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/103803/18-04

Report No: NDT/RT/180658-03/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Seremban Engineering Berhad
Project :	17/01271POYL CCG Splitter Reboiler
Material:	SA 516 GR 60N
Welding Process :	GTAW / SMAW
Examination Code :	ASME V
Acceptance Code:	ASME Sect. VIII Div.1 : 2015 Ed. / Tema Class R 2007 Ed.
Examination Date:	05 June 2018

Procedure No:	NT/RT/ASME REV 7.0
IQI type :	ASTM 1B
Film Manufacturer/Type :	FUJI 50(class I)
Density :	2.0-3.5
Sensitivity:	0.33mm(5 wires visible)
Source to Object Distance :	400mm
Source Side of Object to Film Distance:	(12.7+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) (E-7306)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
LS1 (WN-196/197)	15.7	3	–	12.7	0 - 1	NRI	Accept	
LS1 CS2 (WN-196/197)	15.7	3	–	12.7	0 - 1	NRI	Accept	
LS1 (2) (WN-196/197)	15.7	3	–	12.7	0 - 1	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: 06 June 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/103803/18-04

Report No: NDT/RT/180658-02/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Seremban Engineering Berhad
Project :	17/01271POYL CCG Splitter Reboiler
Material:	SA 516 GR 60N
Welding Process :	GTAW / SMAW
Examination Code :	ASME V
Acceptance Code:	ASME Sect. VIII Div.1 : 2015 Ed. / Tema Class R 2007 Ed.
Examination Date:	05 June 2018

Procedure No:	NT/RT/ASME REV 7.0
IQI type :	ASTM 1B
Film Manufacturer/Type :	FUJI 50(class I)
Density :	2.0-3.5
Sensitivity:	0.33mm(5 wires visible)
Source to Object Distance :	400mm
Source Side of Object to Film Distance:	(12.7+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
(E-7306)								
LS4 (WN-196/197)	15.7	3	–	12.7	0 - 1	Por	Accept	
LS4 C3 (WN-196/197)	15.7	3	–	12.7	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: 06 June 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/103803/18-04

Report No: NDT/RT/180658-04/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Seremban Engineering Berhad	Procedure No:	NT/RT/ASME REV 7.0
Project :	17/01271POYL CCG Splitter Reboiler	IQI type :	ASTM 1B
		Film Manufacturer/Type :	FUJI 50(class I)
		Density :	2.0-3.5
		Sensitivity:	0.33mm(5 wires visible)
Material:	SA 516 GR 60N	Source to Object Distance :	400mm
		Source Side of Object to Film Distance:	(12.7+3)mm
Welding Process :	GTAW / SMAW	No of Radiograph(exposure) :	Single Exposure
Examination Code :	ASME V	No. of Film Each Cassette :	1 Film
Acceptance Code:	ASME Sect. VIII Div.1 : 2015 Ed. / Tema Class R 2007 Ed.	Radiographic Technique :	SWSI
		Film Viewing Technique :	Single Wall Viewing
Examination Date:	05 June 2018	Source Type/Size :	Iridium192 (3.2mm)
		Location Markers :	Film Side

Radiographic Examination Result

Weld Reference (Welder No) (E-7306)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
LS2 (WN-196/197)	15.7	3	–	12.7	0 - 1	Por	Accept	
LS2 CS1 (WN-196/197)	15.7	3	–	12.7	0 - 1	Por	Accept	
LS2 CS3 (WN-196/197)	15.7	3	–	12.7	0 - 1	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: 06 June 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/103803/18-04

Report No: NDT/RT/180658-01/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Seremban Engineering Berhad
Project :	18/01672LLCH Degumming Tank
Material:	SA 240 GR 316L
Welding Process :	FCAW
Examination Code :	ASME V
Acceptance Code:	ASME Sect. VIII Div.1 : 2017 Ed.
Examination Date:	04 June 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 :	400mm
Source Side of Object to Film Distance:	(8+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
2MX312								
LS4 R1 (WN-73)	11	3	–	8	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:	05 June 2018

Client Representative:

Name:
Date: