, Seksyen 31, Kota Kemuning, 40460 Shah Alam, Selangor Darul Ehsan, Malaysia.

Tel: 03-5122 9766/7/8 Fax: 03-5122 8766/7 E-mail: info@nusatek.com

Our Ref.: NT/103327/18-20

Page No: 1 of 1

Report No: TNDT/RT/180272-01/18

RAKIKSARAKNIK EXAMINATION REPORT

Client and Testing Particulars

Client :	Recron (M) Sdn Bhd	Procedure No:	NT/RT/ASME Rev. 7.0
Project :	HTM Piping	IQI type :	ASTM 1B
Material:	Carbon Steel	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	GTAW	Density :	2.0 - 3.5
Examination Code :	ASME V	Sensitivity:	0.33mm(5 wires visible)
Acceptance Code:	ASME B31.3	Source to Object Distance :	114.3mm
Examination Date:	29 March 2018	Source Side of Object to Film Distance:	(7+3)mm
		No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	DWSI
		Film Viewing Technique :	Single 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
Suply								
JT-68	10	3	114.3	7	0 - 1 1 - 2 2 - 0	NRI Con Uc	Accept Accept Accept	
JT-67	10	3	114.3	7	0 - 1 1 - 2 2 - 0	Por Por EP	Accept Accept 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 : Emirsham - NDT Lev. II

Interpreted & Evaluated By: Amat Hamidi - NDT Lev. II

Date: 30 March 2018



Client Representative:

Name:

Date:



Our Ref.: NT/103327/18-20

Page No: 1 of 1
 Report No: I NDT/RT/183272-02/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Recron (M) Sdn Bhd	Procedure No:	NT/RT/ASME Rev. 7.0
Project :	HTM Piping	IQI type :	ASTM 1B
Material:	Carbon Steel	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	GTAW	Density :	2.0 - 3.5
Examination Code :	ASME V	Sensitivity:	0.33mm(5 wires visible)
Acceptance Code:	ASME B31.3	Source to Object Distance :	114.3mm
Examination Date:	29 March 2018	Source Side of Object to Film Distance:	(7+3)mm
		No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	DWSI
		Film Viewing Technique :	Single 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)				
Suply								
JT-54	10	3	114.3	7	0 - 1	Uc	Accept	
					1 - 2	Por	Accept	
					2 - 0	Uc	Accept	
JT-63	10	3	114.3	7	0 - 1	Por	Accept	
					1 - 2	Sur	Accept	
					2 - 0	Sur	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
IF Lack of Fusion	EP Excess Penetration	AR Artifact	Sur Surface	

Personnel Particulars

Radiographer : Emirsham - NDT Lev. II
 Interpreted & Evaluated By: Amat Hamidi - NDT Lev.II
 Date: 30 March 2018



Client Representative:
 Name:
 Date:



NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)

No. 5, Jalan Anggerik Mokara 31/45, Seksyen 31, Kota Kemuning, 40460 Shah Alam, Selangor Darul Ehsan, Malaysia.

Tel: 03-5122 9766/7/8 Fax: 03-5122 8766/7 E-mail: info@nusatek.com

Our Ref.: NT/103327/18-20

Page No: 1 of 1

Report No: I NDT/RT/180272-03/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Recron (M) Sdn Bhd	Procedure No:	NT/RT/ASME Rev. 7.0
Project :	HTM Piping	IQI type :	ASTM 1B
Material:	Carbon Steel	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	GTAW	Density :	2.0 - 3.5
Examination Code :	ASME V	Sensitivity:	0.33mm(5 wires visible)
Acceptance Code:	ASME B31.3	Source to Object Distance :	114.3mm
Examination Date:	29 March 2018	Source Side of Object to Film Distance:	(7+3)mm
		No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	DWSI
		Film Viewing Technique :	Single 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
Suply								
JT-69	10	3	114.3	7	0 - 1	EP	Accept	
					1 - 2	LF	Reject	
					2 - 0	Por	Accept	

End of Report

Legend:

TI: Tungsten Inclusion	NRI: No Relevant Indication	Uo: 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 : Emirsham - NDT Lev. II

Client Representative:

Interpreted & Evaluated By: Amat Hamidi - NDT Lev. II

Date: 30 March 2018

Name:

Date:





Our Ref.: NT/103327/18-20

Page No: 1 of 1

Report No: I NDT/RT/180272-04/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Recron (M) Sdn Bhd	Procedure No:	NT/RT/ASME Rev. 7.0
Project :	HTM Piping	IQI type :	ASTM 1B
Material:	Carbon Steel	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	GTAW	Density :	2.0 - 3.5
Examination Code :	ASME V	Sensitivity:	0.33mm(5 wires visible)
Acceptance Code:	ASME B31.3	Source to Object Distance :	114.3mm
Examination Date:	29 March 2018	Source Side of Object to Film Distance:	(7+3)mm
		No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	DWSI
		Film Viewing Technique :	Single 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
Suply								
JT-61	10	3	114.3	7	0 - 1	Uc	Accept	
					1 - 2	Uc / Por	Reject	
					2 - 0	EP / Uc	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 : Emirsham - NDT Lev. II
 Interpreted & Evaluated By: Amat Hamidi - NDT Lev.II
 Date: 30 March 2018



Client Representative:
 Name:
 Date:



NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)

No. 5, Jalan Anggerik Mokara 31/45, Seksyen 31, Kota Kemuning, 40460 Shah Alam, Selangor Darul Ehsan, Malaysia.

Tel: 03-5122 9766/7/8 Fax: 03-5122 8766/7 E-mail: info@nusatek.com

Our Ref.: NT/103327/18-20

Page No: 1 of 1

Report No: TNDT/RT/180272-05/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Recron (M) Sdn Bhd	Procedure No:	NT/RT/ASME Rev. 7.0
Project :	HTM Piping	IQI type :	ASTM 1B
Material:	Carbon Steel	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	GTAW	Density :	2.0 - 3.5
Examination Code :	ASME V	Sensitivity:	0.33mm(5 wires visible)
Acceptance Code:	ASME B31.3	Source to Object Distance :	114.3mm
Examination Date:	29 March 2018	Source Side of Object to Film Distance:	(7+3)mm
		No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	DWSI
		Film Viewing Technique :	Single 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
Suply								
JT-62	10	3	114.3	7	0 - 1	Inc	Reject	
					1 - 2	Con	Reject	
					2 - 0	Uc	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 : Emirsham - NDT Lev. II

Client Representative:

Interpreted & Evaluated By: Amat Hamidi - NDT Lev.II

Name:

Date: 30 March 2018

Date:



Our Ref. : NT/103327/18-20

Page No: 1 of 1

Report No: NDT/RT/180272-06/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Recron (M) Sdn Bhd	Procedure No:	NT/RT/ASME Rev. 7.0
Project :	HTM Piping	IQI type :	ASTM 1B
Material:	Carbon Steel	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	GTAW	Density :	2.0 - 3.5
Examination Code :	ASME V	Sensitivity:	0.33mm(5 wires visible)
Acceptance Code:	ASME B31.3	Source to Object Distance :	114.3mm
Examination Date:	29 March 2018	Source Side of Object to Film Distance:	(7+3)mm
		No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	DWSI
		Film Viewing Technique :	Single 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
Suply								
JT-77	10	3	114.3	7	0 - 1	LF	Reject	
			Ø6"		1 - 2	Por / Uc	Accept	
					2 - 0	Inc	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 : Emirsham - NDT Lev. II
 Interpreted & Evaluated By: Amat Hamidi - NDT Lev.II
 Date: 30 March 2018



Client Representative:
 Name:
 Date:



Our Ref.: NT/103327/18-20

Page No: 1 of 1
 Report No: I NDT/RT/189272-07/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Recron (M) Sdn Bhd	Procedure No:	NT/RT/ASME Rev. 7.0
Project :	HTM Piping	IQI type :	ASTM 1B
Material:	Carbon Steel	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	GTAW	Density :	2.0 - 3.5
Examination Code :	ASME V	Sensitivity:	0.33mm(5 wires visible)
Acceptance Code:	ASME B31.3	Source to Object Distance :	114.3mm
Examination Date:	29 March 2018	Source Side of Object to Film Distance:	(7+3)mm
		No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	DWSI
		Film Viewing Technique :	Single 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
Suply								
JT-78	10	3	114.3 86"	7	0 - 1	Inc	Reject	
					1 - 2	Inc	Reject	
					2 - 0	LF	Reject	

End of Report

Legend:

TI : Tungsten Inclusion	NRI : No Relevant Indication	Uo : 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 : Emirsham - NDT Lev. II
 Interpreted & Evaluated By: Amat Hamidi - NDT Lev. II
 Date: 30 March 2018



Client Representative:
 Name:
 Date:



Our Ref.: NT/103327/18-20

Page No: 1 of 1

Report No: I NDT/RT/180272-08/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Recron (M) Sdn Bhd	Procedure No:	NT/RT/ASME Rev. 7.0
Project :	HTM Piping	IQI type :	ASTM 1B
Material:	Carbon Steel	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	GTAW	Density :	2.0 - 3.5
Examination Code :	ASME V	Sensitivity:	0.33mm(5 wires visible)
Acceptance Code:	ASME B31.3	Source to Object Distance :	114.3mm
Examination Date:	29 March 2018	Source Side of Object to Film Distance:	(7+3)mm
		No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	DWSI
		Film Viewing Technique :	Single 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
Return								
JT-55	10	3	114.3	7	0 - 1	NRI	Accept	
					1 - 2	Por	Accept	
					2 - 0	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 : Emirsham - NDT Lev. II
 Interpreted & Evaluated By: Amat Hamidi - NDT Lev. II
 Date: 30 March 2018



Client Representative:
 Name:
 Date:



NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)

No. 5, Jalan Anggerik Mokara 31/45, Seksyen 31, Kota Kemuning, 40460 Shah Alam, Selangor Darul Ehsan, Malaysia.

Tel: 03-5122 9766/7/8 Fax: 03-5122 8766/7 E-mail: info@nusatek.com

Our Ref.: NT/103327/18-20

Page No: 1 of 1

Report No: I NDT/RT/180272-09/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Recron (M) Sdn Bhd	Procedure No:	NT/RT/ASME Rev. 7.0
Project :	HTM Piping	IQI type :	ASTM 1B
Material:	Carbon Steel	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	GTAW	Density :	2.0 - 3.5
Examination Code :	ASME V	Sensitivity:	0.33mm(5 wires visible)
Acceptance Code:	ASME B31.3	Source to Object Distance :	114.3mm
Examination Date:	29 March 2018	Source Side of Object to Film Distance:	(7+3)mm
		No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	DWSI
		Film Viewing Technique :	Single 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
Return								
JT-66	10	3	114.3	7	0 - 1	NRI	Accept	
					1 - 2	Debris		Remove
					2 - 0	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 : Emirsham - NDT Lev. II

Interpreted & Evaluated By: Amat Hamidi - NDT Lev.II

Date: 30 March 2018

Client Representative:

Name:

Date:



NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)

No. 5, Jalan Anggerik Mokara 31/45, Seksyen 31, Kota Kemuning, 40460 Shah Alam, Selangor Darul Ehsan, Malaysia.

Tel: 03-5122 9766/7/8 Fax: 03-5122 8766/7 E-mail: info@nusatek.com

Our Ref.: NT/103327/18-20

Page No: 1 of 1

Report No: TNDT/RT/180272-10/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Recron (M) Sdn Bhd	Procedure No:	NT/RT/ASME Rev. 7.0
Project :	HTM Piping	IQI type :	ASTM 1B
Material:	Carbon Steel	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	GTAW	Density :	2.0 - 3.5
Examination Code :	ASME V	Sensitivity:	0.33mm(5 wires visible)
Acceptance Code:	ASME B31.3	Source to Object Distance :	114.3mm
Examination Date:	29 March 2018	Source Side of Object to Film Distance:	(7+3)mm
		No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	DWSI
		Film Viewing Technique :	Single 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
Return								
JT-76	10	3	114.3	7	0 - 1	Por	Reject	
					1 - 2	Por / Con	Accept	
					2 - 0	Inc	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 : Emirsham - NDT Lev. II

Interpreted & Evaluated By: Amat Hamidi - NDT Lev.II

Date: 30 March 2018



Client Representative:

Name:

Date:



Our Ref.: NT/103327/18-20

Page No: 1 of 1

Report No: I NDT/RT/180272-11/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client : Recron (M) Sdn Bhd Project : HTM Piping Material: Carbon Steel Welding Process : GTAW Examination Code : ASME V Acceptance Code: ASME B31.3 Examination Date: 29 March 2018	Procedure No: NT/RT/ASME Rev. 7.0 IQI type : ASTM 1B Film Manufacturer/Type : FUJI 100(class II) Density : 2.0 - 3.5 Sensitivity: 0.33mm(5 wires visible) Source to Object Distance : 114.3mm Source Side of Object to Film Distance: (7+3)mm No of Radiograph(exposure) : Single Exposure No. of Film Each Cassette : 1 Film Radiographic Technique : DWSI Film Viewing Technique : Single 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
Return								
JT-75	10	3	114.3	7	0 - 1 1 - 2 2 - 0	Con LF Per	Accept Reject 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 : Emirsham - NDT Lev. II
 Interpreted & Evaluated By: Amat Hamidi - NDT Lev. II
 Date: 30 March 2018



Client Representative:
 Name:
 Date:



Our Ref.: NT/103327/18-20

Page No: 1 of 1
 Report No: NDT/RT/180272-12/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client : Recron (M) Sdn Bhd Project : HTM Piping Material: Carbon Steel Welding Process : GTAW Examination Code : ASME V Acceptance Code: ASME B31.3 Examination Date: 29 March 2018	Procedure No: NT/RT/ASME Rev. 7.0 IQI type : ASTM 1B Film Manufacturer/Type : FUJI 100(class II) Density : 2.0 - 3.5 Sensitivity: 0.33mm(5 wires visible) Source to Object Distance : 114.3mm Source Side of Object to Film Distance: (7+3)mm No of Radiograph(exposure) : Single Exposure No. of Film Each Cassette : 1 Film Radiographic Technique : DWSI Film Viewing Technique : Single 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
Return								
JT-59	10	3	114.3	7	0 - 1	Inc		Reject
					1 - 2	Inc		Reject
					2 - 0	Uc		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 : Emirsham - NDT Lev. II
 Interpreted & Evaluated By: Amat Hamidi - NDT Lev. II
 Date: 30 March 2018



Client Representative:

Name:
Date:



Our Ref. : NT/103327/18-20

Page No: 1 of 1

Report No: NDT/RT/180272-13/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Recron (M) Sdn Bhd	Procedure No:	NT/RT/ASME Rev. 7.0
Project :	HTM Piping	IQI type :	ASTM 1B
Material:	Carbon Steel	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	GTAW	Density :	2.0 - 3.5
Examination Code :	ASME V	Sensitivity:	0.33mm(5 wires visible)
Acceptance Code:	ASME B31.3	Source to Object Distance :	114.3mm
Examination Date:	29 March 2018	Source Side of Object to Film Distance:	(7+3)mm
		No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	DWSI
		Film Viewing Technique :	Single 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
Return								
JT-58	10	3	114.3	7	0 - 1	Inc	Reject	
					1 - 2	Inc	Reject	
					2 - 0	Inc	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 : Emirsham - NDT Lev. II

Client Representative:

Interpreted & Evaluated By: Amat Hamidi - NDT Lev. II

Date: 30 March 2018



Name:

Date:



Our Ref. : NT/103327/18-20

Page No: 1 of 1

Report No: I NDT/RT/180272-14/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Recron (M) Sdn Bhd	Procedure No:	NT/RT/ASME Rev. 7.0
Project :	HTM Piping	IQI type :	ASTM 1B
Material:	Carbon Steel	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	GTAW	Density :	2.0 - 3.5
Examination Code :	ASME V	Sensitivity:	0.33mm(5 wires visible)
Acceptance Code:	ASME B31.3	Source to Object Distance :	141.3mm
Examination Date:	29 March 2018	Source Side of Object to Film Distance:	(7+3)mm
		No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	DWSI
		Film Viewing Technique :	Single 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
JT-23	10	3	141.3	7	0 - 1	Uc	Accept	
					1 - 2	Con	Accept	
					2 - 0	Uc	Accept	
JT-70	10	3	141.3	7	0 - 1	NRI	Accept	
					1 - 2	Por	Accept	
					2 - 0	Uc	Accept	
JT-45	10	3	141.3	7	0 - 1	NRI	Accept	
					1 - 2	NRI	Accept	
					2 - 0	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 : Emirsham - NDT Lev. II

Interpreted & Evaluated By: Amat Hamidi - NDT Lev.II

Date: 30 March 2018



Client Representative:

Name:

Date:



Our Ref. : NT/103327/18-20

Page No: 1 of 1

Report No: I NDT/RT/180272-15/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Recron (M) Sdn Bhd	Procedure No:	NT/RT/ASME Rev. 7.0
Project :	HTM Piping	IQI type :	ASTM 1B
Material:	Carbon Steel	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	GTAW	Density :	2.0 - 3.5
Examination Code :	ASME V	Sensitivity:	0.33mm(5 wires visible)
Acceptance Code:	ASME B31.3	Source to Object Distance :	141.3mm
Examination Date:	29 March 2018	Source Side of Object to Film Distance:	(7+3)mm
		No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	DWSI
		Film Viewing Technique :	Single 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
JT-44	10	3	141.3	7	0 - 1	Sur	Accept	
					1 - 2	Por	Accept	
					2 - 0	NRI	Accept	
JT-43	10	3	141.3	7	0 - 1	NRI	Accept	
					1 - 2	Por / Uc	Accept	
					2 - 0	NRI	Accept	
JT-51	10	3	141.3	7	0 - 1	Por	Accept	
					1 - 2	Uc	Accept	
					2 - 0	Uc	Accept	

End of Report

Legend:

TI : Tungsten Inklusion	NRI : No Relevant Indication	Uc : Undercut	Por : Porosity	WT : Weld Thickness
SI : Slag Inklusion	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 : Emirsham - NDT Lev. II

Interpreted & Evaluated By: Amat Hamidi - NDT Lev.II

Date: 30 March 2018



Client Representative:

Name:

Date:



Our Ref.: NT/103327/18-20

Page No: 1 of 1
 Report No: I NDT/RT/180272-16/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Recron (M) Sdn Bhd	Procedure No:	NT/RT/ASME Rev. 7.0
Project :	HTM Piping	IQI type :	ASTM 1B
Material:	Carbon Steel	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	GTAW	Density :	2.0 - 3.5
Examination Code :	ASME V	Sensitivity:	0.33mm(5 wires visible)
Acceptance Code:	ASME B31.3	Source to Object Distance :	114.3mm
Examination Date:	29 March 2018	Source Side of Object to Film Distance:	(7+3)mm
		No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	DWSI
		Film Viewing Technique :	Single 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
JT-21	10	3	114.3 141.3	7	0 - 1	Uc	Accept	
					1 - 2	Con	Accept	
					2 - 0	Por	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 : Emirsham - NDT Lev. II
 Interpreted & Evaluated By: Amat Hamidi - NDT Lev. II
 Date: 30 March 2018



Client Representative:
 Name:
 Date:



Our Ref.: NT/103327/18-20

Page No: 1 of 1

Report No: I NDT/RT/180272-17/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Recron (M) Sdn Bhd	Procedure No:	NT/RT/ASME Rev. 7.0
Project :	HTM Piping	IQI type :	ASTM 1B
Material:	Carbon Steel	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	GTAW	Density :	2.0 - 3.5
Examination Code :	ASME V	Sensitivity:	0.33mm(5 wires visible)
Acceptance Code:	ASME B31.3	Source to Object Distance :	141.3mm
Examination Date:	29 March 2018	Source Side of Object to Film Distance:	(7+3)mm
		No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	DWSI
		Film Viewing Technique :	Single 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
JT-50	10	3	141.3	7	0 - 1	Inc	Reject	
					1 - 2	Inc	Reject	
					2 - 0	Por	Reject	
JT-64	10	3	141.3	7	0 - 1	LF	Reject	
					1 - 2	LF	Reject	
					2 - 0	LF	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 : Emirsham - NDT Lev. II

Interpreted & Evaluated By: Amat Hamidi - NDT Lev.II

Date: 30 March 2018



Client Representative:

Name:

Date:



NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)

No. 5, Jalan Anggerik Mokara 31/45, Seksyen 31, Kota Kemuning, 40460 Shah Alam, Selangor Darul Ehsan, Malaysia.

Tel: 03-5122 9766/7/8 Fax: 03-5122 8766/7 E-mail: info@nusatek.com

Our Ref.: NT/103327/18-20

Page No: 1 of 1

Report No: I NDT/RT/180272-18/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Recron (M) Sdn Bhd	Procedure No:	NT/RT/ASME Rev. 7.0
Project :	HTM Piping	IQI type :	ASTM 1B
Material:	Carbon Steel	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	GTAW	Density :	2.0 - 3.5
Examination Code :	ASME V	Sensitivity:	0.33mm(5 wires visible)
Acceptance Code:	ASME B31.3	Source to Object Distance :	114.3mm
Examination Date:	29 March 2018	Source Side of Object to Film Distance:	(7+3)mm
		No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	DWSI
		Film Viewing Technique :	Single 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
JT-71	10	3	114.3 141.3	7	0 - 1	Por	Accept	
					1 - 2	Sur	Accept	
					2 - 0	Inc	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 : Emirsham - NDT Lev. II

Interpreted & Evaluated By: Amat Hamidi - NDT Lev.II

Date: 30 March 2018



Client Representative:

Name:
Date:



NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)

No. 5, Jalan Anggerik Mokara 31/45, Seksyen 31, Kota Kemuning, 40460 Shah Alam, Selangor Darul Ehsan, Malaysia.

Tel: 03-5122 9766/7/8 Fax: 03-5122 8766/7 E-mail: info@nusatek.com

Our Ref.: NT/103327/18-20

Page No: 1 of 1

Report No: I NDT/RT/180272-19/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Recron (M) Sdn Bhd	Procedure No:	NT/RT/ASME Rev. 7.0
Project :	HTM Piping	IQI type :	ASTM 1B
Material:	Carbon Steel	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	GTAW	Density :	2.0 - 3.5
Examination Code :	ASME V	Sensitivity:	0.33mm(5 wires visible)
Acceptance Code:	ASME B31.3	Source to Object Distance :	114.3mm
Examination Date:	29 March 2018	Source Side of Object to Film Distance:	(7+3)mm
		No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	DWSI
		Film Viewing Technique :	Single 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
JT-34	10	3	114.3 141.3	7	0 - 1	Por	Reject	
						1 - 2	Por	Accept
						2 - 0	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 : Emirsham - NDT Lev. II

Interpreted & Evaluated By: Amat Hamidi - NDT Lev.II

Date: 30 March 2018



Client Representative:

Name:
Date:



NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)

No. 5, Jalan Anggerik Mokara 31/45, Seksyen 31, Kota Kemuning, 40460 Shah Alam, Selangor Darul Ehsan, Malaysia.

Tel: 03-5122 9766/7/8 Fax: 03-5122 8766/7 E-mail: info@nusatek.com

Our Ref.: NT/103327/18-20

Page No: 1 of 1

Report No: NDT/RT/180272-20/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Recron (M) Sdn Bhd	Procedure No:	NT/RT/ASME Rev. 7.0
Project :	HTM Piping	IQI type :	ASTM 1B
Material:	Carbon Steel	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	GTAW	Density :	2.0 - 3.5
Examination Code :	ASME V	Sensitivity:	0.33mm(5 wires visible)
Acceptance Code:	ASME B31.3	Source to Object Distance :	114.3mm
Examination Date:	29 March 2018	Source Side of Object to Film Distance:	(7+3)mm
		No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	DWSI
		Film Viewing Technique :	Single 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
JT-22	10	3	114.3	7	0 - 1 LF		Reject	
			141.3		1 - 2 LF		Reject	
					2 - 0 LF		Reject	

JT 42

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 : Emirsham - NDT Lev. II

Interpreted & Evaluated By: Amat Hamidi - NDT Lev. II

Date: 30 March 2018

Client Representative:

Name:
Date:





NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)

No. 5, Jalan Anggerik Mokara 31/45, Seksyen 31, Kota Kemuning, 40460 Shah Alam, Selangor Darul Ehsan, Malaysia.

Tel: 03-5122 9766/7/8 Fax: 03-5122 8766/7 E-mail: info@nusatek.com

Our Ref. : NT/103327/18-20

Page No: 1 of 1

Report No: I NDT/RT/180272-20/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Recron (M) Sdn Bhd	Procedure No:	NT/RT/ASME Rev. 7.0
Project :	HTM Piping	IQI type :	ASTM 1B
Material:	Carbon Steel	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	GTAW	Density :	2.0 - 3.5
Examination Code :	ASME V	Sensitivity:	0.33mm(5 wires visible)
Acceptance Code:	ASME B31.3	Source to Object Distance :	141.3mm
Examination Date:	29 March 2018	Source Side of Object to Film Distance:	(7+3)mm
		No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	DWSI
		Film Viewing Technique :	Single 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
JT-42	10	3	141.3	7	0 - 1	Inc	Reject	
					1 - 2	Inc	Reject	
					2 - 0	Inc	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 : Emirsham - NDT Lev. II

Interpreted & Evaluated By: Amat Hamidi - NDT Lev.II

Date: 30 March 2018



Client Representative:

Name:

Date: