



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/103097/18-12

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Report No: BFTT/RT-01/18

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 1B
Job No:	BFTT 17-638	Film Manufacturer/Type :	FUJI 100/class II
Material:	SA 240 UNS S31803 / SA 182 F 51	Density :	2.0 - 4.0
Welding Process :	SMAW	Sensitivity:	0.33mm(5 wires visible)
Examination Code :	ASME V	Source to Object Distance :	445.2mm
Acceptance Code:	ASME Sect. VIII Div.1 2015 Ed.	Source Side of Object to Film Distance:	(13+3)mm
Examination Date:	28 February 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 :	Source Side

Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
124-CPHY-0110								
CS-1 (WN-007)	16	3	890.4	13	0 - 1	NRI	Accept	
					1 - 2	NRI	Accept	
					2 - 3	NRI	Accept	
					3 - 4	Por	Accept	
					4 - 5	NRI	Accept	
					5 - 6	Por	Accept	
					6 - 7	NRI	Accept	
					7 - 8	NRI	Accept	
					8 - 9	NRI	Accept	
					9 - 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: 01 March 2018



Client Representative:

Name:
Date:



NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)

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Our Ref. : NT/103097/18-12

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Report No: BFTT/RT-02/18

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 1B
Job No:	BFTT 17-638	Film Manufacturer/Type :	FUJI 100/class II
Material:	SA 240 UNS S31803	Density :	2.0 - 4.0
Welding Process :	SMAW	Sensitivity:	0.33mm(5 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:	(13+3)mm
Examination Date:	28 February 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 :	Source Side

Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
124-CPHY-0110								
LS-1 (WN-007)	16	3	-	13	0 - 1	Por	Accept	
					1 - 2	NRI	Accept	
					2 - 3	Por	Accept	
					3 - 4	NRI	Accept	
					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: 01 March 2018



Client Representative:

Name:
Date:



Our Ref. : NT/103097/18-12

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Report No: BFTT/RT-03/18

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 1B
Job No:	BFTT 17-638	Film Manufacturer/Type :	FUJI 100/class II
Material:	SA 240 UNS S31803	Density :	2.0 - 4.0
Welding Process :	GTAW / SMAW	Sensitivity:	0.33mm(5 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:	(13+3)mm
Examination Date:	28 February 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 :	Source Side

Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
124-CPHY-0110								
N1-L1 (WN-007)	16	3	-	13	0-1	NRI	Accept	

End Of Report

Legend:

TI: Tungsten Inclusion	NRI: No Relevant Indication	Uc: Undercut	Por: Porosity	WT: Weld Thickness
Sf: 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: 01 March 2018



Client Representative:

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 240 UNS S31803	Density :	2.0 - 4.0
Welding Process :	SMAW / SAW	Sensitivity:	0.33mm(5 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:	(15+3)mm
Examination Date:	28 February 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 :	Source Side

Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
124-VESE-0210								
LS - 1A (WN-005/008)	18	3	-	15	0 - 1	NRI	Accept	
					1 - 2	NRI	Accept	
					2 - 3	Por / Sur	Accept	
					3 - 4	Sur	Accept	
					4 - 5	Por / Sur	Accept	
					5 - 6	Por	Accept	
					6 - 7	Por / 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: 01 March 2018



Client Representative:

Name:
Date:



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Report No: BFTT/RT-05/18

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 1B
Job No:	BFTT 17-638	Film Manufacturer/Type :	FUJI 100/class II
Material:	SA 240 UNS S31803	Density :	2.0 - 4.0
Welding Process :	SMAW / SAW	Sensitivity:	0.33mm(5 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:	(15+3)mm
Examination Date:	28 February 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 :	Source Side

Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
124-VESE-0210								
LS - 2A (WN-005/008)	18	3	-	15	0 - 1	Por	Accept	
					1 - 2	Por	Reject	
					2 - 3	NRI	Accept	
					3 - 4	NRI	Accept	
					4 - 5	NRI	Accept	
					5 - 6	Por	Accept	
					6 - 7	SI	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: 01 March 2018



Client Representative:

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 240 UNS S31803	Density :	2.0 - 4.0
Welding Process :	SMAW / SAW	Sensitivity:	0.33mm(5 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:	(15+3)mm
Examination Date:	28 February 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 :	Source Side

Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
124-VESE-0210								
LS - 1B (WN-009/008)	18	3	-	15	0 - 1	Por	Accept	
					1 - 2	NRI	Accept	
					2 - 3	NRI	Accept	
					3 - 4	NRI	Accept	
					4 - 5	Por	Accept	
					5 - 6	Por	Accept	
					6 - 7	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: 01 March 2018



Client Representative:

Name:

Date:



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Report No: BFTT/RT-07/18

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 1B
Job No:	BFTT 17-638	Film Manufacturer/Type :	FUJI 100/class II
Material:	SA 240 UNS S31803	Density :	2.0 - 4.0
Welding Process :	SMAW / SAW	Sensitivity:	0.33mm(5 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:	(15+3)mm
Examination Date:	28 February 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 :	Source Side

Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
124-VESE-0210								
LS - 2B (WN-009/216)	18	3	-	15	0 - 1	Por / Sur		Visual
					1 - 2	Por	Accept	
					2 - 3	Por	Accept	
					3 - 4	NRI	Accept	
					4 - 5	Por	Accept	
					5 - 6	Por	Accept	
					6 - 7	LF / 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: 01 March 2018



Client Representative:

Name:
Date:



Our Ref. : NT/103097/18-12

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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 240 UNS S31803	Density :	2.0 - 4.0
Welding Process :	SMAW / SAW	Sensitivity:	0.33mm(5 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:	(15+3)mm
Examination Date:	28 February 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 :	Source Side

Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
124-VESE-0210								
LS - 3A (WN-005/008)	18	3	-	15	0 - 1 1 - 2	Por 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: 01 March 2018



Client Representative:

Name:

Date:



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Our Ref. : NT/103097/18-12

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Report No: BFTT/RT-09/18

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 1B
Job No:	BFTT 17-638	Film Manufacturer/Type :	FUJI 100/class II
Material:	SA 240 UNS S31803	Density :	2.0 - 4.0
Welding Process :	SMAW / SAW	Sensitivity:	0.33mm(5 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:	(15+3)mm
Examination Date:	28 February 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 :	Source Side

Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
124-VESE-0210								
LS - 3B (WN-009/008)	18	3	-	15	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: 01 March 2018



Client Representative:

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 240 UNS S31803	Density :	2.0 - 4.0
Welding Process :	SMAW / SAW	Sensitivity:	0.33mm(5 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:	(15+3)mm
Examination Date:	28 February 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 :	Source Side

Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
124-VESE-0210								
LS - 4B (WN-009/008)	18	3	-	15	0 - 1	NRI	Accept	
					1 - 2	Inc	Reject	
					2 - 3	NRI	Accept	
					3 - 4	NRI	Accept	
					4 - 5	NRI	Accept	
					5 - 6	NRI	Accept	
					6 - 7	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: 01 March 2018



Client Representative:
 Name:
 Date:



Our Ref. : NT/103097/18-12

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Report No: BFTT/RT-11/18

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 1B
Job No:	BFTT 17-638	Film Manufacturer/Type :	FUJI 100/class II
Material:	SA 240 UNS S31803	Density :	2.0 - 4.0
Welding Process :	SMAW / SAW	Sensitivity:	0.33mm(5 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:	(15+3)mm
Examination Date:	28 February 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 :	Source Side

Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
124-VESE-0210								
LS - 4A (WN-005/007)	18	3	-	15	0 - 1	Por	Accept	
					1 - 2	Por	Accept	
					2 - 3	NRI	Accept	AR
					3 - 4	Por	Accept	
					4 - 5	NRI	Accept	
					5 - 6	NRI	Accept	
					6 - 7	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: 01 March 2018



Client Representative:

Name:

Date:



Our Ref. : NT/103097/18-12

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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	IQI type :	ASTM 1B
Job No:	Offshore - Liza Destiny - FPSO EPCI	Film Manufacturer/Type :	FUJI 100/class II
Material:	BFTT 17-638	Density :	2.0 - 4.0
	SA 240 UNS S31803	Sensitivity:	0.33mm(5 wires visible)
Welding Process :	GTAW / SMAW	Source to Object Distance :	400mm
Examination Code :	ASME V	Source Side of Object to Film Distance:	(15+3)mm
Acceptance Code:	ASME Sect. VIII Div.1 2015 Ed.	No of Radiograph(exposure) :	Single Exposure
		No. of Film Each Cassette :	1 Film
Examination Date:	28 February 2018	Radiographic Technique :	SWSI
		Film Viewing Technique :	Single Wall Viewing
		Source Type/Size :	Iridium192 (3.2mm)
		Location Markers :	Source Side

Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
124-VESE-0210								
M1-L1 (WN-009)	18	3	-	15	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: 01 March 2018



Client Representative:

Name:

Date: