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/103567/18-07

Report No: NDT/RT/180450-01/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Seremban Engineering Berhad
Project :	18/01728PCYC Sludge Filter No.1 (222/001/1) Venator (Tank 1)
Material:	S 275 JR
Welding Process :	FCAW
Examination Code :	ASME V
Acceptance Code:	ASME Sect. VIII Div.1 : 2017 Ed.
Examination Date:	20 April 2018

Procedure No:	NT/RT/ASME REV 7.0
IQI type :	ASTM 1A
Film Manufacturer/Type :	FUJI 100(class II)
Density :	2.0-3.5
Sensitivity:	0.20mm(2 wires visible)
Source to Object Distance :	400mm
Source Side of Object to Film Distance:	(6+3)mm
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
Sludge Filter No.1 (222/001/1)								
Joint 1 (WN-119)	9	3	–	6	0 - 1	NRI	Accept	
					1 - 2	Por	Accept	
					2 - 3	Por	Reject	
					3 - 4	Por	Accept	
					4 - 5	Por	Accept	
					5 - 6	Por	Accept	
					6 - 7	LF / Por	Reject	
					7 - 8	Por	Accept	
					8 - 9	SI	Reject	
					9 - 10	Por	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 : Emirsham - NDT Lev. II

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

Date: 21 April 2018

NUSANTARA TECHNOLOGIES SDN. BHD. * (187753-D) * NDT Division

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/103567/18-07

Report No: NDT/RT/180450-01/18

Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
Sludge Filter No.1 (222/001/1)								
Joint 1 (WN-119)	9	3	–	6	10 - 11	NRI	Accept	
					11 - 12	NRI	Accept	
					12 - 13	Por	Accept	
					13 - 14	NRI	Accept	
					14 - 15	Por	Accept	
					15 - 16	NRI	Accept	
					16 - 17	NRI	Accept	

End of Report

NUSANTARA TECHNOLOGIES SDN. BHD. * (187753-D) * NDT Division

NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)
No. 5, Jalan Anggerik Mokara 31/45, Seksyen 31, Kota Kemuning, 40460 Shah Alam, Selangor Darul Ehsan, Malaysia.
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Our Ref. : NT/103567/18-07

Report No: NDT/RT/180450-02/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Seremban Engineering Berhad
Project :	18/01728PCYC Sludge Filter No.1 (222/001/1) Venator (Tank 1)
Material:	S 275 JR
Welding Process :	FCAW
Examination Code :	ASME V
Acceptance Code:	ASME Sect. VIII Div.1 : 2017 Ed.
Examination Date:	20 April 2018

Procedure No:	NT/RT/ASME REV 7.0
IQI type :	ASTM 1A
Film Manufacturer/Type :	FUJI 100(class II)
Density :	2.0-3.5
Sensitivity:	0.20mm(2 wires visible)
Source to Object Distance :	400mm
Source Side of Object to Film Distance:	(6+3)mm
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
Sludge Filter No.1 (222/001/1)								
Joint 4 R1 (WN-119)	9	3	–	6	1 - 2	NRI	Accept	
					2 - 3	Por	Accept	
					6 - 7	Por	Accept	
					7 - 8	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: 21 April 2018

NUSANTARA TECHNOLOGIES SDN. BHD. * (187753-D) * NDT Division

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.
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Our Ref. : NT/103567/18-07

Report No: NDT/RT/180450-03/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Seremban Engineering Berhad
Project :	18/01728PCYC Sludge Filter No.1 (222/001/1) Venator (Tank 1)
Material:	S 275 JR
Welding Process :	FCAW
Examination Code :	ASME V
Acceptance Code:	ASME Sect. VIII Div.1 : 2017 Ed.
Examination Date:	20 April 2018

Procedure No:	NT/RT/ASME REV 7.0
IQI type :	ASTM 1A
Film Manufacturer/Type :	FUJI 100(class II)
Density :	2.0-3.5
Sensitivity:	0.20mm(2 wires visible)
Source to Object Distance :	400mm
Source Side of Object to Film Distance:	(6+3)mm
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
Sludge Filter No.1 (222/001/1)								
Joint 2 R1 (WN-199)	9	3	–	6	0 - 1	Por	Accept	
					1 - 2	Por	Accept	
					4 - 5	Por	Accept	
					5 - 6	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*
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: 21 April 2018

NUSANTARA TECHNOLOGIES SDN. BHD. NDT Division

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.
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Our Ref. : NT/103567/18-07

Report No: NDT/RT/180450-04/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Seremban Engineering Berhad	Procedure No:	NT/RT/ASME REV 7.0
		IQI type :	ASTM 1A
Project :	18/01728PCYC	Film Manufacturer/Type :	FUJI 100(class II)
	Sludge Filter No.1 (222/001/1)	Density :	2.0-3.5
	Venator (Tank 1)	Sensitivity:	0.20mm(2 wires visible)
Material:	S 275 JR	Source to Object Distance :	400mm
		Source Side of Object to Film Distance:	(6+3)mm
Welding Process :	FCAW	No of Radiograph(exposure) :	Single Exposure
Examination Code :	ASME V	No. of Film Each Cassette :	1 Film
Acceptance Code:	ASME Sect. VIII Div.1 : 2017 Ed.	Radiographic Technique :	SWSI
		Film Viewing Technique :	Single Wall Viewing
Examination Date:	20 April 2018	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
Sludge Filter No.1 (222/001/1)								
Joint 3 RS (WN-199)	9	3	–	6	4 - 5	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: 21 April 2018

NUSANTARA TECHNOLOGIES SDN. BHD. * (187753-D) * NDT Division

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.
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Our Ref. : NT/103567/18-07

Report No: NDT/RT/180450-05/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Seremban Engineering Berhad
Project :	18/01728PCYC Sludge Filter No.1 (222/001/1) Venator (Tank 1)
Material:	S 275 JR
Welding Process :	FCAW
Examination Code :	ASME V
Acceptance Code:	ASME Sect. VIII Div.1 : 2017 Ed.
Examination Date:	20 April 2018

Procedure No:	NT/RT/ASME REV 7.0
IQI type :	ASTM 1A
Film Manufacturer/Type :	FUJI 100(class II)
Density :	2.0-3.5
Sensitivity:	0.20mm(2 wires visible)
Source to Object Distance :	400mm
Source Side of Object to Film Distance:	(6+3)mm
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
Sludge Filter No.1 (222/001/1)								
Joint 6 (WN-199)	9	3	–	6	0 - 1	SI / 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: 21 April 2018

NUSANTARA TECHNOLOGIES SDN. BHD. * (187753-D) * NDT Division

Client Representative:

Name:

Date:

NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)
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Our Ref. : NT/103567/18-07

Report No: NDT/RT/180450-06/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Seremban Engineering Berhad	Procedure No:	NT/RT/ASME REV 7.0
		IQI type :	ASTM 1A
Project :	18/01728PCYC	Film Manufacturer/Type :	FUJI 100(class II)
	Sludge Filter No.1 (222/001/1)	Density :	2.0-3.5
	Venator (Tank 1)	Sensitivity:	0.20mm(2 wires visible)
Material:	S 275 JR	Source to Object Distance :	400mm
		Source Side of Object to Film Distance:	(6+3)mm
Welding Process :	FCAW	No of Radiograph(exposure) :	Single Exposure
Examination Code :	ASME V	No. of Film Each Cassette :	1 Film
Acceptance Code:	ASME Sect. VIII Div.1 : 2017 Ed.	Radiographic Technique :	SWSI
		Film Viewing Technique :	Single Wall Viewing
Examination Date:	20 April 2018	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
Sludge Filter No.1 (222/001/1)								
Joint 5 (WN-199)	9	3	–	6	0 - 1	Inc / 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: 21 April 2018

NUSANTARA TECHNOLOGIES SDN. BHD. NDT Division (187753-D)

Client Representative:

Name:

Date:

NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)
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Our Ref. : NT/103567/18-07

Report No: NDT/RT/180450-07/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Seremban Engineering Berhad
Project :	18/01728PCYC Sludge Filter No.1 (222/001/1) Venator (Tank 1)
Material:	S 275 JR
Welding Process :	FCAW
Examination Code :	ASME V
Acceptance Code:	ASME Sect. VIII Div.1 : 2017 Ed.
Examination Date:	20 April 2018

Procedure No:	NT/RT/ASME REV 7.0
IQI type :	ASTM 1A
Film Manufacturer/Type :	FUJI 100(class II)
Density :	2.0-3.5
Sensitivity:	0.20mm(2 wires visible)
Source to Object Distance :	400mm
Source Side of Object to Film Distance:	(6+3)mm
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
Sludge Filter No.1 (222/001/1)								
Joint 3 R1 (WN-199)	9	3	–	6	0 - 1	Por	Accept	
					1 - 2	Sur	Accept	
					2 - 3	Por	Reject	
					6 - 7	Por / Sur	Accept	
					7 - 8	Por	Accept	
					10 - 11	Por	Accept	
					12 - 13	Por	Accept	
					13 - 14	Por	Accept	
					14 - 15	Por	Accept	
					15 - 16	Por	Accept	

Legend:

End of Report

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:	21 April 2018

NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D) NDT Division

Client Representative:

Name:
Date: