



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/103454/18-11

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Report No: NDT/RT/180342-01/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client : Seremban Engineering Berhad

Project : 17/01609PNKT
Oil Pot (Unit No.1)

Material: SA 106 GR.B

Welding Process : GTAW

Examination Code : ASME V

Acceptance Code: ASME Sect. VIII Div.1 : 2015 Ed.

Examination Date: 06 April 2018

Procedure No: NT/RT/ASME REV 6.0

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 : 219.1mm

Source Side of Object to Film Distance: (8.18+3)mm

No of Radiograph(exposure) : Single Exposure

No. of Film Each Cassette : 1 Film

Radiographic Technique : DWSI

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
AX-003460-V06								
CS 2 R1 (WN-196)	11.18	3	219.1	8.18	0 - 1	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: 07 April 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.

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Our Ref.: NT/103454/18-11

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Report No: NDT/RT/180342-02/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Seremban Engineering Berhad	Procedure No:	NT/RT/ASME REV 6.0
Project :	17/01609PNKT Oil Pot (Unit No.3)	IQI type :	ASTM 1B
Material:	SA 106 GR.B	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 Sect. VIII Div.1 : 2015 Ed.	Source to Object Distance :	219.1mm
Examination Date:	06 April 2018	Source Side of Object to Film Distance:	(8.18+3)mm
		No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	DWSI
		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
AX-003460-V06								
CS 1 R1 (WN-196)	11.18	3	219.1	8.18	1-2	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 Hamdi - NDT Lev.II

Date: 07 April 2018



Client Representative:

Name:

Date:



Our Ref. : NT/103454/18-11

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RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Seremban Engineering Berhad	Procedure No:	NT/RT/ASME REV 6.0
Project :	17/01609PNKT Oil Pot (Unit No.3)	IQI type :	ASTM 1B
Material:	SA 106 GR.B	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 Sect. VIII Div.1 : 2015 Ed.	Source to Object Distance :	219.1mm
Examination Date:	06 April 2018	Source Side of Object to Film Distance:	(8.18+3)mm
		No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	DWSI
		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
AX-003460-V06								
CS 2 R1 (WN-196)	11.18	3	219.1	8.18	1 - 2	NRI	Accept	
					2 - 3	Por / Uc	Accept	
					3 - 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: 07 April 2018



Client Representative:
 Name:
 Date:



Our Ref.: NT/103454/18-11

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RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Seremban Engineering Berhad	Procedure No:	NT/RT/ASME REV 6.0
Project :	17/01606PNKT -10°C Inter Cooler	IQI type :	ASTM 1B
Material:	SA 516 GR.70	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	FCAW	Density :	2.0-3.5
Examination Code :	ASME V	Sensitivity:	0.33mm(5 wires visible)
Acceptance Code:	ASME Sect. VIII Div.1 : 2015 Ed.	Source to Object Distance :	400mm
Examination Date:	06 April 2018	Source Side of Object to Film Distance:	(19.1+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
AX-003460-V03								
CS2 / LS2 (WN-191)	22.1	3	-	19.1	0 - 1	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: 07 April 2018



Client Representative:
 Name:
 Date:



Our Ref. : NT/103454/18-11

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RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Seremban Engineering Berhad	Procedure No:	NT/RT/ASME REV 7.0
Project :	18/01668PCYC Premium Vegetable Oils Sdn.Bhd.	IQI type :	ASTM 1A
Material:	SA 240 Gr.304/304L	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	FCAW	Density :	2.0-3.5
Examination Code :	ASME V	Sensitivity:	0.20mm(2 wires visible)
Acceptance Code:	ASME Sect. VIII Div.1 : 2017 Ed.	Source to Object Distance :	400mm
Examination Date:	06 April 2018	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
LS 2 (WN-31)	9	3	-	6	0 - 1 1 - 2	NRI NRI	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: 07 April 2018



Client Representative:
 Name:
 Date:



Our Ref.: NT/103454/18-11

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RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Seremban Engineering Berhad	Procedure No:	NT/RT/ASME REV 7.0
Project :	18/01668PCYC Premium Vegetable Oils Sdn.Bhd.	IQI type :	ASTM 1A
Material:	SA 240 Gr.304/304L	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	FCAW	Density :	2.0-3.5
Examination Code :	ASME V	Sensitivity:	0.20mm(2 wires visible)
Acceptance Code:	ASME Sect. VIII Div.1 : 2017 Ed.	Source to Object Distance :	400mm
Examination Date:	06 April 2018	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
LS 2a (WN-31)	9	3	-	6	0 - 1 1 - 2	Inc NRI	Reject 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: 07 April 2018



Client Representative:

Name:

Date:



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RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Seremban Engineering Berhad	Procedure No:	NT/RT/ASME REV 7.0
Project :	18/01668PCYC Premium Vegetable Oils Sdn.Bhd.	IQI type :	ASTM 1A
Material:	SA 240 Gr.304/304L	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	FCAW	Density :	2.0-3.5
Examination Code :	ASME V	Sensitivity:	0.20mm(2 wires visible)
Acceptance Code:	ASME Sect. VIII Div.1 : 2017 Ed.	Source to Object Distance :	400mm
Examination Date:	06 April 2018	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	RT	Pipo Diameter	Material Thickness	Film Position	Film Interpretation	Result	Remarks
	(mm)	(mm)	(mm)	(mm)				
LS 1 (WN-31)			-	6	0 - 1	Inc		Reject
					1 - 2	Inc		Reject
					2 - 3	Inc		Reject
					3 - 4	Por		Accept
					4 - 5	Inc		Reject
					5 - 6	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: 07 April 2018



Client Representative:

Name:

Date:



Our Ref.: NT/103454/18-11

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RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Seremban Engineering Berhad	Procedure No:	NT/RT/ASME REV 7.0
Project :	18/01669PCYC Premium Vegetable Oils Sdn.Bhd.	IQI type :	ASTM 1A
Material:	SA 240 Gr.304/304L	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	FCAW	Density :	2.0-3.5
Examination Code :	ASME V	Sensitivity:	0.20mm(2 wires visible)
Acceptance Code:	ASME Sect. VIII Div.1 : 2017 Ed.	Source to Object Distance :	400mm
Examination Date:	06 April 2018	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
LS 6 (WN-31)	9	3	-	6	0 - 1	Inc	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 : Emirsham - NDT Lev. II
 Interpreted & Evaluated By: Amat Hamidi - NDT Lev.II
 Date: 07 April 2018



Client Representative:
 Name:
 Date:



Our Ref. : NT/103454/18-11

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RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Seremban Engineering Berhad	Procedure No:	NT/RT/ASME REV 7.0
Project :	18/01669PCYC Premium Vegetable Oils Sdn.Bhd.	IQI type :	ASTM 1A
Material:	SA 240 Gr.304/304L	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	FCAW	Density :	2.0-3.5
Examination Code :	ASME V	Sensitivity:	0.20mm(2 wires visible)
Acceptance Code:	ASME Sect. VIII Div.1 : 2017 Ed.	Source to Object Distance :	400mm
Examination Date:	06 April 2018	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
LS 2 (WN-31)	9	3	-	6	0 - 1	NRI	Accept	
					1 - 2	NRI	Accept	
					2 - 3	Inc	Reject	
					3 - 4	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: 07 April 2018



Client Representative:

Name:

Date:



Our Ref. : NT/103454/18-11

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RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Seremban Engineering Berhad	Procedure No:	NT/RT/ASME REV 7.0
Project :	18/01669PCYC Premium Vegetable Oils Sdn.Bhd.	IQI type :	ASTM 1A
Material:	SA 240 Gr.304/304L	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	FCAW	Density :	2.0-3.5
Examination Code :	ASME V	Sensitivity:	0.20mm(2 wires visible)
Acceptance Code:	ASME Sect. VIII Div.1 : 2017 Ed.	Source to Object Distance :	400mm
Examination Date:	06 April 2018	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	RT	Pipe Diameter	Material Thickness	Film Position	Film Interpretation	Result	Remarks
	(mm)	(mm)	(mm)	(mm)				
LS 4 (WN-31)	9	3	-	6	0 - 1	Inc		Reject
					1 - 2	NRI		Accept
					2 - 3	Inc		Reject
					3 - 4	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: 07 April 2018



Client Representative:
 Name:
 Date:



Our Ref.: NT/103454/18-11

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RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Seremban Engineering Berhad	Procedure No:	NT/RT/ASME REV 7.0
Project :	18/01669PCYC Premium Vegetable Oils Sdn.Bhd.	IQI type :	ASTM 1A
Material:	SA 240 Gr.304/304L	Film Manufacturer/Type :	FUJI 100(class II)
Welding Process :	FCAW	Density :	2.0-3.5
Examination Code :	ASME V	Sensitivity:	0.20mm(2 wires visible)
Acceptance Code:	ASME Sect. VIII Div.1 : 2017 Ed.	Source to Object Distance :	400mm
Examination Date:	06 April 2018	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
LS 5 (WN-31)	9	3	-	6	0 - 1	NRI	Accept	
					1 - 2	NRI	Accept	
					2 - 3	inc	Reject	
					3 - 4	NRI	Accept	
					4 - 5	NRI	Accept	
					5 - 6	inc	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: 07 April 2018



Client Representative:
 Name:
 Date: