



Our Ref. : NT/103371/18-04

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 Report No: BFTT/RT-65/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Bukit Fraser Thermal Technology Sdn Bhd	Procedure No:	NT/RT/ASME Rev 6.0
Project :	Frames Separation Technologies B.V / SBM Offshore - Liza Destiny - FPSO EPCI	IQI type :	ASTM 1A
Job No:	BFTT 17-638	Film Manufacturer/Type :	FUJI 100/class II
Material:	SA 182 F51 / SA 790 UNS S31803	Density :	2.0 - 4.0
Welding Process :	GTAW	Sensitivity:	0.20mm(2 wires visible)
Examination Code :	ASME V	Source to Object Distance :	400mm
Acceptance Code:	ASME Sect. VIII Div.1 2015 Ed.	Source Side of Object to Film Distance:	(60.3)mm
Examination Date:	03 April 2018	No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
		Radiographic Technique :	DWDI
		Film Viewing Technique :	Double 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)				
124-VESE-0210								
N10 - JT1 (WN-005)	8.54	3	60.3	5.54	X Y	NRI AR	Accept	Reshoot

_____ 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: 04 April 2018

Name:

Date:





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RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Bukit Fraser Thermal Technology Sdn Bhd	Procedure No:	NT/RT/ASME Rev 6.0
Project :	Frames Separation Technologies B.V / SBM Offshore - Liza Destiny - FPSO EPCI	IQI type :	ASTM 1B
Job No:	BFTT 17-638	Film Manufacturer/Type :	FUJI 100/class II
Material:	SA 790 UNS S31803 / SA 815 UNS S31803	Density :	2.0 - 4.0
Welding Process :	GTAW	Sensitivity:	0.33mm(5 wires visible)
Examination Code :	ASME V	Source to Object Distance :	88.9mm
Acceptance Code:	ASME Sect. VIII Div.1 2015 Ed.	Source Side of Object to Film Distance:	(7.62+3)mm
Examination Date:	03 April 2018	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	RT	Pipe Diameter	Material Thickness	Film Position	Film Interpretation	Result	Remarks
	(mm)	(mm)	(mm)	(mm)				
124-VESE-0210								
N7B - JT2 RS (WN-005)	10.62	3	88.9	7.62	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

Client Representative:

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

Date: 04 April 2018

Name:
Date:





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RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Bukit Fraser Thermal Technology Sdn Bhd	Procedure No:	NT/RT/ASME Rev 6.0
Project :	Petronas Chemicals Polyethylene Sdn Bhd	IQI type :	ASTM 1B
	Fabrication Of Moisture And Alcohol Removal.	Film Manufacturer/Type :	FUJI 100/class II
Job No:	BFTT 17-634	Density :	2.0 - 4.0
Material:	SA 516 GR 70N	Sensitivity:	0.33mm(5 wires visible)
		Source to Object Distance :	1000mm
		Source Side of Object to Film Distance:	(31.80+3)mm
Welding Process :	GTAW / SMAW / SAW	No of Radiograph(exposure) :	Single Exposure
Examination Code :	ASME V	No. of Film Each Cassette :	1 Film
Acceptance Code:	ASME Sec VIII Div.2 2015 Ed.	Radiographic Technique :	SWSI
		Film Viewing Technique :	Single Wall Viewing
Examination Date:	03 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
PE-0-D-902A								
CS - 4 (WN090/078)	34.8	3	2000	31.8	0 - 1	NRI	Accept	
					1 - 2	NRI	Accept	
					2 - 3	NRI	Accept	
					3 - 4	AR		Reshoot
					4 - 5	NRI	Accept	
					5 - 6	NRI	Accept	
					6 - 7	NRI	Accept	AR
					7 - 8	NRI	Accept	
					8 - 9	Por	Accept	
					9 - 10	NRI	Accept	

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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: 04 April 2018

Date:





NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)

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Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
PE-0-D-902A								
CS - 4 (WN090/078)	34.8	3	2000	31.8	10 - 11	NRI	Accept	AR
					11 - 12	NRI	Accept	
					12 - 13	NRI	Accept	
					13 - 14	Por	Accept	
					14 - 15	NRI	Accept	
					15 - 16	Sur	Accept	
					16 - 17	Sur	Accept	
					17 - 18	Uc	Accept	
					18 - 19	NRI	Accept	
					19 - 20	NRI	Accept	
					20 - 21	NRI	Accept	
					21 - 22	NRI	Accept	
	22 - 0	NRI	Accept					

End Of Report





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RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	Bukit Fraser Thermal Technology Sdn Bhd	Procedure No:	NT/RT/ASME Rev 6.0
Project :	Petronas Chemicals Polyethylene Sdn Bhd	IQI type :	ASTM 1B
Job No:	BFTT 17-634	Film Manufacturer/Type :	FUJI 100/class II
Material:	SA 516 GR 70N	Density :	2.0 - 4.0
Welding Process :	GTAW / SMAW / SAW	Sensitivity:	0.33mm(5 wires visible)
Examination Code :	ASME V	Source to Object Distance :	1000mm
Acceptance Code:	ASME Sec VIII Div.2 2015 Ed.	Source Side of Object to Film Distance:	(31.80+3)mm
Examination Date:	03 April 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)				
PE-0-D-902B								
CS - 4 (WN007/216)	34.8	3	2000	31.8	0 - 1	NRI	Accept	
					1 - 2	SI	Accept	
					2 - 3	NRI	Accept	
					3 - 4	NRI	Accept	
					4 - 5	NRI	Accept	
					5 - 6	AR		Reshoot
					6 - 7	Por	Accept	AR
					7 - 8	Por / AR		Reshoot
					8 - 9	NRI	Accept	
					9 - 10	NRI	Accept	

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Legend:

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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: 04 April 2018

Name:

Date:





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Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks	
PE-0-D-902B									
CS - 4 (WN007/216)	34.8	3	2000	31.8	10 - 11	Por	Accept	AR	
					11 - 12	SI	Reject		
					12 - 13	NRI	Accept		
					13 - 14	NRI	Accept		
					14 - 15	Sur	Accept		
					15 - 16	NRI	Accept		
					16 - 17	Por	Accept		
					17 - 18	NRI	Accept		
					18 - 19	NRI	Accept		
					19 - 20	AR			Reshoot
					20 - 21	NRI	Accept		
					21 - 22	Sur	Accept		
22 - 0	Uc	Accept							

End Of Report

