

Annex C

Inventory of Hazardous Materials (IHM)



Task – T2189020
“FPSO FLUMINENSE”, Class No. 7428908
KOCKUMS MEKANISKA VERKSTADS AB., Hull: 546
Flag: The Commonwealth of the Bahamas

Attention: Mr. Dilip Naik, SHELL BRASIL PETROLEO LTDA (WCN: 468370)

The document shown in the attached list is reviewed in accordance with the applicable requirements of the following:

- IMO Resolution MEPC.269(68) – “2015 Guidelines for the Development of Inventory of Hazardous Materials”
- Regulation (EU) No. 1257/2013 of the European Parliament and of the Council of 20 November 2013 on ship recycling and amending Regulation (EC) No 1013/2006 and Directive 2009/16/EC

Please note our review is based on the following conditions:

1. The work is to be completed to the satisfaction of the attending ABS Surveyor.
2. The IHM has also been reviewed for compliance with Regulation (EU) No. 1257/2013 to cover the presence/absence of the two hazardous materials namely hydrochlorofluorocarbon (HCFC) and brominated flame retardant (HBCDD).
3. From the date the EU SRR SOC/SOVC is issued, the IHM Part I is to be properly maintained and updated in accordance with the EU SRR.
4. It is the responsibility of the Vessel Owner and Shipyard to ensure supplier documentation on all products required by MEPC. 269(68) are provided when developing the Inventory of Hazardous Materials.
5. Our review is limited to Part I of the IHM.

Please refer to the attached list of comments associated with this review.

For any clarifications, contact Ms. Renata Dias at +55 21 2276-3532, (rdias@eagle.org).

Very truly yours,

Joshua Divin
Vice President, Engineering

Electronically Signed by: João Claudio Machado

Documents List

Drawing No.	Rev. No.	Title	Status
INVENTORY HAZARDOUS MATERIALS	-	Inventory Hazardous Materials	Approved on behalf with Comment
OIM Declaration IHM	-	OIM Declaration IHM	Filed by ABS for Reference Only

An electronic copy of the drawing, appropriately stamped will be returned by FTP/e-mail.

Comments List

Comment No.	Comment Text	Facilities	Action
L-002	INVENTORY HAZARDOUS MATERIALS - Inventory Hazardous Materials	546[Open]	Surveyor
	As per IMO Resolution MEPC.269(68)/4.2.9, the attending Surveyor is requested to verify that the locations and the approximate quantity/volume of hazardous materials detailed on the Inventory of Hazardous Materials (IHM) Booklet reflects those found on the vessel. In addition, we note that Part II and III of the IHM have been developed. Please note that it has to be surveyed in accordance with Resolution MEPC 222(64) to the satisfaction of the attending Surveyor.		

**Statement of Compliance
For
Inventory of Hazardous Materials**

(Note: This statement shall be supplemented by Part I of the Inventory of Hazardous Materials)

Issued under the provisions of Regulation (EU) No 1257/2013

under the authority of the Government of:

The Commonwealth of the Bahamas

(Name of the State)

by **American Bureau of Shipping**

Under Regulation (EU) No 1257/2013 of the European Parliament and the Council on ship recycling

Particulars of Ship:

Name of Ship	Distinctive Number or Letters	Port of Registry	Gross Tonnage	IMO Number
FPSO FLUMINENSE	9000056 C6FU8	Nassau	171186	7389405
Name and Address of Shipowner		IMO Registered Owner Identification Number	IMO Company Identification Number	Date of Construction
SHELL BRASIL PETROLEO LTDA.		N/A	0250240	01 August 1974
AV. DAS AMERICAS, 4200 BLOCK 6 3RD FLOOR RIO DE JANEIRO 22640-102 Brazil				

Particulars of Part I of the Inventory of Hazardous Materials

Part I of the Inventory of Hazardous Materials Identification/Verification Number: PROJ. 173.19 / T2189020

Note: In accordance with Article 9(1) of Regulation (EU) No 1257/2013, Part I of the inventory of hazardous materials is annexed to this certificate. Part I of the Inventory of Hazardous Materials should be compiled on the basis of the standard format shown in the guidelines developed by the International Maritime Organization, supplemented, where applicable, by guidelines on aspects specific to Regulation (EU) No 1257/2013, such as substances listed in that Regulation but not in the Hong Kong Convention.

THIS IS TO CERTIFY THAT:

- the ship has been surveyed in accordance with Article 8 of Regulation (EU) No 1257/2013; and
- the survey shows that Part I of the Inventory of Hazardous Materials fully complies with the applicable requirements of that Regulation.

Completion date of the survey on which this statement is based: 18 May 2023

This statement is valid until 17 April 2028

Issued at Rio de Janeiro, Brazil on 18 May 2023
(Place of Issue of Certificate) *(Date of Issue)*



Electronically Signed By
Dos Santos, Eduardo Jose, Rio de Janeiro Port

(Surveyor, American Bureau of Shipping)
(Signature of duly authorized official)
(Seal of stamp of the authority, as appropriate)

ENDORSEMENT TO EXTEND THE CERTIFICATE IF VALID FOR LESS THAN FIVE YEARS WHERE ARTICLE 9(5) APPLIES*

The ship complies with the relevant provisions of regulation (EU) No 1257/2013 on ship recycling, and this certificate shall, in accordance with Article 9(4) of that regulation, be accepted as valid until _____

Signed: _____
(Surveyor, American Bureau of Shipping)
(Signature of duly authorized official)
(Seal or stamp of the authority, as appropriate)
Place: _____
Date: _____

ENDORSEMENT WHERE THE RENEWAL SURVEY HAS BEEN COMPLETED AND ARTICLE 9(4) APPLIES*

The ship complies with the relevant provisions of regulation (EU) No 1257/2013 on ship recycling, and this certificate shall, in accordance with Article 9(4) of that regulation, be accepted as valid until: _____

Signed: _____
(Surveyor, American Bureau of Shipping)
(Signature of duly authorized official)
(Seal or stamp of the authority, as appropriate)
Place: _____
Date: _____

ENDORSEMENT TO EXTEND THE VALIDITY OF THE CERTIFICATE UNTIL REACHING THE PORT OR ANCHORAGE OF SURVEY FOR A PERIOD OF GRACE WHERE ARTICLE 9(7) OR ARTICLE 9(8) APPLIES*

This certificate shall, in accordance with Article 9(7) or 9(8) * of regulation (EU) No 1257/2013 on ship recycling, be accepted as valid until: _____

Signed: _____
(Surveyor, American Bureau of Shipping)
(Signature of duly authorized official)
(Seal or stamp of the authority, as appropriate)
Place: _____
Date: _____

ENDORSEMENT FOR ADDITIONAL SURVEY WHERE ARTICLE 9(2) APPLIES*

At an additional survey in accordance with Article 8(6) regulation (EU) No 1257/2013 on ship recycling, the ship was found to comply with the relevant provisions of that regulation.

Signed: _____
(Surveyor, American Bureau of Shipping)
(Signature of duly authorized official)
(Seal or stamp of the authority, as appropriate)
Place: _____
Date: _____



* Delete as appropriate.

**Statement of Compliance
For
Inventory of Hazardous Materials**

(Note: This statement shall be supplemented by Part I of the Inventory of Hazardous Materials)

under the authority of the Government of:

The Commonwealth of the Bahamas

(Name of the State)

by American Bureau of Shipping

Issued under the provisions of the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009
(hereinafter referred to as "the Convention")

Particulars of Ship

Name of Ship	Distinctive Number or Letters	Port of Registry	Gross Tonnage	IMO Number
FPSO FLUMINENSE	9000056 C6FU8	Nassau	171186	7389405
Name and address of shipowner	IMO registered owner identification number		IMO company identification number	Date of Construction
SHELL BRASIL PETROLEO LTDA. AV. DAS AMERICAS, 4200 BLOCK 6 3RD FLOOR RIO DE JANEIRO 22640-102 Brazil	N/A		0250240	01 August 1974

Particulars of Part I of the Inventory of Hazardous Materials

Identification No. PROJ. 173.19 / T2189020, location of issue Rotterdam, The Netherlands, date of issue 23 June 2021

Note: Part I of the Inventory of Hazardous Materials, as required by regulation 5 of the Annex to the Convention, is an essential part of the International Certificate on Inventory of Hazardous Materials and must always accompany the International Certificate on Inventory of Hazardous Materials. Part I of the Inventory of Hazardous Materials should be compiled on the basis of the standard format shown in the guidelines developed by the Organization.

THIS IS TO CERTIFY THAT:

- the ship has been surveyed in accordance with regulation 10 of Annex to the Convention;
and
- the survey shows that Part I of the Inventory of Hazardous Materials fully complies with the applicable requirements of the Convention.

Completion date of the survey on which this statement is based: 18 May 2023

This statement is valid until: 17 April 2028

Issued at Rio de Janeiro, Brazil on 18 May 2023
(Place of issue of statement) (Date of issue)



**Electronically Signed By
Dos Santos, Eduardo Jose, Rio de Janeiro Port**

(Surveyor, American Bureau of Shipping)
(Signature of duly authorized official issuing the certificate)
(Seal or stamp of the authority, as appropriate)

**ENDORSEMENT TO EXTEND THE CERTIFICATE IF VALID FOR
LESS THAN FIVE YEARS WHERE REGULATION 11.6 APPLIES***

The ship complies with the relevant provisions of the Convention, and this certificate shall, in accordance with regulation 11.6 of the Annex to the Convention, be accepted as valid until: _____

Signed: _____

*(Surveyor, American Bureau of Shipping)**(Signature of duly authorized official)**(Seal or stamp of the authority, as appropriate)*

Place: _____

Date: _____

**ENDORSEMENT WHERE THE RENEWAL SURVEY HAS BEEN COMPLETED
AND REGULATION 11.7 APPLIES***

The ship complies with the relevant provisions of the Convention, and this certificate shall, in accordance with regulation 11.7 of the Annex to the Convention, be accepted as valid until: _____

Signed: _____

*(Surveyor, American Bureau of Shipping)**(Signature of duly authorized official)**(Seal or stamp of the authority, as appropriate)*

Place: _____

Date: _____

**ENDORSEMENT TO EXTEND THE VALIDITY OF THE CERTIFICATE UNTIL
REACHING THE PORT OF SURVEY OR FOR A PERIOD OF GRACE WHERE
REGULATION 11.8 OR 11.9 APPLIES****

This certificate shall, in accordance with regulation 11.8 or 11.9** of the Annex to the Convention, be accepted as valid until: _____

Signed: _____

*(Surveyor, American Bureau of Shipping)**(Signature of duly authorized official)**(Seal or stamp of the authority, as appropriate)*

Place: _____

Date: _____

ENDORSEMENT FOR ADDITIONAL SURVEY*

At an additional survey in accordance with regulation 10 of the Annex to the Convention, the ship was found to comply with the relevant provisions of the Convention.

Signed: _____

*(Surveyor, American Bureau of Shipping)**(Signature of duly authorized official)**(Seal or stamp of the authority, as appropriate)*

Place: _____

Date: _____



* This page of the endorsement at survey shall be reproduced and added to the certificate as considered necessary by the Administration.

** Delete as appropriate.



Projects & Technology

Controlled Document

Bijupira Salema Decommissioning

FPSO Fluminense - Inventory Hazardous Materials Prior to Recycling

Project	Bijupira Salema Decommissioning
Document Title	FPSO Fluminense - Inventory Hazardous Materials Prior to Recycling
Document Number	BJSA-SHL-100-MA-ASE-0001
DCAF Control ID Number	
Document Revision	03
Document Status	Issued for Approval
Document Type	Analysis & Design
Owner	Dilip Naik
Issue Date	03/09/22
Expiry Date	None
ECCN	
Security Classification	Restricted
Disclosure	
<i>Revision History shown on next page</i>	

Revision History

REVISION STATUS			APPROVAL		
Rev.	Date	Description	Originator	Reviewer	Approver
01	23 June 2021	IFR	SeaToCradle	Elizabeth B / John W	Dilip Naik
02	28 Sept 2021	IFR	SeaToCradle	John W	Dilip Naik
03	8 Nov 2021	IFR	SeaToCradle	John W	Dilip Naik
03	9 Mar 2022	IFA	SeaToCradle	John W	Dilip Naik
<ul style="list-style-type: none"> • All signed originals will be retained by the UA Document Control Center and an electronic copy will be stored in Livelink 					

Signatures for this revision

Date	Role	DCAF Authority Role	Name	Signature or electronic reference (email)
	Originator	Contractor	S2C	Actual signature
9 Mar 2022	Reviewer	Marine Support	John Whitlow	Actual signature
9 Mar 2022	Approver	Marine Lead	Dilip Naik	Actual signature

Inventory Hazardous Materials Prior to Recycling FPSO Fluminense



Sea2Cradle B.V. | Scheepmakershaven 59, 3011 VD Rotterdam, The Netherlands



APPROVED
on behalf of the
government
of the vessel's registry
subject to conditions
of ABS letter



WITH ABS AMENDMENTS
ON PAGES N/A

WITH ABS COMMENTS
#s L-002



Inventory Hazardous Materials

Prior to Recycling

FPSO Fluminense

PROJECT 173.19

Principal

SHELL BRASIL PETROLEO LTDA Av das Americas
4200 / Bloco 6 – 1 andar (parte) Barra da Tijuca
CEP 22640-102
Rio de Janeiro – RJ
Brazil

Prepared by:

Sea2Cradle B.V.
Scheepmakershaven 59
3011 VD Rotterdam
The Netherlands

Date: 23rd June 2021

Amended: 28th of September 2021

Amended" 8th of November 2021 (incl MEPC table Part 1)

Note:

Parts 2 and 3(A+B) to be completed based on (estimated) arrival conditions

Contact information:

Sea2Cradle B.V.

info@Sea2Cradle.com

© Sea2Cradle B.V.

The Management of Sea2Cradle is not responsible for resulting damage, as well as for damage resulting from the application of results or research obtained by Sea2Cradle, its clients or any claims related to the application of information found within its research. No part of this publication may be reproduced and/or made public by means of print or by way of any other transmission, e.g. photocopying, microfilm, recording, or otherwise, without prior permission, in writing, from Sea2Cradle B.V., Rotterdam, The Netherlands.

Contents

Terms of reference	4
Particulars of the FPSO Fluminense	9
IHM PART 1 MEPC TABLE	10
IHM Part 1A	11
IHM Part 1B	13
IHM Part 2.....	16
IHM Part 3A	20
IHM Part 3B	29
Other hazardous materials.....	31
Appendices	33
Zone and Level Definitions	34
Location Diagrams of Hazardous Materials on Board.....	39
Visual/Sampling Check Plan (VSCP).....	79
Asbestos documentation.....	89
Hazmat Samples Documentation	125
Radiation Documentation	141
Medicines Documentation	153
Surveyor's 'Approved Hazmat Expert' Certificate	191

Terms of reference

a. Assignment

Aim of the survey

The aim of this survey is to provide an IHM (Inventory Hazardous Materials) on existing ships (Table A, Part 1).

The survey is based on:

- The IMO Hong Kong International Convention for the safe and environmentally sound recycling of ships, May 19th 2009, further mentioned as the Hongkong Convention;
- MEPC 269(68) Guidelines for the developments of the Inventory of Hazardous Materials, further mentioned as the Guideline;
- Dutch NSI Instruction, "Ban the Use of Asbestos on board ships" further mentioned as the Instruction where applicable.
- US EPA guidelines where applicable
- Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants, amending Directive 79/117/EEC (OJ L 158, 30.4.2004, p. 7) and Regulation 1257/2013 for EU flagged ships.

The IHM Part 1A is restricted to the following substances:

- Asbestos;
- PCBs (Polychlorinated Biphenyls);
- ODS (Ozone Depleting Substances);
- TBT in anti-fouling (Organic tin compounds);
- Perfluorooctane sulfonic acid (PFOS)

IHM Part 1B is mandatory for existing vessels under the new EU regulation and will be completed as far as practicable.

Assignment

Our assignment is restricted to a non-destructive survey based on a Visual/Sampling Check and information made available by the ship owner and the owner's representative on board, according to our standard survey procedures.

The asbestos and PCB survey has been carried out as a random check of the systems and components as mentioned in the Guideline and including the additives as mentioned in the Instruction. The complete list, including remarks, is added as an appendix to this report.

The PCB survey for US flagged ships has been carried out basis U.S. EPA guidelines to prove the absence of PCB containing materials

Destructive research, or research of secondary contaminations as a result of possible damages of asbestos or PCB containing materials, are not part of the assignment and are as a consequence not included in this report unless there is a reasonable expectation for hidden hazardous materials.

Liability and accuracy

Although we aim for maximum accuracy, an accuracy of 100% is not feasible. Therefore, our agency cannot be held liable for any damage as a result of hazardous materials that are not mentioned in this inventory. These can be materials that were unreachable and consequently excluded from inspection, materials that are not recognized as hazardous, and materials that were not mentioned as hazardous in the report and are found on board at a later stage.

Safety

Advice will be sought from the senior management of the vessel/structure, prior to commencing any inspection, as to any restricted or unsafe areas. Additionally, it is the decision of the surveyor to omit any other area which he/she assesses as unsafe for whatever reason. Restricted or unsafe areas will be noted in the VSCP.

b. Survey results

Desk Research

For our desk research all available relevant documents were consulted. These are listed in the Visual/Sampling Check Plan (VSCP)

Visual inspection

To meet the IMO standard the inspection is carried out following our in-house developed general standard "Visual/Sampling Check Plan"

Several materials on board are sampled, a complete overview of the sampled materials and sample locations are shown in the analysis results and on the floor plans.

c. Investigation Methods

➤ ASBESTOS

DEFINITION

Asbestos can be defined as a group of fibrous materials like silicates. According to the Guideline asbestos is material that contains one of the following substances:

- Chrysotile (CAS nr 12001-29-5);
- Amosite (CAS nr 12172-73-5);
- Crocidolite (CAS nr 12001-28-4);
- Tremolite (CAS nr 77536-68-6);
- Anthofilite (CAS nr 77536-67-5);
- Actinolite (CAS nr 77536-66-4).

LAWS AND REGULATIONS

- As domain of the Dutch Ministry of Infrastructure and Environment concerning ship inspection, the Dutch Shipping Inspectorate has issued instructions to ban the use of asbestos on board ships in order to implement SOLAS II-I regulation 3-5 and MSC.1/Circ 1379. An asbestos survey is conducted on board compliant with these Dutch Shipping Inspectorate instructions,
- Dutch certified survey bureaux (SC540) will perform in principle the asbestos survey. Inspectors deployed are personally certified according the guideline SC560," Expert Surveyor Asbestos" by IBEX a certification body accredited to ISO 17024.
- Lab testing, according our certification guideline, will be ordered to accredited laboratories (ISO 17025), e.g. Fibrecount Environmental Control in Rotterdam, The Netherlands.

From 1 January 2011 the new installation of materials which contain asbestos is prohibited.

In short the Dutch Shipping Inspectorate instructions are:

- | | |
|-----------------------------------------------------------|-------------------------------------------|
| a. Vessels in new build but not yet delivered: | Remove before delivery |
| b. Vessels delivered on or after 1st January 2011: | Remove immediately |
| c. Vessels delivered after 1st July 2002: | Remove within 3 years after discovery |
| d. Vessels delivered before 1 st of July 2002: | Remove immediately in case of health risk |

AIM

The aim of the survey is to prove that, based on the method as described in the Instruction, no asbestos containing materials are installed on board the vessel which is in violation with the SOLAS requirements

SCOPE

The inspection is restricted to a random sampling procedure on the used materials on board the vessel. The list of components as published in the Guideline, including its additions prescribed in the Instruction, is used as a guideline. The complete list includes a brief description of our observations on board and is added as an appendix to this report.

The inspection is restricted to non-destructive inspection. Unless otherwise agreed, no dismantling, cutting or breaking on behalf of the inspection of construction, equipment or components is part of the inspection.

OBSERVATIONS AND RESTRICTIONS

The general restrictions and basic principles that apply to our inspections are discussed below.

Engines, equipment and installations

Regarding the inspection of engines, auxiliaries, installations and other equipment, the following principles apply:

- Engines, auxiliaries, installations and other equipment will not be deconstructed. The inspection is limited to the exterior and parts that are directly accessible. Installation components will not be opened or damaged;
- Composite parts won't be opened or damaged;
- Inspection of pipe insulation will be based on randomly picked samples for each type of suspicious material. Our team leader will decide on the number of samples.
- Installation materials such as gaskets, packings, rope or canvas tape and covers, which are applied on board by the yard or subcontractors, will be sampled randomly. Of each type a representative number of samples will be taken.

The evaluation of the used gaskets is based on a random sampling check and visual check for conformity of the majority of the flange connections on board.

Accommodation

Regarding the inspection of accommodation, the following principles apply:

- All cabins and living or functional areas where accessible for inspection, but the inspection is restricted to a representative number of random picked available cabins;
- The inspection focuses on fire resistant materials, such as wall and ceiling finishes, fire compartments (including transit), heat protection on exposed decks and other insulation materials;
- In addition, the inspection is focused on other visible and accessible places and materials, such as floor finishes, adhesives, sealant and paints.

Equipment such as AC units, bridge equipment, refrigerators and galley equipment is visually checked from the outside only, or through normal opening doors or hatches.

Decks, holds and fixtures

Regarding the inspection of other compartments than the accommodation, the following principles apply:

- All other compartments will be fully inspected, as far as the compartments are accessible;
- Vapour proof insulation on e.g. cooling systems, will not be damaged for further determination. The inspection will be restricted to accessible surfaces and via existing openings;
- Ballast, bunkers and drinking water tanks and other void spaces, inaccessible cofferdams, double bottom tanks, etc. will not be opened for inspection;
- Equipment like winches, windlasses and cranes will only be inspected from the exterior;
- Only bituminous coating and thick mastic coating (applied on accessible surfaces) will be sampled.

TESTING CRITERIA

The threshold level, as specified in the Hong Kong Convention, will function as testing criteria. However the current possibilities for analysis lead to a detection level of approximately 0.1% asbestos in the asbestos containing material. Below this detection level materials can be considered asbestos free.

The analysis of the sampling will be directed to the accredited laboratory of Fibrecount BV.

The results of the analysis are fully documented in the relevant Appendix to the IHM and positive results listed in the IHM.

Our inspection approach on vessel is based on sampling all materials with a particular reference to the IMO Indicative List, 2.2.3.2 in **RESOLUTION MEPC. 269(68)**

➤ POLY CHLORINATED BIPHENYLS (PCBs)

DEFINITION

PCBs can be defined as man-made synthetic chemicals. The group of PCBs consists of 209 different types (congeners). Fifty of these congeners are found in commercial chemical compounds. PCBs are used as insulating fluid in e.g. transformers, capacitors, oils such as hydraulic cooling and heating oil, and in materials such as plastics and oil based paints.

The convention has determined a threshold value for PCBs at 50 ppm.

The US EPA threshold levels are:

- 50 ppm for hazardous waste
- 10ug/100cm² for wipes
- 1.0 ppm for oils

TESTING CRITERIA

Testing of all congeners is not feasible in practice. Therefore, several organizations have drafted a list of indicator congeners to be tested. This list of seven congeners, which is used by the International Council for the Exploration of the Sea (ICES) and by several governments, forms the basis of our investigation, except for US Flagged vessels.

The ICES7 list consists of the congeners 28, 52, 101, 118, 138, 153 and 180. The analysis of these samples is restricted to a qualitative analysis ordered to UCL Umwelt Control Labor GmbH Germany.

The proposed threshold levels as specified in the Hong Kong convention will function as testing criterion.

Our inspection approach on vessel is based on sampling all materials with a particular reference to the IMO Indicative List, 2.2.3.3 in **RESOLUTION MEPC. 269(68)**

For US flagged vessels the analysis is based on the US EPA guidelines methodology 8081/8082 (see <http://www.epa.gov/osw/hazard/testmethods/sw846/pdfs/8082a.pdf>). The threshold levels are based U.S. EPA guidelines as well.

The analysis of these samples is restricted to a qualitative analysis ordered to EMSL Analytical, Inc, 200 Route 130 North, Cinnaminson, NJ 08077, U.S.A.

The results of the analysis are fully documented in the relevant Appendix to the IHM and positive results listed in the IHM.

➤ **OZONE DEPLETING SUBSTANCES (ODS)**

The inventory of ODS focuses on fixed items that are part of the construction or equipment of the ship, incorporating gaseous ODS. Portable items and domestic items such as refrigerators in cabins are not part of this inventory.

Materials likely to have been formed using ODS as blowing agents (e.g insulating materials) are sampled for analysis.

The analysis of these samples is restricted to a qualitative analysis ordered to UCL Umwelt Control Labor GmbH Germany

➤ **ORGANOTIN COMPOUNDS (TBT) in anti-fouling**

Inspection is based on the ship's certificates as required by the class society. Copies of the certificates are given in the relevant Appendix to the IHM. The original certificates will apply with the ships delivery.

➤ **Perfluorooctane sulfonic acid (PFOS)**

The inspection is concentrated on foam of fire extinguishers and carpets. Samples will be taken for further analyses ordered to UCL Umwelt Control Labor GmbH Germany.

PFOS was the key ingredient in Scotchgard, a fabric protector made by 3M, and numerous stain repellents. PFOS has been used to make aqueous film forming foam (AFFF), a component of fire-fighting foams, and alcohol-type concentrate foams.

PFOS compounds can also be found in some impregnation agents for textiles, paper, and leather; in wax, polishes, paints, varnishes, and cleaning products for general use; in metal surfaces, and carpets.

The threshold level is zero for new installations.

Particulars of the FPSO Fluminense

Distinctive number or letters	C6FU8
Port of Registry	Nassau
Type of Vessel	FPSO
IMO Number	7389405
Name of Shipbuilder	Kockums Mek Verks
Name of Shipowner	Shell Brasil Petroleo Ltda
Date of Delivery	01 August 1974

Attachments:

- Zone and level Definitions
- Location Diagrams of Hazardous Materials on Board
- VSCP
- Asbestos documentation
- PCB, HM & ODS Documentation
- Radiation report
- Surveyor's 'Approved Hazmat Expert' certificate

Survey carried out offshore at BJSa Bijupira and Salema Field, Macae, Brazil
15th to 22nd April, 2021

Signature:



Frank Fox
Superintendent

On behalf of Sea2Cradle B.V.

IHM PART 1 MEPC TABLE

Part I
Hazardous materials contained in the ship's structure and equipment

I-1 Paints and coating systems containing materials listed in Table A and Table B of Appendix 1 of these guidelines

No.	Application of paint	Name of paint	Sample no	Location	Materials (classification in appendix	Remarks
1	Deck paint	Yellow paint	G- FLU 08	01 Nav Deck	Pb 10600 mg/kg	
2	Bracket paint	Red paint	G - FLU 51	05A Upper Deck	Pb 1450 mg/kg	
3	Deck paint	Red paint	G - FLU 53	05A Upper Deck	Pb 6000 mg/kg Cr 1490 mg/kg	
4	Internal paint	White paint	G - FLU 31	08 Lower platform ER	PB 3210 mg/kg Cr 1100 mg/kg	
5	Internal paint	Red paint	G - FLU 36	09 Tanktop ER	Pb 3190 mg/kg	
6	Machinery paint	Green paint	G - FLU 37	09 Tanktop ER	Pb 5320 mg/kg	

I-2 Equipment and machinery containing materials listed in Table A and Table B of Appendix 1 of these guidelines

No.	Name of equipment and machinery	Location	Materials (classification in appendix 1)	Parts where used	Approximate quantity		Remarks
1	Cold stores	A Deck	R11 Polyurethane Foam	Insulation	20 m3	2t	R11 used as blowing agent (sample G-FLU 62)
2	Radio/GMDSS	Top of Nav Deck	Lead and Lead compounds	Lead Acid Batteries	2		
3	Emergency Generator	B Deck PS	Lead and Lead compounds	Lead Acid Batteries	4		
4	UPS Systems	Accommodation	Lead and Lead compounds	Lead Acid Batteries	15		
5	UPS Systems	04A E House	Lead and Lead compounds	Lead Acid Batteries	48		
6	Battery Room	05A Upper Deck AFT	Lead and Lead compounds	Lead Acid Batteries	54		
7	FWD Em Fire Pump	05B Upper Deck FWD	Lead and Lead compounds	Lead Acid Batteries	8		
8	Main Em Fire pump	08 Lower Engine Room	Lead and Lead compounds	Lead Acid Batteries	8		
9	ECR Switchboard	07 Boiler platform ER	Lead and Lead compounds	Lead Acid Batteries	2		
10	Various equipments	Engine room	Mercury and mercury compounds	Thermometers	50		
11	Smoke detectors	Throughout the vessel	Radioactive substances	Smoke detectors	210		

I-3 Structure and hull containing materials listed in Table A and Table B of Appendix 1 of these guidelines

No.	Name of structural element	Location	Sample no	Materials (classification in appendix 1)	Parts where used	Approximate quantity		Remarks
1	Steam Drum	Port & Starboard main boiler	A-FLU 18	Asbestos	Heat insulation Gypsum (plaster of Paris)	20m3	46t	2 - 5% Chrysotile, 2 - 5% Amosite
	Water drum		A-FLU 26	Asbestos				2 - 5% Chrysotile, 2 - 5% Amosite
	Bottom Header		A-FLU 24	Asbestos				5 - 10% Chrysotile
	Main steam pipe		A-FLU 30, A-FLU 39	Asbestos				5 - 10% Chrysotile
2	Exhaust uptakes (2)	Hedemora V16 Generator Level 08 Lower platform ER	A-FLU 43	Asbestos	Heat insulation Gypsum (plaster of Paris)	10 m3	23t	2 - 5% Chrysotile, 2 - 5% Amosite
3	Main Condensor	Main Condensor	A-FLU 45	Asbestos	Heat insulation Canvas	2 m3	5t	15 - 30% Chrysotile, 2 - 5% Amosite
			A-FLU 46	Asbestos	Heat insulation Fibre	6 m3	16t	30 - 60% Chrysotile, 2 - 5% Amosite
5	HP & LP Turbines	HP & LP Turbines	A-FLU 48	Asbestos	Heat insulation Fibre	14 m3	36t	2 - 5% Chrysotile
6	Access & Mud Doors	Main Boiler	A-FLU 20	Asbestos	Cord (packing and Jointing)	20 kg		>60 % Chrysotile
7	Boiler Feed pipe	Boiler Feed pipe	A-FLU 27	Asbestos	Cord (packing and Jointing)	10 kg		>60 % Chrysotile
8	Spare role of packing	Starboard shelving level 07 Boiler platform	A-FLU 33	Asbestos	Cord (packing and Jointing)	5 kg		>60 % Chrysotile

IHM Part 1A

PART 1A - Materials Contained in Ship's Structure or Equipment
Materials Listed in Appendix 1 Table A

(Ref MEPC 68/21/Add.1 Annex 17. (RESOLUTION MEPC.269(68))

Code A1	Asbestos (threshold value 0.1%)			
Type of Asbestos Materials (board, pipe lagging, contained)	Location	Approximate Quantity	Notes	
<u>Heat Insulation</u> Gypsum [plaster of Paris]	<u>Port & Starboard Main Boiler</u> Steam Drum Water Drum Bottom Header Main Steam Pipe	20 m ³ [46t]		1 1 2 2
	<u>HEDEMORA V16 Diesel Generator</u> Exhaust Uptakes x 2	10m ³ [23t]		1
<u>Heat Insulation</u> Canvas Fibre Fibre	Main Condenser	2 m ³ [5t]		4
	Main Condenser	6m ³ [16t]		5
	H.P & L.P. Turbines	14m ³ [36t]		6
<u>Cord</u> Packing and Jointing	Main Boiler Access & Mud Doors	20 kg		3
	Boiler Feed Pipe	10kg		3
	Spare Roll of Packing	5kg		3
Note: 1. 2 - 5% Chrysotile, 2 - 5% Amosite 2. 5 – 10% Chrysotile 3. >60 % Chrysotile 4. 15 – 30% Chrysotile, 2 – 5% Amosite 5. 30 – 60% Chrysotile, 2 – 5% Amosite 6. 2 – 5% Chrysotile				

Caution: Asbestos Containing Material (ACM) may be found underneath materials that do not contain asbestos.

Code A2	Polychlorinated Biphenyls (PCBs) (threshold value 50 mg/kg)			
Material	Location	Approximate Quantity	Notes	
		Nil		

Code A3	Ozone Depleting Substances (no threshold value)		
Type	Location	Approximate Quantity	Notes
<u>R11</u> Polyurethane Foam Insulation	05. A Deck Cold Stores	20m ³ [2t]	01.
R11 used as blowing agent.			

Code A4	Antifouling Organotin Compounds as a Biocide (threshold value 2500 mg/kg)		
Materials	Location	Approximate Quantity	Notes
		Nil	
No record of anti-fouling application.			

* EU Regulation	Perfluorooctane sulfonic acid (PFOS) (Threshold value 10 mg/kg in substances or preparations) (Threshold value 1 µg/m² in textiles or coated materials)		
Materials	Location	Approximate Quantity	Notes
		Nil	
* for ships flying the flag of an EU Member country			

IHM Part 1B

PART 1B - Materials Contained in Ship's Structure or Equipment**Materials Listed in Appendix 1 Table B**

(Ref MEPC 68/21/Add.1 Annex 17. (RESOLUTION MEPC.269(68))

Code B1			
Cadmium and Cadmium Compounds (threshold value 100 mg/kg)			
Type	Location	Approximate Quantity	Notes
		Nil	

Code B2			
Hexavalent chromium and hexavalent chromium compounds (threshold value 1000 mg/kg)			
Type	Location	Approximate Quantity	Notes
Paint	Certain paints have high levels of Chromium as per Walkaround		

Code B3			
Lead and Lead Compounds (threshold value 1000 mg/kg)			
Type	Location	Approximate Quantity	Notes
Paint	Certain paints have high levels of lead as per Walkaround		
Lead Acid Batteries	Radio/GMDSS – 00. Top of Nav. Deck Em. Generator – 04. B Deck Port UPS systems - Accommodation UPS systems – 04A E House Battery Room – 05A. Upper Deck Aft (Starboard) Fwd Emergency Fire Pump - 05B. Upper Deck Forward Main Emergency Fire Pump - 08. Lower Engine Room Engine Control Room Switchboard – 07. Boiler Platform Engine Room	2 4 15 48 54 8 8 2	

Code B4			
Mercury and Mercury Compounds (threshold value 1000 mg/kg)			
Type	Location	Approximate Quantity	Notes
Thermometers	Engine Room	50	

Code B5		Polybrominated Biphenyl (PBB) (threshold value 50 mg/kg)		
Type	Location	Approximate Quantity	Notes	
	No record or documentation			

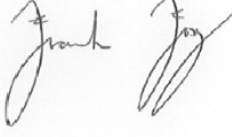
Code B6		Polybrominated Diphenyl Ethers (PBDEs) (Threshold value 1000 mg/kg)		
Type	Location	Approximate Quantity	Notes	
	No record or documentation			

Code B7		Polychlorinated Naphthalenes (PCN) (threshold value 50 mg/kg)		
Type	Location	Approximate Quantity	Notes	
	No record or documentation			

Code B8		Radioactive Substances (no threshold value)		
Type	Location	Approximate Quantity	Notes	
As per radiation survey				

Code B9		Shortchain Chlorinated Paraffins (threshold value 1%)		
Type	Location	Approximate Quantity	Notes	
	No record or documentation			

EU Regulation		Hexabromocyclododecane (HBCDD) (Brominated flame retardant) (Threshold value 100 mg/kg)		
Materials	Location	Approximate Quantity	Notes	
		Nil		

Part 1 completed by	Frank Fox	Date	23/06/2021
Signature		On behalf of	Sea2Cradle

WHILST EVERY CARE HAS BEEN TAKEN TO ENSURE THAT THE INFORMATION PROVIDED IN PART 1 OF THIS INVENTORY IS ACCURATE, UP-TO-DATE AND COMPLETE, NEITHER THE SHIPOWNER NOR ANY SHIPOWNER'S REPRESENTATIVE ACCEPTS ANY LIABILITY FOR ANY ERRORS OR OMISSIONS IN THE INVENTORY OR FOR ANY ACTS OR OMISSIONS OF ANY PERSON IN THE HANDLING, REMOVAL OR DISPOSAL OF THESE SUBSTANCES, WHETHER DONE IN RELIANCE ON THE INFORMATION IN THIS INVENTORY OR OTHERWISE.

IT REMAINS THE RESPONSIBILITY OF EACH EMPLOYER TO PROVIDE APPROPRIATE TRAINING, GUIDANCE AND PERSONAL PROTECTIVE EQUIPMENT TO ITS EMPLOYEES TO ENSURE THE IDENTIFICATION, LOCATION, HANDLING AND DISPOSAL OF ALL MATERIALS ON BOARD THE VESSEL OR INHERENT IN ITS STRUCTURE, EQUIPMENT OR MACHINERY.

IT IS STRESSED THAT THE INFORMATION PROVIDED IN THIS INVENTORY IS NOT A CONTRACTUAL STATEMENT OF PRECISE QUANTITIES OF RESIDUES AND MATERIALS ON BOARD. THE QUANTITIES GIVEN ARE ESTIMATES ONLY AND NO GUARANTEE OF THEIR ACCURACY IS EITHER GIVEN OR IMPLIED.

See ABS Rio de Janeiro Letter Ref T2189020 Dated 18-NOV-2021

IHM Part 2

PART 2 – Operationally Generated Wastes
Materials Listed in Table C

(Ref MEPC 68/21/Add.1 Annex 17. (RESOLUTION MEPC.269(68)))

Code C 31		Waste Oil (Sludge)		
Location	Frame No.	Capacity m ³	Approximate Quantity	Notes
Waste Oil Tank	93-97	17		

Code C 32		Bilge and/or waste water generated by the after-treatment systems fitted on machineries		
Location	Frame No.	Capacity m ³	Approximate Quantity	Notes
Bilge Tank	101-107	178		

Code C 33		Oily Liquid Cargo Tank Residues		
Location	Frame No.	Capacity m ³	Approximate Quantity	Notes

Code C 34		Ballast water		
Location	Frame No.	Capacity (m ³)	Approximate Quantity	Notes
Forepeak Tank	387-409	7866		
No.4 Ballast Tank (P)	262-292	14996		
No.4 Ballast Tank (S)	262-292	14996		
No.7 Ballast Tank (P)	172-202	14947		
No.7 Ballast Tank (S)	172-202	14947		
Aft Peak Tank Upper	AE-65	1238		

Code C 35		Raw Sewage		
Location	Frame No	Capacity m ³	Approximate Quantity	Notes

**FILED BY ABS FOR
REFERENCE ONLY**

Code C 36		Treated Sewage		
Location	Frame No.	Capacity m ³	Approximate Quantity	Notes
Sewage Tank – 06. Upper Platform Engine Room				

Code C 37		Non-Oily Liquid Cargo Residue		
Location	Frame no.	Capacity m ³	Approximate Quantity	Notes

Code C 39		Dry Cargo Residues		
Location		Approximate Quantity	Notes	

Code C40		Medical Waste/Infectious Waste		
Location		Approximate Quantity	Notes	

Code C41		Incinerator Ash		
Location		Approximate Quantity	Notes	

Code C42		Garbage		
Location		Approximate Quantity	Notes	

**FILED BY ABS FOR
REFERENCE ONLY**

Code C43		Fuel Tank Residues		
Location		Frame No.	Approximate Quantity	Notes
<i>This refers to unpumpables/ullages. See Part 3A C29 for bunker remains</i>				
MDO Storage Tank (P)		73-107		
MDO Storage Tank (S)		73-107		
MDO Setting Tank		69-81		
MDO Service Tank		69-81		

Code C44		Oily Solid Cargo Tank Residues		
Location		Frame No.	Approximate Quantity	Notes

Code C45		Oily or Chemical Contaminated Rags		
Location		Approximate Quantity	Notes	

Code C53		Dry Tank Residues		
Location		Frame No.	Approximate Quantity	Notes

Code C54		Cargo Residues		
Location		Frame no.	Approximate Quantity	Notes
No.1 Cargo Oil Tank (C)		367-387		
No.2 Cargo Oil Tank (C)		307-367		
No.3 Cargo Oil Tank (C)		292-307		
No.4 Cargo Oil Tank (C)		262-292		
No.5 Cargo Oil Tank (C)		232-262		
No.6 Cargo Oil Tank (C)		187-232		
No.7 Cargo Oil Tank (C)		142-187		
No.8 Cargo Oil Tank (C)		112-142		
Clean Slop Tank (P)		117-142		
Slop Tank (P)		107-117		

**FILED BY ABS FOR
REFERENCE ONLY**

--	--	--	--

Part 2 completed by	<i>NAME</i>	Date	2000-00-00
Signature		On behalf of	<i>Company</i>

**FILED BY ABS FOR
REFERENCE ONLY**

WHILST EVERY CARE HAS BEEN TAKEN TO ENSURE THAT THE INFORMATION PROVIDED IN PART 2 OF THIS INVENTORY IS ACCURATE, UP-TO-DATE AND COMPLETE, NEITHER THE SHIPOWNER NOR ANY SHIPOWNER'S REPRESENTATIVE ACCEPTS ANY LIABILITY FOR ANY ERRORS OR OMISSIONS IN THE INVENTORY OR FOR ANY ACTS OR OMISSIONS OF ANY PERSON IN THE HANDLING, REMOVAL OR DISPOSAL OF THESE SUBSTANCES, WHETHER DONE IN RELIANCE ON THE INFORMATION IN THIS INVENTORY OR OTHERWISE.

IT REMAINS THE RESPONSIBILITY OF EACH EMPLOYER TO PROVIDE APPROPRIATE TRAINING, GUIDANCE AND PERSONAL PROTECTIVE EQUIPMENT TO ITS EMPLOYEES TO ENSURE THE IDENTIFICATION, LOCATION, HANDLING AND DISPOSAL OF ALL MATERIALS ON BOARD THE VESSEL OR INHERENT IN ITS STRUCTURE, EQUIPMENT OR MACHINERY.

IT IS STRESSED THAT THE INFORMATION PROVIDED IN THIS INVENTORY IS NOT A CONTRACTUAL STATEMENT OF PRECISE QUANTITIES OF RESIDUES AND MATERIALS ON BOARD. THE QUANTITIES GIVEN ARE ESTIMATES ONLY AND NO GUARANTEE OF THEIR ACCURACY IS EITHER GIVEN OR IMPLIED.

See ABS Rio de Janeiro Letter Ref T25020 Dated 18-NOV-2021

IHM Part 3A

**PART 3 (A) Stores and Spares
Materials Listed in Table C**

(Ref MEPC 68/21/Add.1 Annex 17. (RESOLUTION MEPC.269(68))

Code C 1	Kerosene		
Location		Approximate Quantity	Notes

Code C 2	White Spirit		
Location		Approximate Quantity	Notes

Code C 3	Lubricating Oils (In machinery and storage tanks)		
Machinery Description	Location	Approximate Quantity including reservoirs	Notes
<u>Power Generation</u> Turbo Alternator Stal Laval Hedemora Diesel Generator V16 Hedemora Diesel Generator V16	08. Lower Engine Room 08. Lower Engine Room 08. Lower Engine Room		
Solar Gas Turbine No.1 Solar Gas Turbine No.2 Solar Gas Turbine No.3 Solar Gas Turbine No.4	04A. Module 05 04A. Module 05 04A. Module 06 04A. Module 06		
Booster Gas Compressor Skid A Booster Gas Compressor Skid B Booster Gas Compressor Skid C Booster Gas Compressor Skid D	04A. Module 07 04A. Module 07 04A. Module 07 04A. Module 07		
Flash Gas Compressor Skid A Flash Gas Compressor Skid B	04A. Module 08 04A. Module 08		
Compressor GA75 A Compressor GA75 B	04A. Module 09 04A. Module 09		
Emergency Diesel Generator Fwd Emergency Fire Pump Main Emergency Fire Pump	04. B Deck 05B. Upper Deck Forward 08. Lower Engine Room		
Air Compressor – Atlas Copco 01	08. Lower Engine Room		

**FILED BY ABS FOR
REFERENCE ONLY**

Air Compressor – Atlas Copco 02 MDO Separator	08. Lower Engine Room 08. Lower Engine Room		
Port A/C Plant Compressors Stbd A/C Plant Compressors Domestic Reefer Compressor 01 Domestic Reefer Compressor 02	02. D Deck Port 02. D Deck Starboard 06. Upper Engine Room 06. Upper Engine Room		
Main Chain Turret Anchorage Pull-in Reel Turret Anchorage System Anchorage Main Deck Forward Anchorage Main Deck Aft After Winches	04B. Topside Forward 04B. Topside Forward 04B. Topside Forward 05. Upper Deck Fwd 05. Upper Deck Aft 05. Upper Deck Accom.		

Lib. Oil Tank Designation	Frame No.	Capacity m ³	Approximate Quantity	Notes
L.O. Storage Tank	71-73	31		
L.O. Service Tank	69-71	31		
L.O. Sump Tank	80-85	27		

Lib. Oil Stores (Drums)	Location	Approximate Quantity	Notes

Code C 4 Hydraulic Oils (In machinery and storage tanks)			
Machinery Description	Location	Approximate Quantity including reservoirs	Notes
Steering Gear Cargo Pumps HPU Fwd Emergency Fire Pump Valve Operating HPU Main Emergency Fire Pump HPU Turret (Swivel) HPU Anchorage Deck Crane Stbd (SWL 22.5 ton) Deck Crane Port (SWL 7.3 ton) Aft Stores Crane	06. Steering Gear Flat 04A. HPU Room 05B. Upper Deck Forward 06. Upper Engine Room 08. Lower Engine Room 05B. Upper Deck Forward 05B. Upper Deck Forward 05A. Upper Deck Aft 05A. Upper Deck Aft 05. Upper Deck	Empty	

Hyd. Oil Tank Designation	Tank frame	Capacity m ³	Approximate Quantity	Notes
Cargo Pumps HPU Fwd Emergency Fire Pump Main Emergency Fire Pump Valve Operating HPU HPU Turret (Swivel) HPU Anchorage				

**FILED BY ABS FOR
REFERENCE ONLY**

Hyd. Oil Stores (Drums)	Location	Approximate Quantity	Notes

Code C 5	Anti-seize Compounds		
	Location	Approximate Quantity	Notes

Code C 6	Fuel Additives		
	Location	Approximate Quantity	Notes

Code C 7	Engine Coolant Additives & Water Treatments		
Machinery Description	Location	Approximate Quantity including reservoirs	Notes
<i>Give tonnage of treated engine coolant</i>			
Main Engine	DECOMMISSIONED		
Generators			
Emergency Generator			
Central Cooling System			

Engine Additives/Treatment Chemical Stores	Location	Approximate Quantity including reservoirs	Notes
N/A			

Code C 8	Antifreeze Fluids		
	Machinery Location	Approximate Quantity	Notes
	<i>Give tonnage of treated water in use (eg Em.Gen. Coolant)</i>		

Antifreeze Stores	Location	Approximate Quantity	Notes

**FILED BY ABS FOR
REFERENCE ONLY**

Code C 9		Boiler and Feedwater Treatment and Test Reagents	
Machinery Description <i>Give tonnage of treated water in use</i>	Location	Approximate Quantity including reservoirs	Notes
Main Boiler(s)	DECOMMISSIONED		
Economiser			
Auxiliary Boiler			

Boiler & Feed Water Chemicals & Test Reagents	Location	Approximate Quantity	Notes
N/A			

Code C10		De-ioniser Regeneration Chemicals	
Location		Approximate Quantity	Notes

Code C11		Evaporator Dosing Descaling Acids	
Location		Approximate Quantity	Notes

Code C12		Paint Stabilisers/Rust Stabilisers	
Location		Approximate Quantity	Notes

Code C 13		Solvents/Thinners	
Location		Approximate Quantity	Notes
Paint Locker – 05B Upper Deck Forward			

**FILED BY ABS FOR
REFERENCE ONLY**

Code C 14	Paints		
Location		Approximate Quantity	Notes
Paint Locker – 05B Upper Deck Forward			

Code C 15	Chemical Refrigerants		
Location		Approximate Quantity	Notes

Code C 16	Battery Electrolyte		
Location		Approximate Quantity	Notes
<i>Only if in bulk (stores), not in batteries (see B3 and C46)</i>			

Code C 17	Alcohol, Methylated Spirit		
Location		Approximate Quantity	Notes

Code C 18	Acetylene		
Location		Approximate Quantity	Notes
Acetylene Locker – 05. Upper Deck Accommodation Port			

Code C 19	Propane		
Location		Approximate Quantity	Notes

Code C20	Butane		
Location		Approximate Quantity	Notes

**FILED BY ABS FOR
REFERENCE ONLY**

Code C 21		Oxygen	
Location		Approximate Quantity	Notes
<i>Include ER use and medical</i>			
Oxygen Locker – 05. Upper Deck Accommodation Port Medical Oxygen - Hospital - 05. Upper Deck Accommodation			

Code C 22		CO ₂	
Location		Approximate Quantity	Notes
05. Upper Deck Accommodation – Bulk CO ₂ System		Decommissioned	
Solar Gas Turbine No.1 - 04A. Module 05		9 Cylinders	
Solar Gas Turbine No.2 - 04A. Module 05		9 Cylinders	
Solar Gas Turbine No.3 - 04A. Module 06		9 Cylinders	
Solar Gas Turbine No.4 - 04A. Module 06		9 Cylinders	

Code C 23		Perfluorocarbons (PFCs)	
Location		Approximate Quantity	Notes

Code C 24		Methane	
Location		Approximate Quantity	Notes

Code C 25		Hydrofluorocarbon (HFCs) (R134a/401a/404a etc)	
Type	Location	Approximate Quantity (kg)	Notes
All Systems on vessel use R407C/R404A/R410A			
Plant	Main A/C Plant Port – 02. D Deck Port	200	
	Main A/C Plant Stbd – 02. D Deck Stbd	200	
	MCC & Instrument Room x 2 – 04A. Topside Aft Laboratory – 04A. Topside Aft		
	Domestic Reefer Plant – 06. Upper Engine Room	100	
Units	Wheelhouse – 00. Top of Nav. Deck		
	Shell Office – 00. Top of Nav. Deck		

**FILED BY ABS FOR
REFERENCE ONLY**

	Accommodation Container A x 2 – 01. Nav. Deck Accommodation Container B x 2 – 02. D Deck Accommodation Container C x 2 – 02. D Deck Central Control Room – 05. Upper Deck Accom. Mess Room – 05. Upper Deck Accom. Engine Control Room – 06. Upper Platform E.R. Machinery Shop – 06. Upper Platform E.R.		
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--

Code C 27	Nitrous Oxide (N ₂ O)		
	Location	Approximate Quantity	Notes

Code C 28	Sulphur Hexafluoride (SF ₆)		
	Location	Approximate Quantity	Notes

Code C 29	Bunkers : HFO/IFO/MDO				
	Tank Description	Frame No.	Capacity m ³	Approximate Quantity	Notes
	MDO MDO Storage Tank (P) MDO Storage Tank (S) MDO Settling Tank MDO Service Tank	73-107 73-107 69-81 74-81	4022 4022 574 359		
	GAS/DIESEL Emergency Diesel Generator Fwd Emergency Fire Pump Main Emergency Fire Pump				

Code C 30	Grease		
	Location	Approximate Quantity	Notes
	<i>Only grease in stores - not in use</i>		

Code C 38	Fuel Gas		
	Location	Approximate Quantity	Notes
	<i>This refers to gas used as fuel (LNG) not gasoline/petrol</i>		

**FILED BY ABS FOR
REFERENCE ONLY**

Code C46		Batteries (All types incl. Lead acid batteries)		
Type and Use <i>Only batteries in store (spares or waste) otherwise in B1 and B3. Not consumer batteries (AA AAA etc) see Part 3B</i>		Location	Approximate Quantity	Notes
Code C47		Pesticides/insecticide sprays		
Location		Approximate Quantity	Notes	
Code C48		Extinguishers, including portable CO ₂ units		
Location	Type	Approximate Quantity	Notes	
Details as per Fire Plan	9 ltr Water	14		
	12 kg Dry Powder 4 kg Dry Powder 50 kg Dry Powder	31 1 3		
	8.3 ltr FFFP Foam (6%) - Turret	17		
	6 kg CO ₂ 25 kg CO ₂ 44.9 kg CO ₂	60 18 2		
	8.1 kg Dry Chemical - Turret	17		
Code C49		Chemical Cleaner (incl electrical equipment cleaner, carbon remover)		
Type <i>(product brand)</i>	Location	Approximate Quantity	Notes	
Code C50		Detergent/bleacher		
Location		Approximate Quantity	Notes	

**FILED BY ABS FOR
REFERENCE ONLY**

--	--	--

Code C51	Miscellaneous Medicines		
	Location <i>(product brand) (Attach separate list of medical stores)</i>	Approximate Quantity	Notes

Code C52	Firefighting Clothing and Personal Protective Equipment		
Item <i>Include BA sets & spares, EEBD</i>	Location	Approximate Quantity	Notes

Code C55	Spare Parts which contain materials listed in Table A or Table B		
	Location	Approximate Quantity	Notes

Part 3A completed by	NAME	Date	<i>2000-00-00</i>
Signature		On behalf of	<i>Company</i>

WHILST EVERY CARE HAS BEEN TAKEN TO ENSURE THAT THE INFORMATION PROVIDED IN PART 3 OF THIS INVENTORY IS ACCURATE, UP-TO-DATE AND COMPLETE, NEITHER THE SHIPOWNER NOR ANY SHIPOWNER'S REPRESENTATIVE ACCEPTS ANY LIABILITY FOR ANY ERRORS OR OMISSIONS IN THE INVENTORY OR FOR ANY ACTS OR OMISSIONS OF ANY PERSON IN THE HANDLING, REMOVAL OR DISPOSAL OF THESE SUBSTANCES, WHETHER DONE IN RELIANCE ON THE INFORMATION IN THIS INVENTORY OR OTHERWISE.

IT REMAINS THE RESPONSIBILITY OF EACH EMPLOYER TO PROVIDE APPROPRIATE TRAINING, GUIDANCE AND PERSONAL PROTECTIVE EQUIPMENT TO ITS EMPLOYEES TO ENSURE THE IDENTIFICATION, LOCATION, HANDLING AND DISPOSAL OF ALL MATERIALS ON BOARD THE VESSEL OR INHERENT IN ITS STRUCTURE, EQUIPMENT OR MACHINERY.

IT IS STRESSED THAT THE INFORMATION PROVIDED IN THIS INVENTORY IS NOT A CONTRACTUAL STATEMENT OF PRECISE QUANTITIES OF RESIDUES AND MATERIALS ON BOARD. THE QUANTITIES GIVEN ARE ESTIMATES ONLY AND NO GUARANTEE OF THEIR ACCURACY IS EITHER GIVEN OR IMPLIED.

**FILED BY ABS FOR
REFERENCE ONLY**

IHM Part 3B

PART 3 (B) - Materials Listed in Table D**Regular Consumable (Domestic) Goods Potentially Containing Hazardous Materials**

(Ref MEPC 68/21/Add.1 Annex 17. (RESOLUTION MEPC.269(68))

Equipment	Description/Location	Quantity	Notes
D1 : Refrigeration Units	Conventional refrigerators		
	Water fountains		
	Deep freezer		
	Ice machine		
	Drinks chillers		
	Food chillers		
D1 : Radar & Nav Equipment Displays	CRT Display		
	Flat screen		
D1 : Computers (PCs)			
D1 : Printers			
D1 : Scanners			
D1 : UPS Units			
D1 : Television Sets	CRT Displays		
	Flat screen		
D1 : Radio Sets			
D1 : Video Cameras			
D1 : Video Recorders			
D1 : Telephones			

**FILED BY ABS FOR
REFERENCE ONLY**

D1 : Consumer batteries			
D2 : Filament Bulbs <i>(estimated)</i>			
D2 : Lamps			
D2 : Fluorescent Lamps <i>(estimated)</i>			
D3 :			

Part 3B completed by	<i>NAME</i>	Date	<i>2000-00-00</i>
Signature		On behalf of	<i>Company</i>

WHILST EVERY CARE HAS BEEN TAKEN TO ENSURE THAT THE INFORMATION PROVIDED IN PART 3 OF THIS INVENTORY IS ACCURATE, UP-TO-DATE AND COMPLETE, NEITHER THE SHIPOWNER NOR ANY SHIPOWNER'S REPRESENTATIVE ACCEPTS ANY LIABILITY FOR ANY ERRORS OR OMISSIONS IN THE INVENTORY OR FOR ANY ACTS OR OMISSIONS OF ANY PERSON IN THE HANDLING, REMOVAL OR DISPOSAL OF THESE SUBSTANCES, WHETHER DONE IN RELIANCE ON THE INFORMATION IN THIS INVENTORY OR OTHERWISE.

IT REMAINS THE RESPONSIBILITY OF EACH EMPLOYER TO PROVIDE APPROPRIATE TRAINING, GUIDANCE AND PERSONAL PROTECTIVE EQUIPMENT TO ITS EMPLOYEES TO ENSURE THE IDENTIFICATION, LOCATION, HANDLING AND DISPOSAL OF ALL MATERIALS ON BOARD THE VESSEL OR INHERENT IN ITS STRUCTURE, EQUIPMENT OR MACHINERY.

IT IS STRESSED THAT THE INFORMATION PROVIDED IN THIS INVENTORY IS NOT A CONTRACTUAL STATEMENT OF PRECISE QUANTITIES OF RESIDUES AND MATERIALS ON BOARD. THE QUANTITIES GIVEN ARE ESTIMATES ONLY AND NO GUARANTEE OF THEIR ACCURACY IS EITHER GIVEN OR IMPLIED.

FILED BY ABS FOR REFERENCE ONLY

See ABS Rio de Janeiro Letter Ref T2189020 Dated 18-NOV-2021

Other hazardous materials

Other hazardous materials (potential, non-IMO/MEPC/EU guidelines)

Equipment containing Lithium Batteries		
Location	Quantity	Notes
EPIRB 01. Nav. Deck 05. Em. Ops Centre	1 4	
LIFEJACKET LIGHTS As per fire and safety plan	393	

FM200		
Location and Item Description	Quantity	Notes
Em. Generator – 04. B Deck Port 04A. Topside MCC Room 05B. Fwd Emergency Fire Pump 05B. Paint Locker	2 4 1 1	


AFFF Foam		
Location and Item Description	Quantity	Notes
Foam Tank Room AGEFOAM 2136 AFFF/ARC 3% x 6% AGEFOAM 2103 AFFF 3%	2 x 5000 litres	

Pyrotechnics		
	Quantity	Notes
DISTRESS SIGNALS 01. Nav. Deck 05. Em. Ops Centre	12 4	
LINETHROWING EQUIPMENT 01. Nav. Deck 05. Em. Ops Centre	6 1	

Lifeboats complete with fuel and statutory equipment		
Location and Item Description	Quantity	Notes
04. B DECK		
60 Person Port & Starboard	2	
50 Person Port & Starboard	2	

Liferafts complete with self inflation devices and statutory equipment		
Location and Item Description	Quantity	Notes
04. B DECK – GRAVITY		
25 person	2	
20 person	4	
16 person	3	
04. B DECK – DAVIT		
16 person	3	
04B. FORECASTLE		
10 person	1	

Glycol & Chemical Bulk Tanks (if applicable)		
Location	Capacity – Bulk Tanks	Notes
Glycol Tanks		
Ethanol Tank		
Other Chemical Tanks		

Completed by	Frank Fox	Date	22/04/2021
Signature		On behalf of	Sea2Cradle

WHILST EVERY CARE HAS BEEN TAKEN TO ENSURE THAT THE INFORMATION PROVIDED IN THIS PART OF THIS INVENTORY IS ACCURATE, UP-TO-DATE AND COMPLETE, NEITHER THE SHIPOWNER NOR ANY SHIPOWNER'S REPRESENTATIVE ACCEPTS ANY LIABILITY FOR ANY ERRORS OR OMISSIONS IN THE INVENTORY OR FOR ANY ACTS OR OMISSIONS OF ANY PERSON IN THE HANDLING, REMOVAL OR DISPOSAL OF THESE SUBSTANCES, WHETHER DONE IN RELIANCE ON THE INFORMATION IN THIS INVENTORY OR OTHERWISE.

IT REMAINS THE RESPONSIBILITY OF EACH EMPLOYER TO PROVIDE APPROPRIATE TRAINING, GUIDANCE AND PERSONAL PROTECTIVE EQUIPMENT TO ITS EMPLOYEES TO ENSURE THE IDENTIFICATION, LOCATION, HANDLING AND DISPOSAL OF ALL MATERIALS ON BOARD THE VESSEL OR INHERENT IN ITS STRUCTURE, EQUIPMENT OR MACHINERY.

IT IS STRESSED THAT THE INFORMATION PROVIDED IN THIS INVENTORY IS NOT A CONTRACTUAL STATEMENT OF PRECISE QUANTITIES OF RESIDUES AND MATERIALS ON BOARD. THE QUANTITIES GIVEN ARE ESTIMATES ONLY AND NO GUARANTEE OF THEIR ACCURACY IS EITHER GIVEN OR IMPLIED.

Appendices

- Zone and level Definitions
- Location Diagrams of Hazardous Materials on Board
- Visual Sampling Check Plan
- Asbestos documentation
- Hazmat documentation
- Radiation report
- Medicines documentation
- Surveyor's 'Approved Hazmat Expert' certificate

See ABS Rio de Janeiro Letter Ref T2189020 Dated 18-NOV-2021

Zone and Level Definitions

See ABS Rio de Janeiro Letter Ref T2189020 Dated 18-NOV-2021

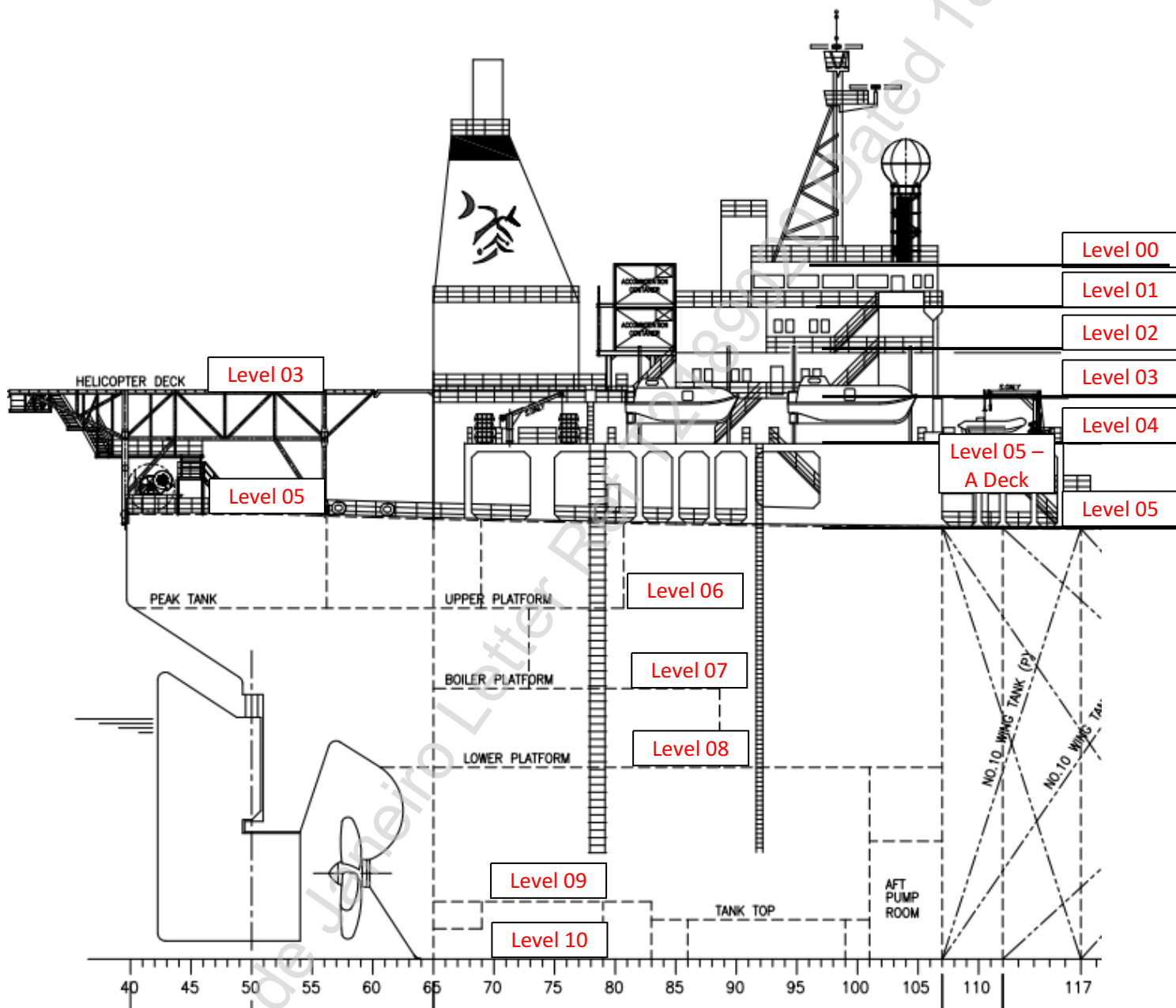
Vessel Zone and Level Definitions

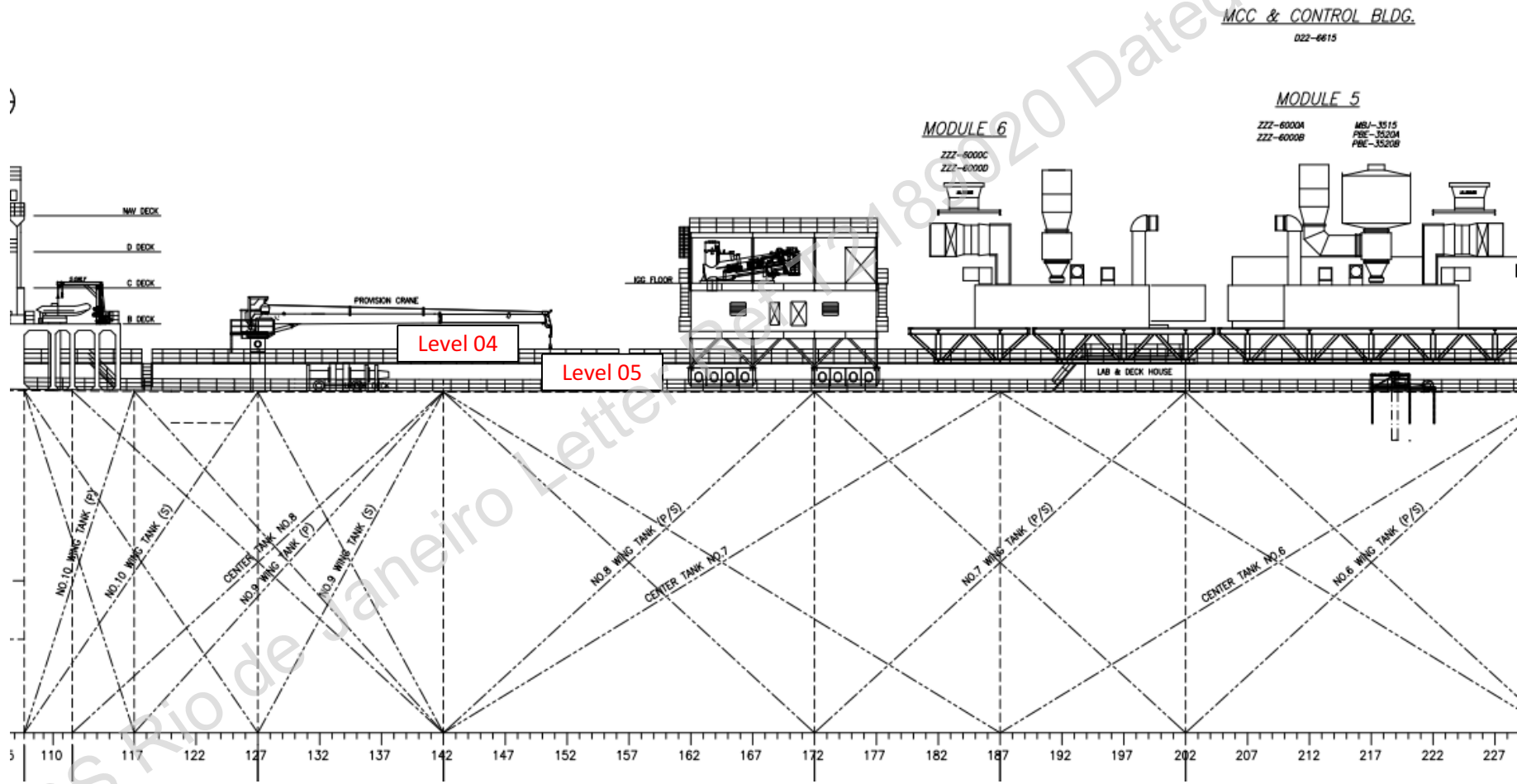
Project 173.19

FPSO Fluminence

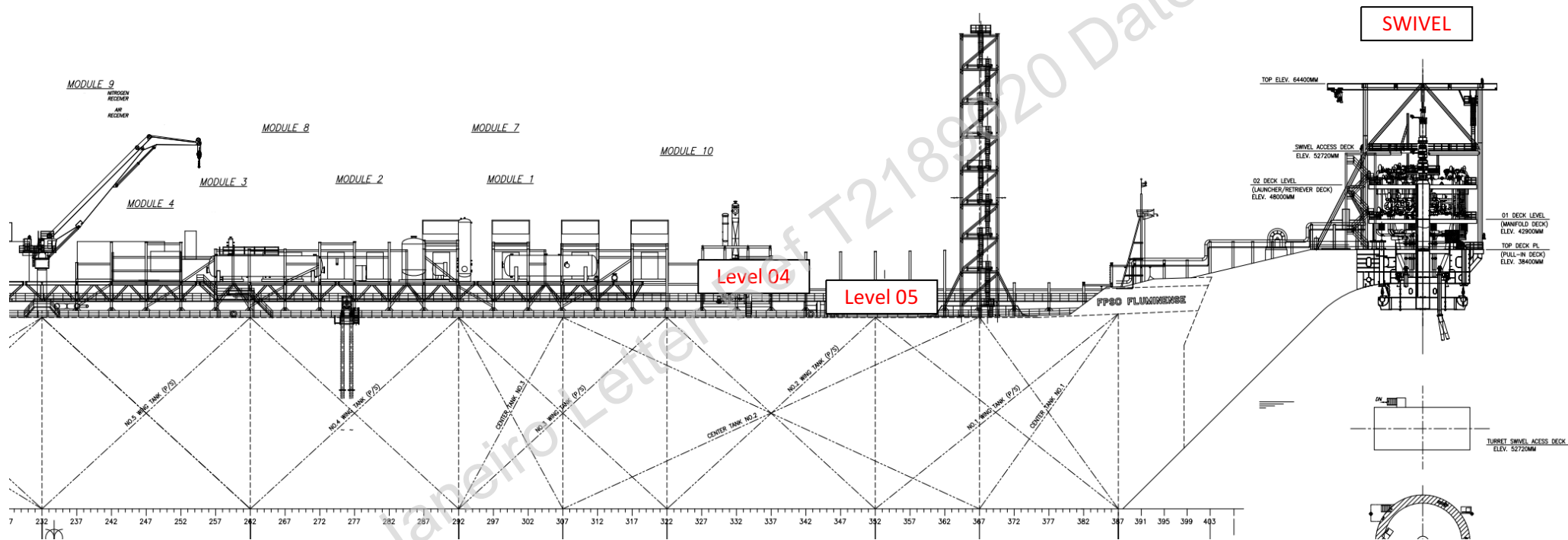
Refer to the profile plan for the location of the listed zones and levels

LEVEL	DECK
00	TOP of NAV. DECK
01	NAV. DECK
02	D DECK
03	C DECK plus HELI DECK
04	B DECK
04A 04B	TOPSIDE AFT TOPSIDE FORWARD
05	A DECK - ACCOMMODATION
05A 05B	UPPER DECK AFT UPPER DECK FORWARD
06	UPPER PLATFORM ENGINE ROOM plus STEERING GEAR
07	BOILER PLATFORM ENGINE ROOM
08	LOWER PLATFORM ENGINE ROOM
09	TANK TOP ENGINE ROOM





See ABS Rio de Janeiro Letter 231180020 Dated 18-NOV-2021



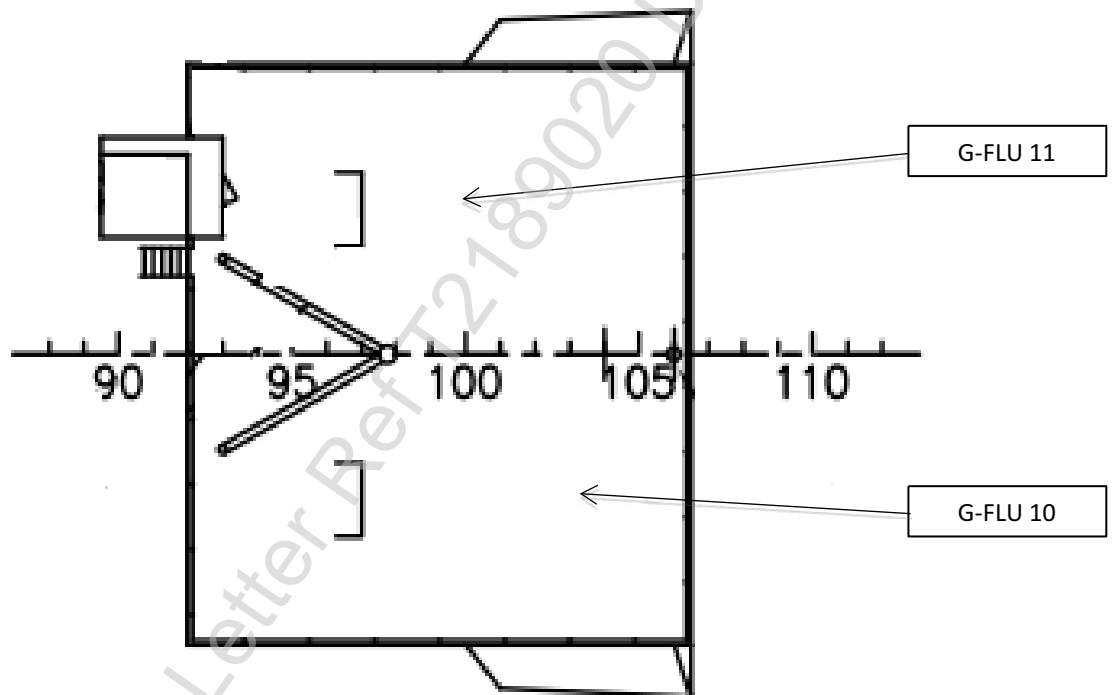
See ABS Rio de Janeiro Letter of T2189/20 Dated 18-NOV-2021

Location Diagrams of Hazardous Materials on Board

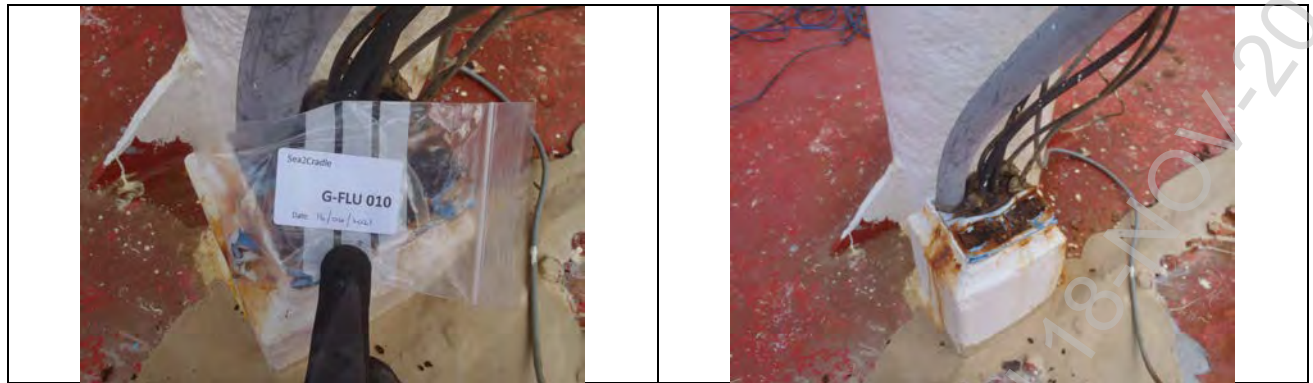
Showing the locations of samples taken, as detailed in the 'Sample List', and the results as detailed in the laboratory report. See attachment 'Hazmat Documentation'

See ABS Rio de Janeiro Letter Ref T2189020 Dated 18-NOV-2021

Rad 0.032
 $\mu\text{Sv/h}$



See ABS Rio de Janeiro Letter Ref T2189020 Dated 18-NOV-2021



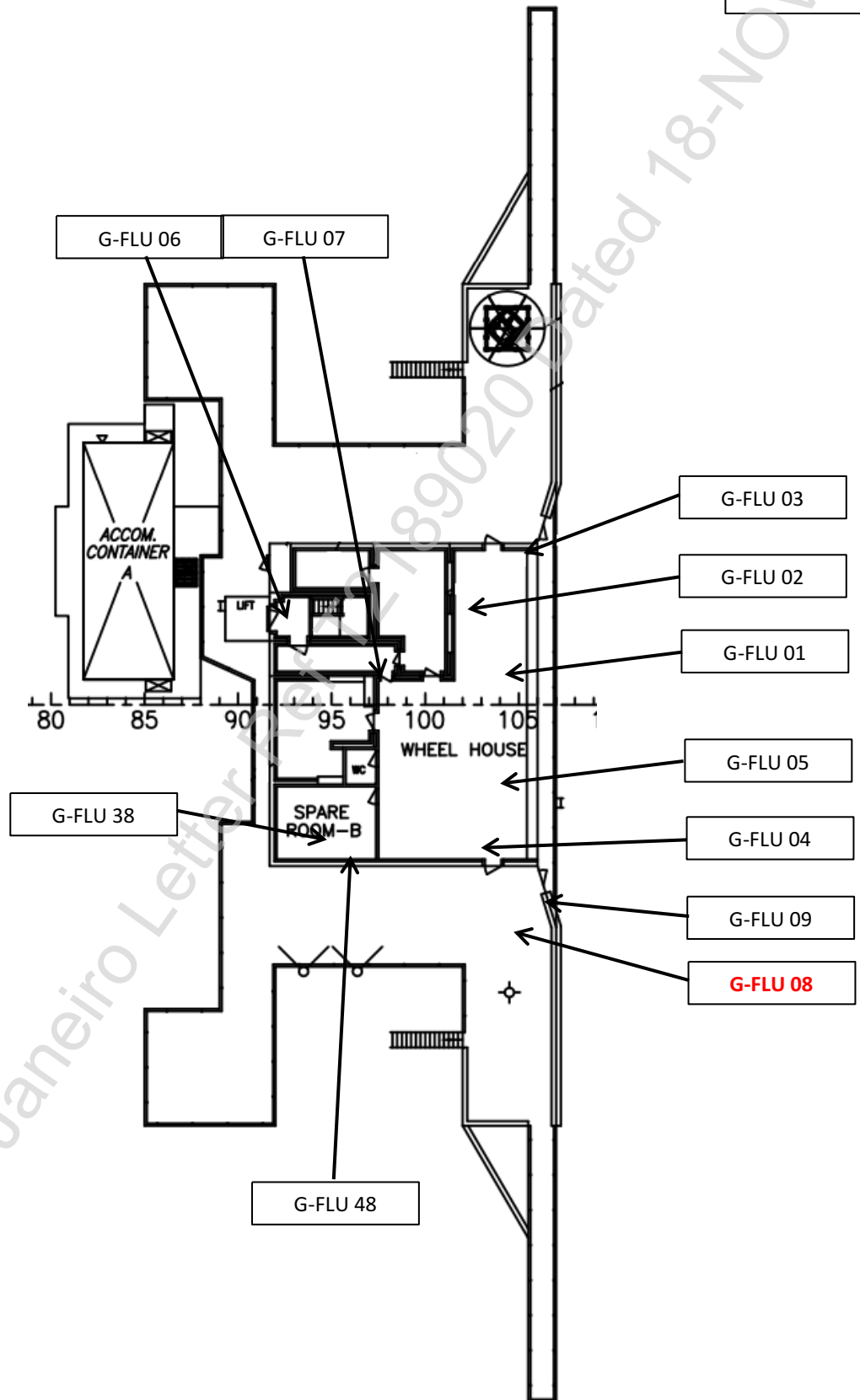
<p>Sample : G-FLU 10 Location : 00. Top of Nav. Deck Description : Cable Penetration</p>	<p>Tested for : PCB Result : 0.00 mg/kg : :</p>
--------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------



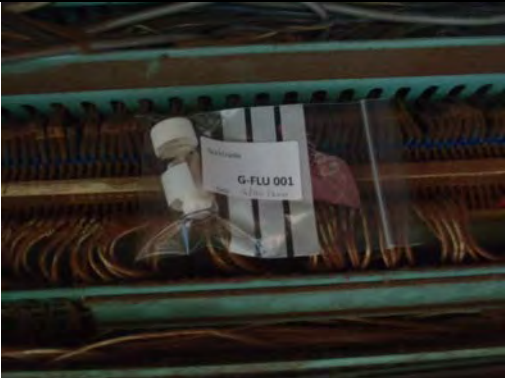

<p>Sample : G-FLU 11 Location : 00. Top of Nav. Deck Description : External Paint - Red</p>	<p>Tested for : PCB, Pb, Cd, Cr Result PCB: 0.00 mg/kg Pb: 170 mg/kg Cd: 0.14 mg/kg Cr: 20 mg/kg</p>
-----------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------

See ABS Rio de Janeiro Letter Ref T2189020 Dated 18/Nov-2021

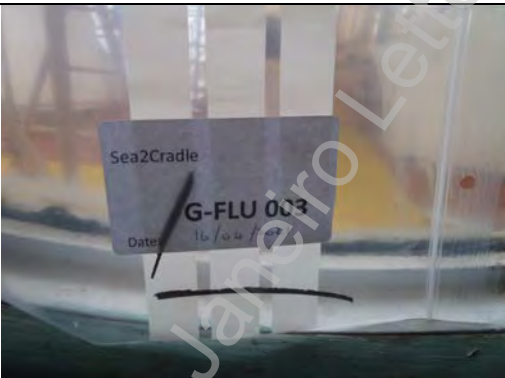

Rad 0.109
 $\mu\text{Sv/h}$



See ABS Rio de Janeiro Letter 189020 dated 18-NOV-2021



	
<p>Sample : G-FLU 01 Location : 01. Nav. Deck Description : Cable Run Wipe</p>	<p>Tested for : PCB Result : 0.285 µg abs : :</p>

	
<p>Sample : G-FLU 02 Location : 01. Nav. Deck Description : Vinyl Flooring</p>	<p>Tested for : PCB Result : 3.30 mg/kg : :</p>

	
<p>Sample : G-FLU 03 Location : 01. Nav. Deck Description : Window Seal</p>	<p>Tested for : PCB Result : 47.45 mg/kg : :</p>

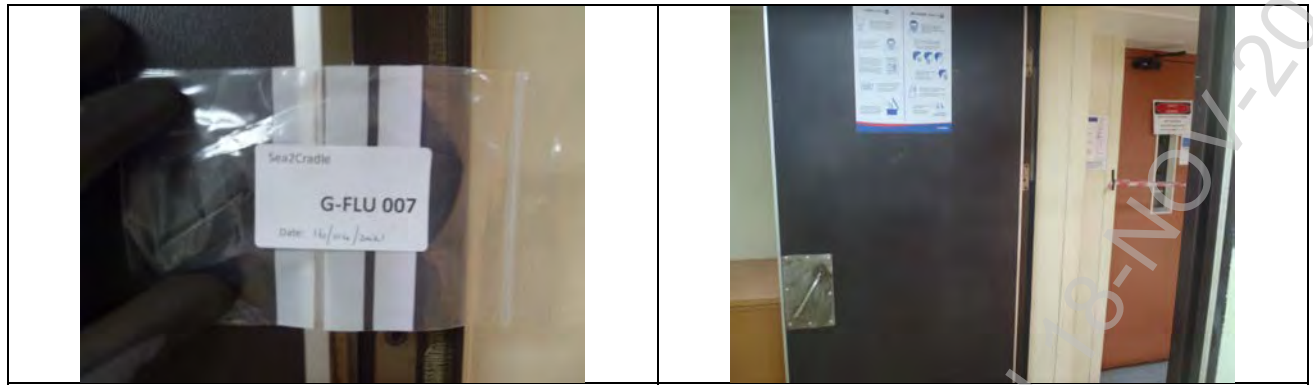
See ABS Rio de Janeiro Letter Ref T27180020 Dated 18-NOV-2021

	
<p>Sample : G-FLU 04 Location : 01. Nav. Deck Description : Rubber Backed Matting</p>	<p>Tested for : PCB Result : 0.00 mg/kg : :</p>

	
<p>Sample : G-FLU 05 Location : 01. Nav. Deck Description : Vinyl Shelving</p>	<p>Tested for : PCB Result : 0.00 mg/kg : :</p>

	
<p>Sample : G-FLU 06 Location : 01. Nav. Deck Description : Vinyl Stairwell Flooring</p>	<p>Tested for : PCB Result : 0.00 mg/kg : :</p>

See ABS Rio de Janeiro Letter Ref T2780020 Dated 10 NOV-2021



Sample	: G-FLU 07	Tested for	: PCB
Location	: 01. Nav. Deck	Result	: 16.20 mg/kg
Description	: Internal Door Seal		:
			:

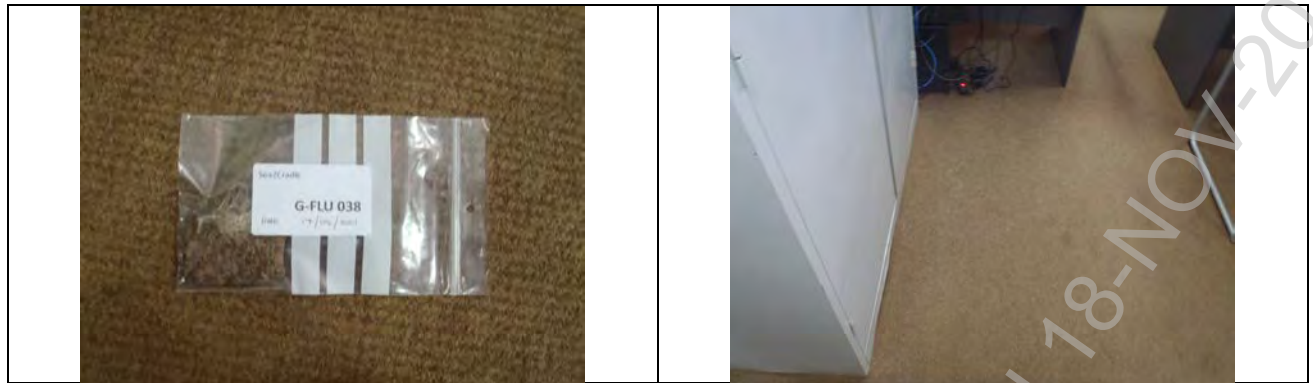


Sample	: G-FLU 08	Tested for	: PCB, Pb, Cd, Cr
Location	: 01. Nav. Deck	Result	PCB: 19.05 mg/kg
Description	: External Paint - Yellow		Pb: 10600 mg/kg
			Cd: 4.2 mg/kg
			Cr: 270 mg/kg



Sample	: G-FLU 09	Tested for	: PCB
Location	: 01. Nav. Deck	Result	: 0.00 mg/kg
Description	: W/T Door Seal		:
			:

See ABS RIO 025 Letter Ref T218900 Dated 19-MAY-2021



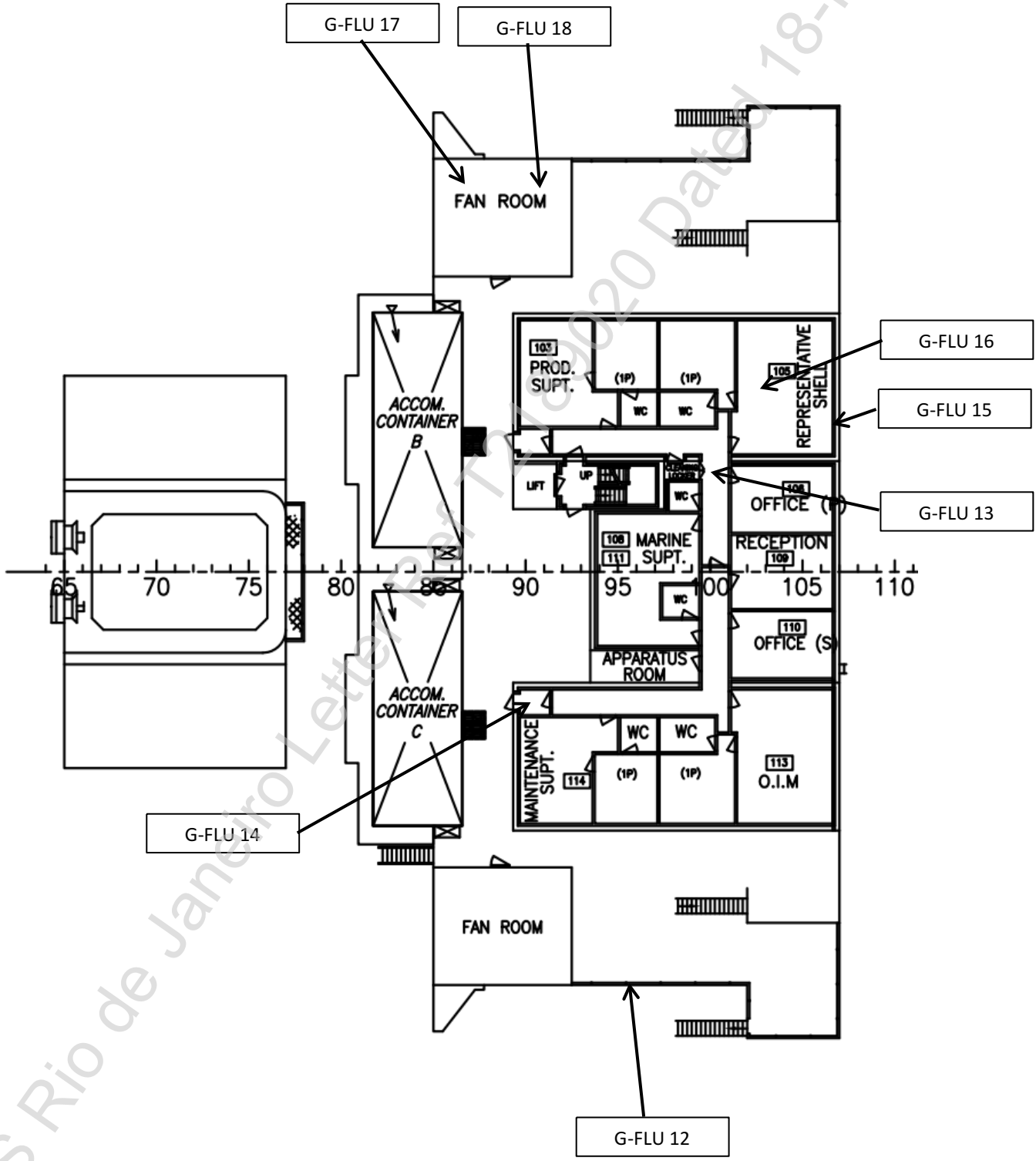
<p>Sample : G-FLU 38 Location : 01. Nav. Deck Description : Carpet Material</p>	<p>Tested for : PFOS Result : 0.028 mg/kg : :</p>
-----------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------





<p>Sample : G-FLU 48 Location : 01. Nav. Deck Description : Curtain Fabric</p>	<p>Tested for : PFOS Result : <0.01 mg/kg : :</p>
----------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------

See ABS Rio de Janeiro Letter Ref T21890-20 Dated 18-NOV-2021



Rad 0.118
μSv/h





See ABS Rio de Janeiro Letter Report 2020 Dated 18-NOV-2021



	
<p>Sample : G-FLU 12 Location : 02. D Deck Description : External Paint - White</p>	<p>Tested for : PCB, Pb, Cd, Cr Result PCB: 0.55 mg/kg Pb: 45 mg/kg Cd: 0.13 mg/kg Cr: 21 mg/kg</p>

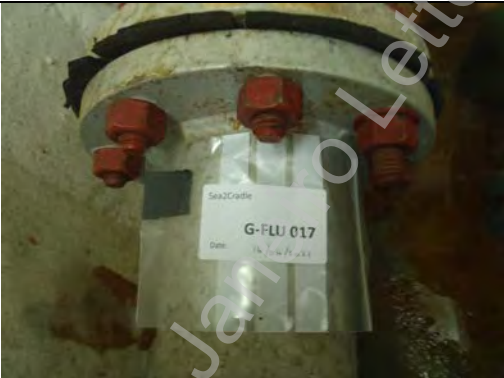

	
<p>Sample : G-FLU 13 Location : 02. D Deck Description : Anti-Slip Mat</p>	<p>Tested for : PCB Result : 0.00 mg/kg : :</p>

	
<p>Sample : G-FLU 14 Location : 02. D Deck Description : Rubber Backed Mat</p>	<p>Tested for : PCB Result : 0.00 mg/kg : :</p>



See ABS RIO de Janeiro Letter Ref T2180020 dated 18-NOV-2021

	
<p>Sample : G-FLU 15 Location : 02. D Deck Description : Curtain Material</p>	<p>Tested for : PFOS Result : <0.04 mg/kg : :</p>

	
<p>Sample : G-FLU 16 Location : 02. D Deck Description : Chair Covering Material</p>	<p>Tested for : PFOS Result : <0.03 mg/kg : :</p>

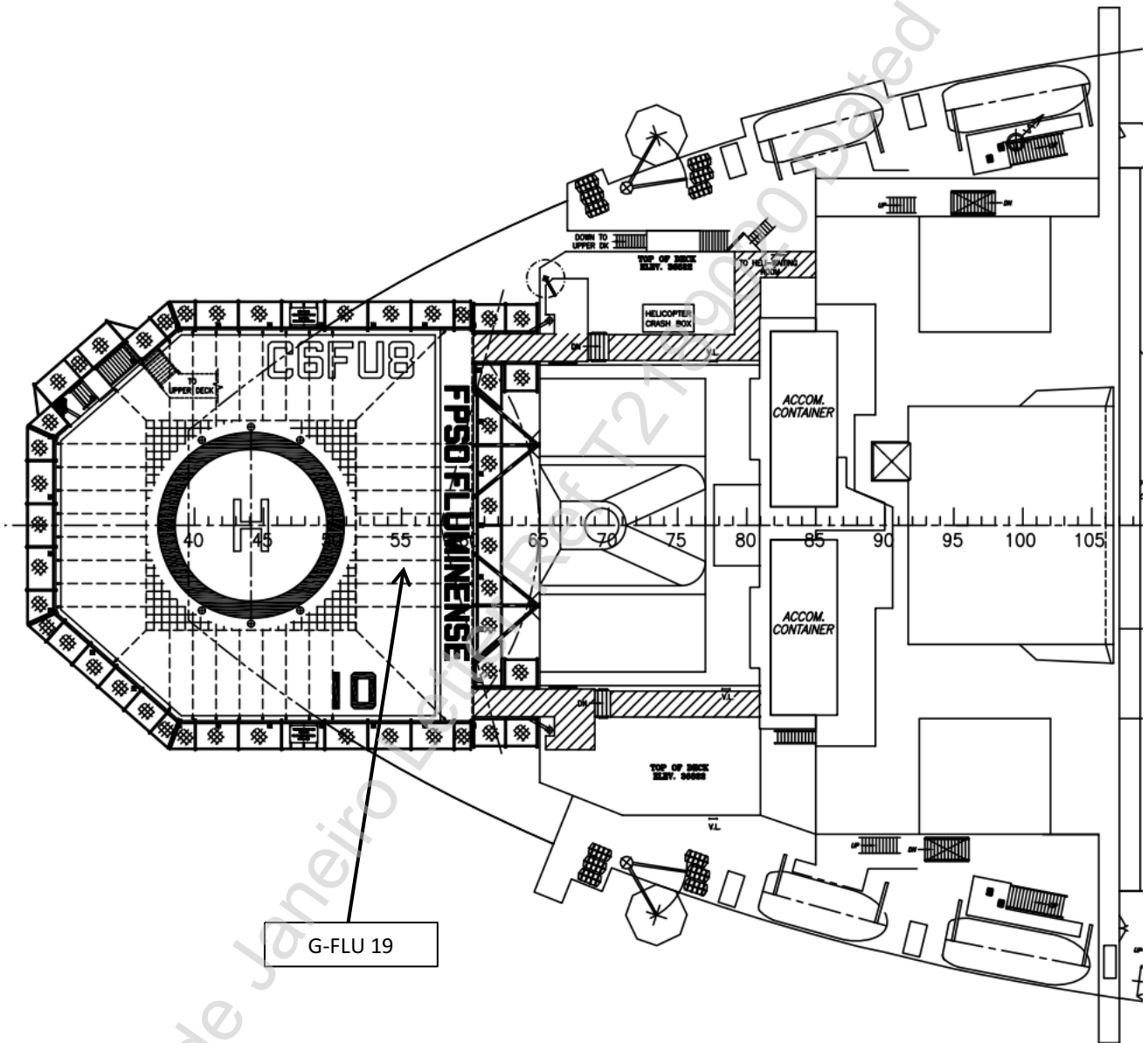
	
<p>Sample : G-FLU 17 Location : 02. D Deck Description : Rubber Pipe Flange</p>	<p>Tested for : PCB Result : 0.00 mg/kg : :</p>

See ABS Rio de Janeiro Letter Ref T278900 Dated 18-NOV-2021

	
<p>Sample : G-FLU 18 Location : 02. D Deck Description : Reefer Trunk Lagging</p>	<p>Tested for : ODS Result : <5.00 mg/kg [R11] : :</p>

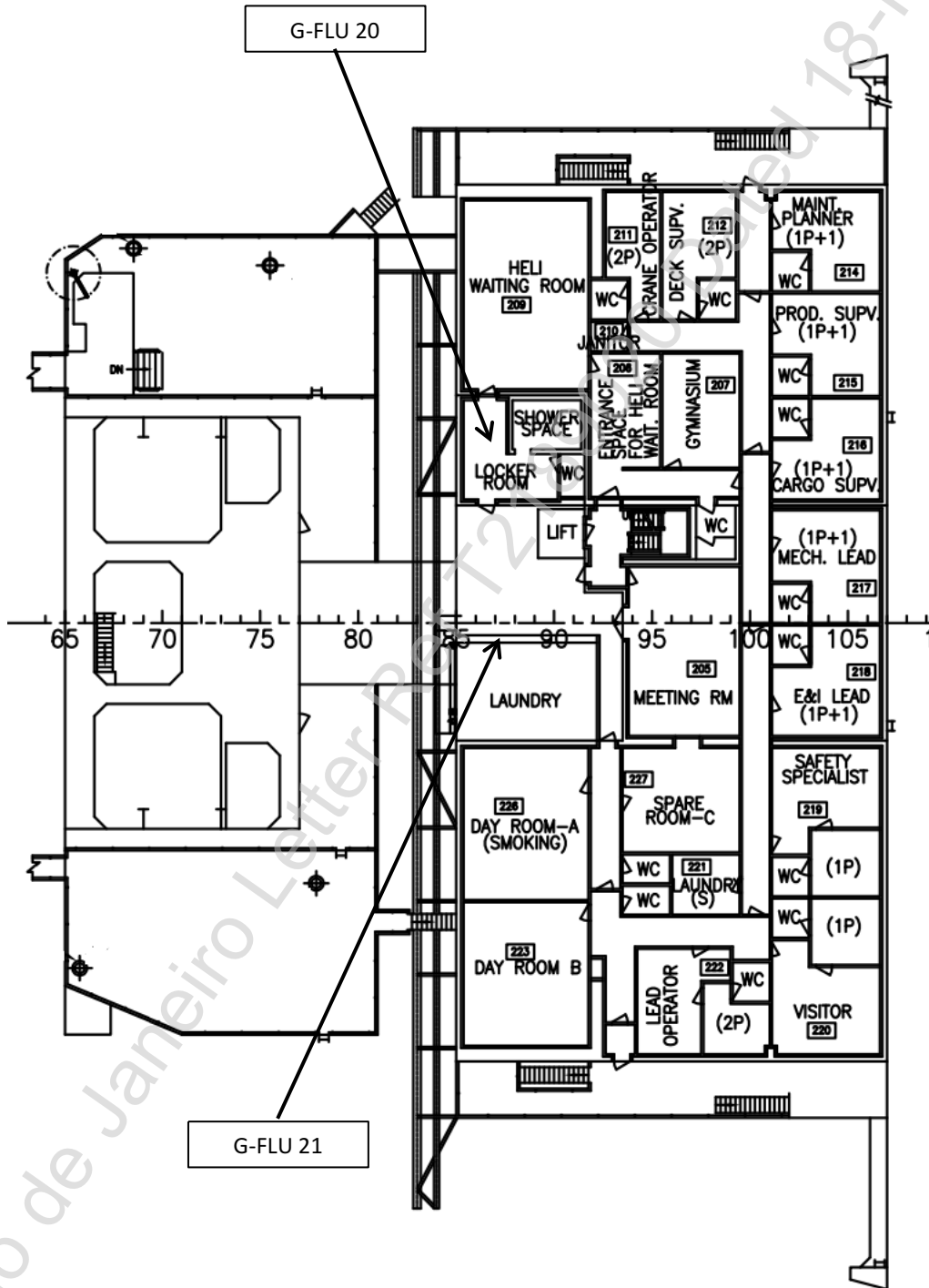
See ABS Rio de Janeiro Letter Ref T2189020 Dated 18-NOV-2021



Rad 0.074
 $\mu\text{Sv/h}$





See ABS Rio de Janeiro dated 18-NOV-2027

Rad 0.109
μSv/h



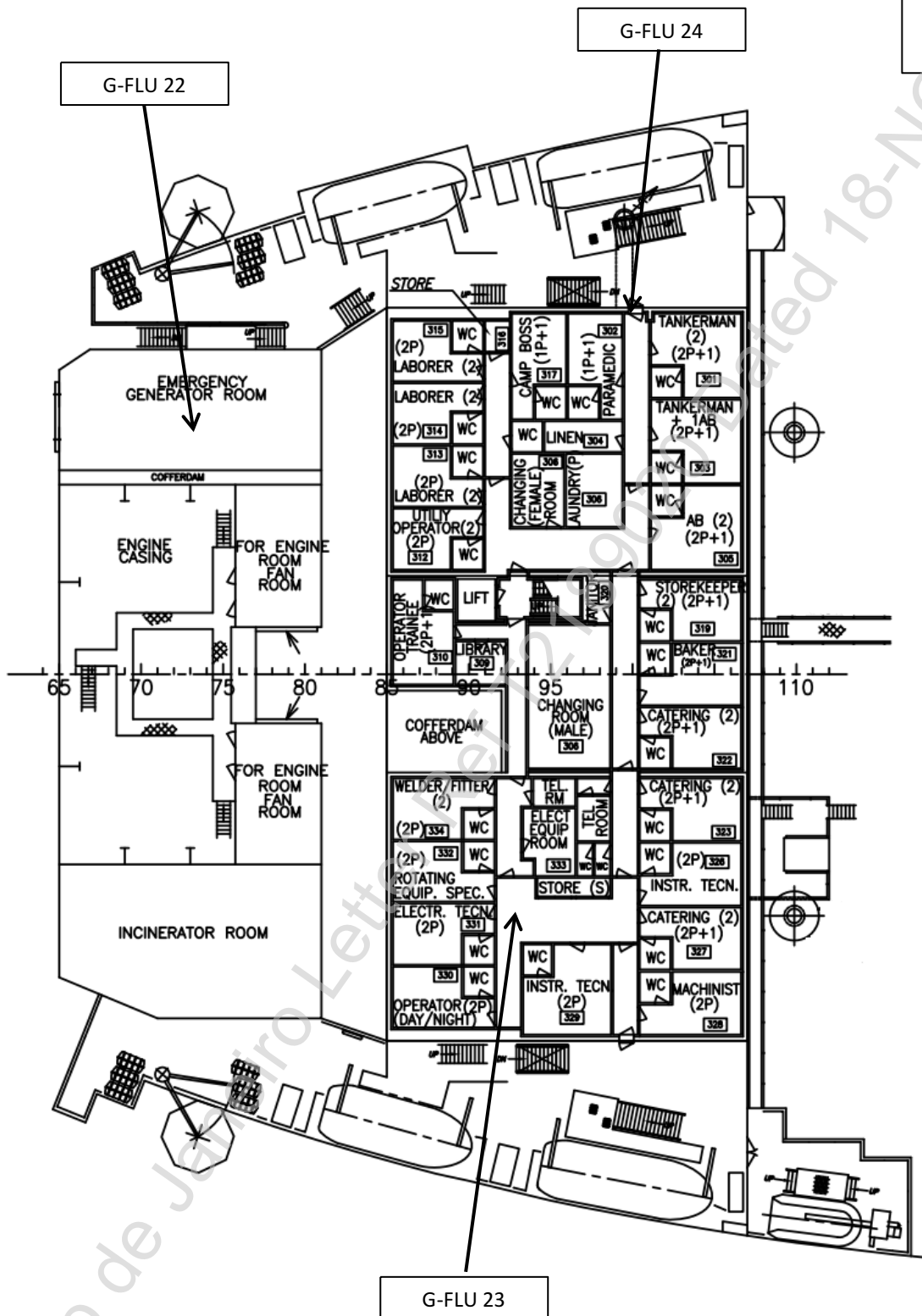
	
<p>Sample : G-FLU 19 Location : 03. Heli Deck Description : Special Paint Coating</p>	<p>Tested for : PCB, Pb, Cd, Cr Result PCB: 0.00 mg/kg Pb: 28 mg/kg Cd: <0.1 mg/kg Cr: 17 mg/kg</p>

	
<p>Sample : G-FLU 20 Location : 03. C Deck Description : Anti-Slip Mat</p>	<p>Tested for : PCB Result : 0.00 mg/kg : :</p>

	
<p>Sample : G-FLU 21 Location : 03.C Deck Description : W/T Vent Seal</p>	<p>Tested for : PCB Result : 12.35 mg/kg : :</p>

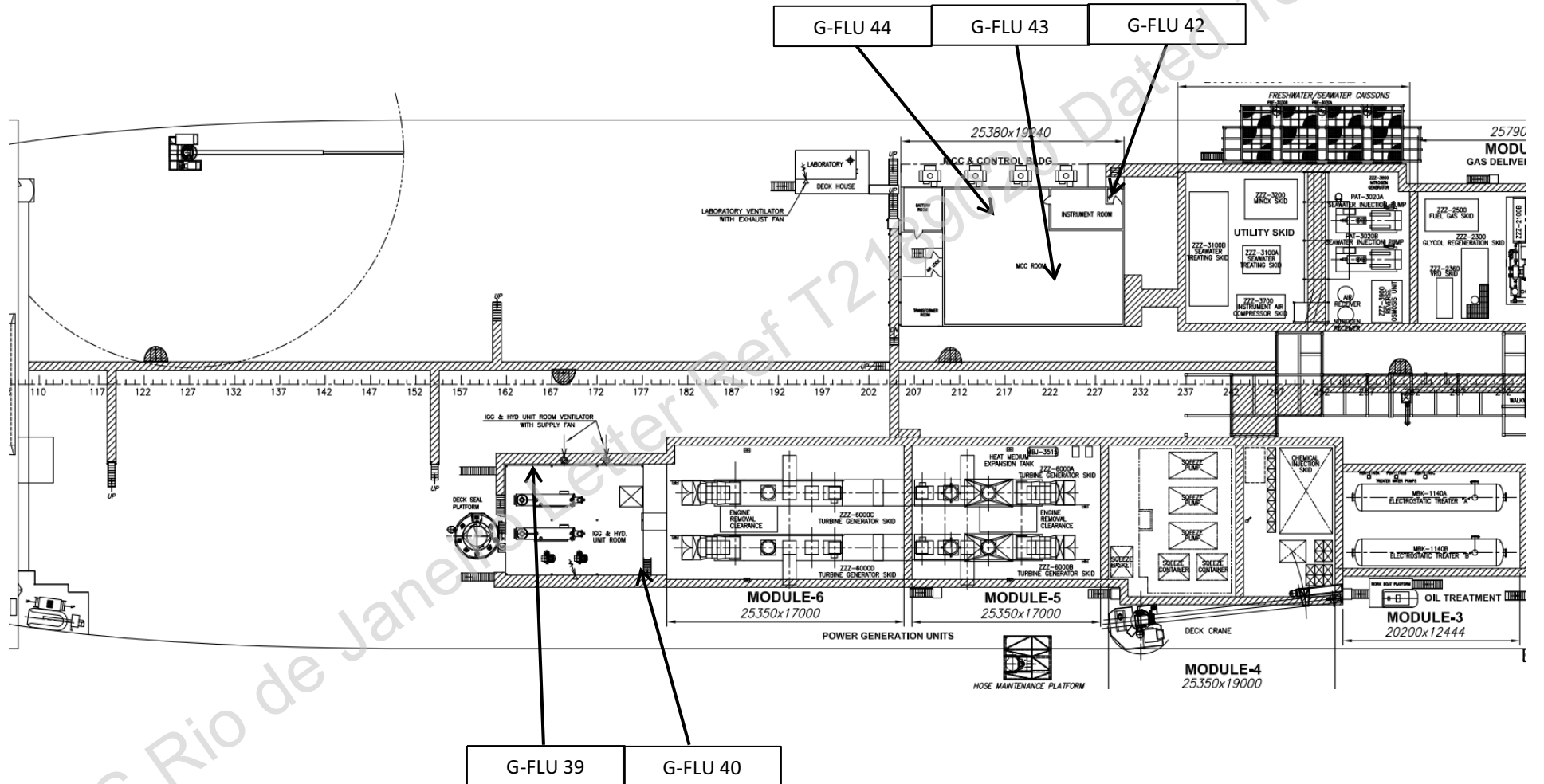
See ABS RIO cases Letter Ref T2789020 18-NOV-2021

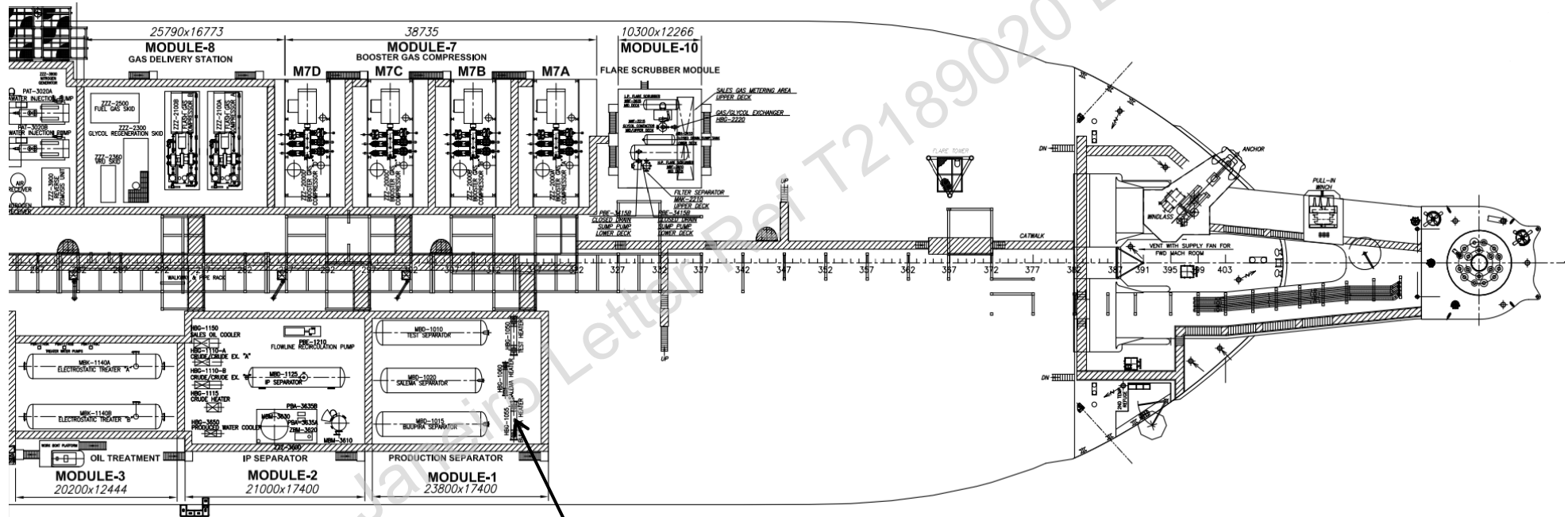
Rad 0.092
μSv/h





See ABS Rio de Janeiro Letter of Approval dated 18-NOV-2017

Rad 0.040
 $\mu\text{Sv/h}$

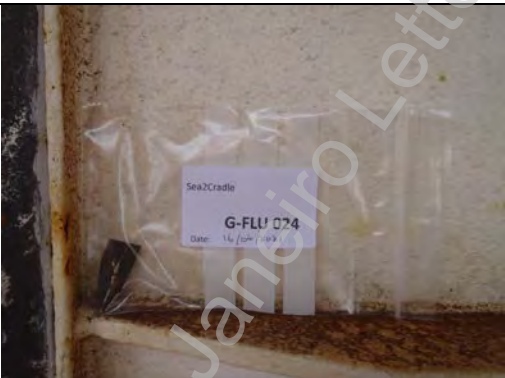





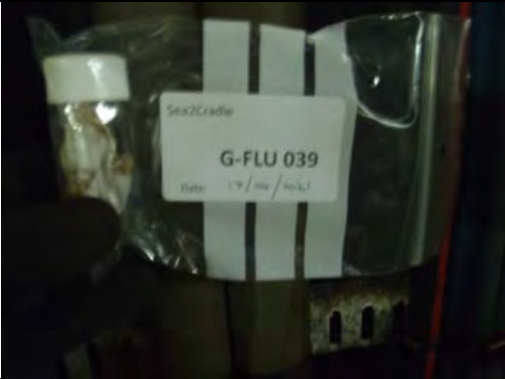

G-FLU 41

	
<p>Sample : G-FLU 22 Location : 04. B Deck Description : Anti-Slip Mat</p>	<p>Tested for : PCB Result : 0.00 mg/kg : :</p>



	
<p>Sample : G-FLU 23 Location : 04. B Deck Description : Vinyl Flooring</p>	<p>Tested for : PCB Result : 0.00 mg/kg : :</p>

	
<p>Sample : G-FLU 24 Location : 04. B Deck Description : W/T Door Seal</p>	<p>Tested for : PCB Result : 3.50 mg/kg : :</p>

See ABS Rio de Janeiro Letter Ref T27189020 Dated 18-NOV-2021



	
<p>Sample : G-FLU 39 Location : 04A. Topside Hyd. Unit Room Description : Cable Run Wipe</p>	<p>Tested for : PCB Result : 0.00 mg/kg : :</p>

	
<p>Sample : G-FLU 40 Location : 04A. Topside Hyd. Unit Room Description : Internal Paint - White</p>	<p>Tested for : PCB, Pb, Cd, Cr Result PCB: 0.00 mg/kg Pb: 95 mg/kg Cd: 0.22 mg/kg Cr: 120 mg/kg</p>

	
<p>Sample : G-FLU 41 Location : 04B. Topside Description : Pipe Paint - Silver</p>	<p>Tested for : PCB, Pb, Cd, Cr Result PCB: 0.00 mg/kg Pb: 10 mg/kg Cd: 0.13 mg/kg Cr: 39 mg/kg</p>

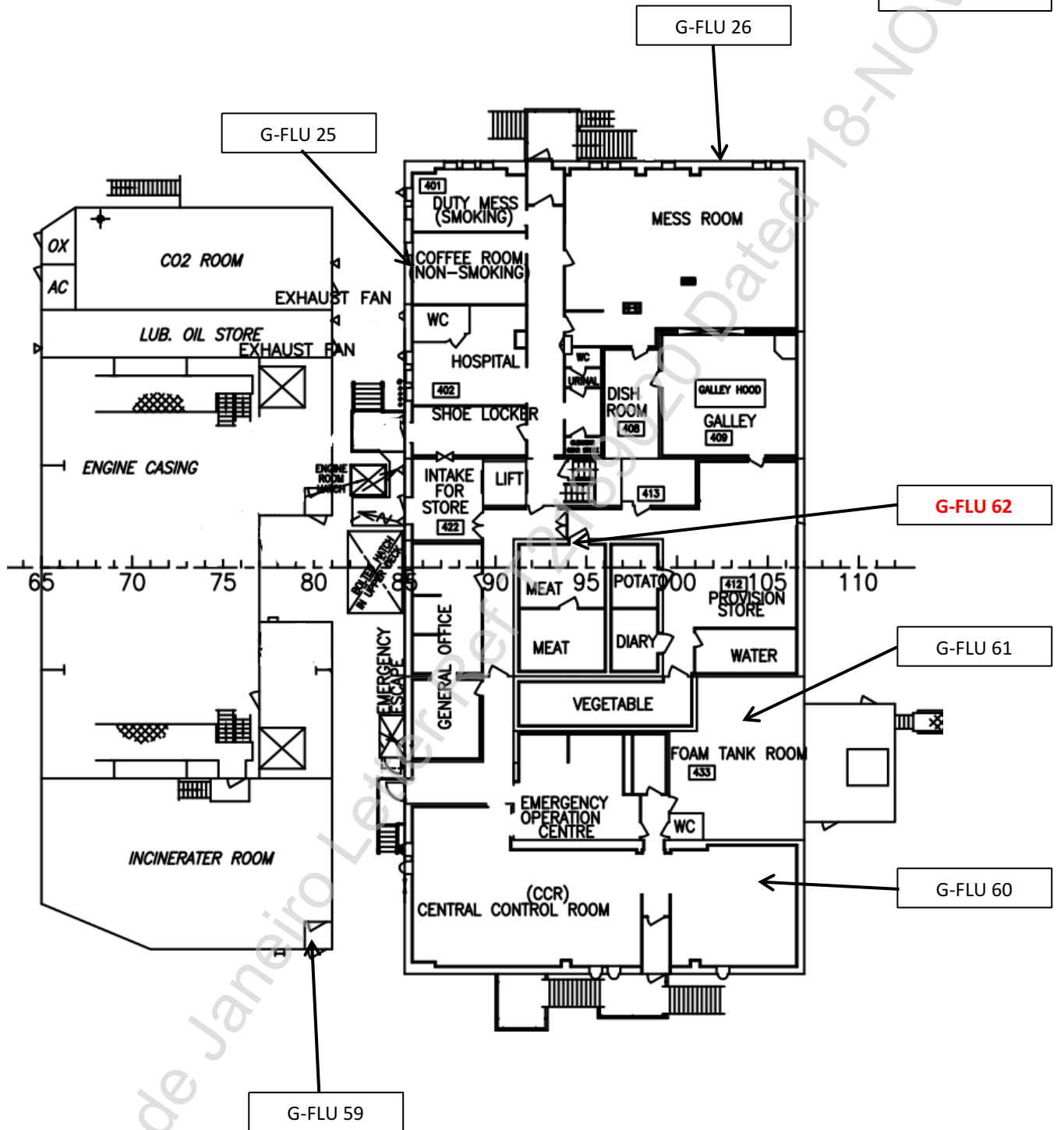
	
<p>Sample : G-FLU 42 Location : 04A. Topside MCC Description : Anti-Slip Mat</p>	<p>Tested for : PCB Result : 0.00 mg/kg : :</p>

	
<p>Sample : G-FLU 43 Location : 04A. Topside MCC Description : Electrical Matting</p>	<p>Tested for : PCB Result : 0.00 mg/kg : :</p>

	
<p>Sample : G-FLU 44 Location : 04A. Topside MCC Description : Cable Run Wipe</p>	<p>Tested for : PCB Result : 0.00 µg abs : :</p>

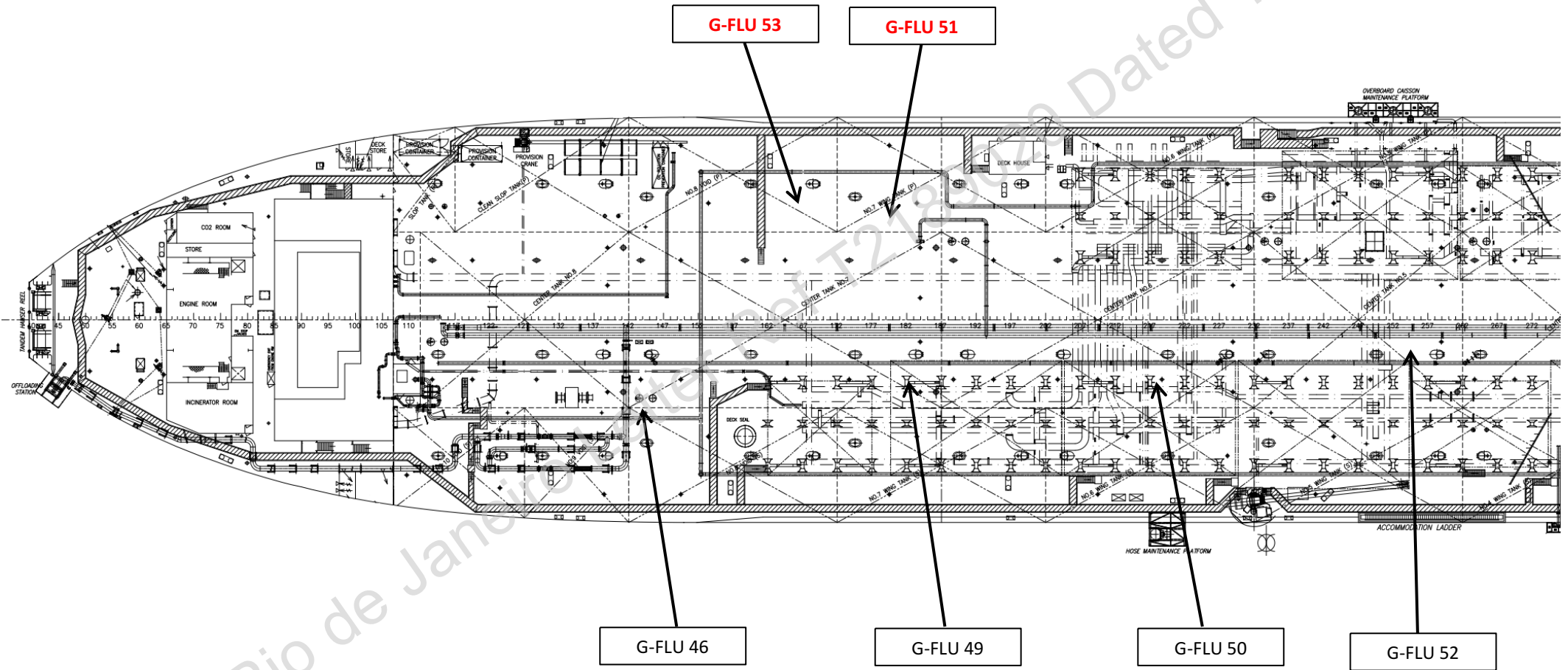
See ABS Rio de Janeiro Letter Ref T2189020 Dated 18-NOV-2021

Rad 0.160
μSv/h

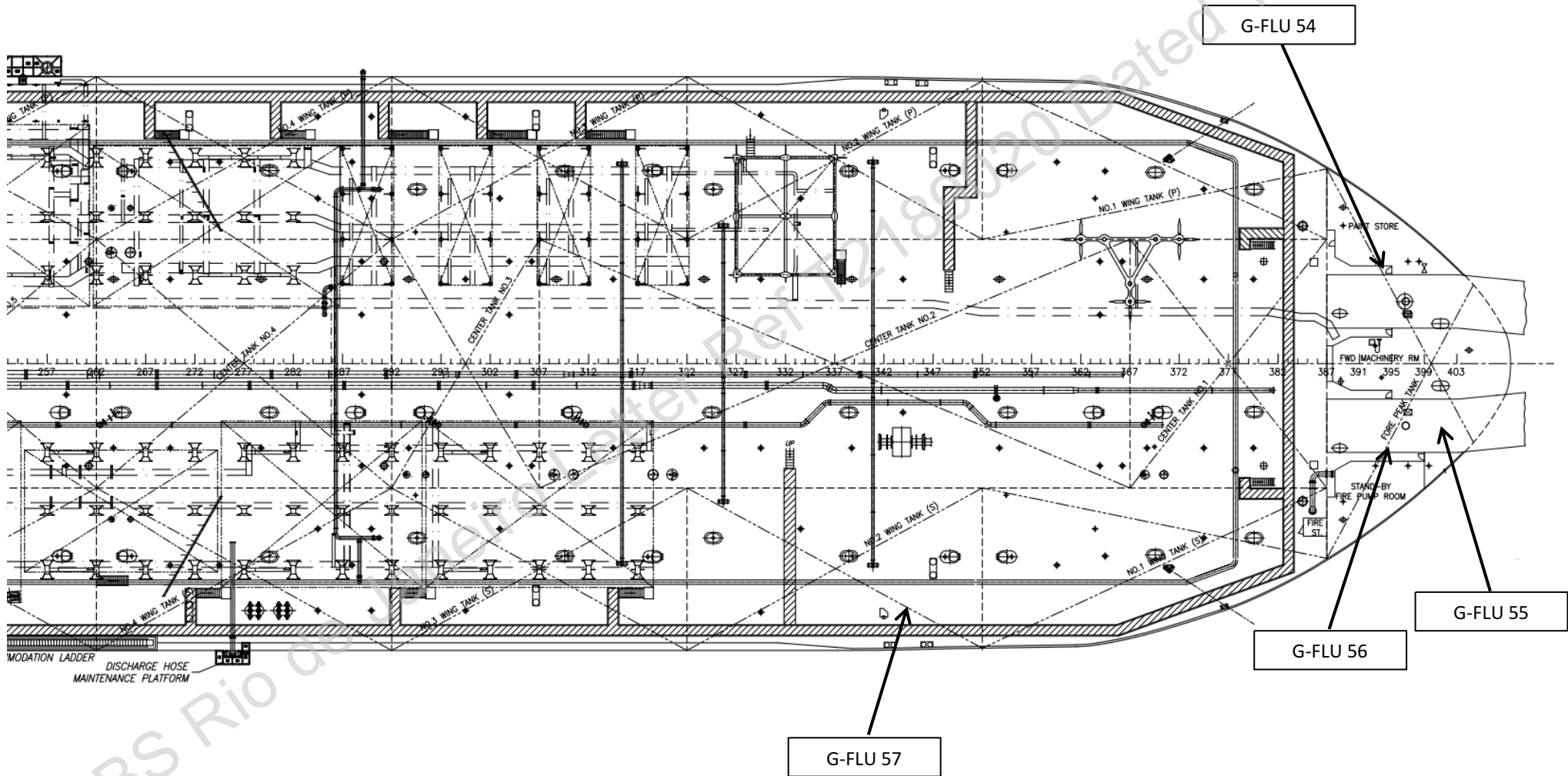


See ABS Rio de Janeiro Letter of Approval Dated 18-NOV-2017



Rad 0.074
 $\mu\text{Sv/h}$







See ABS Rio de Janeiro Report T218728-002 Dated 18-Nov-2021





See ABS Rio de Janeiro Report Ref: 2180020 Dated 18-NOV-2021



 <p>Sea2Cradle G-FLU 025 Date: 16/04/2021</p>	
<p>Sample : G-FLU 25 Location : 05. Upper Deck Accommodation Description : Cable Run Wipe</p>	<p>Tested for : PCB Result : 0.00 µg abs : :</p>



 <p>Sea2Cradle G-FLU 026 Date: 16/04/2021</p>	
<p>Sample : G-FLU 26 Location : 05. Upper Deck Accommodation Description : Manhole Door Joint</p>	<p>Tested for : PCB Result : 0.00 mg/kg : :</p>

 <p>Sea2Cradle G-FLU 046 Date: 17/04/2021</p>	
<p>Sample : G-FLU 46 Location : 05A. Upper Deck Description : Deck Line Hydraulic Oil</p>	<p>Tested for : PCB Result : 0 mg/kg : :</p>

See ABS Rio de Janeiro Letter Ref T278903 Dated NOV-2021

	
<p>Sample : G-FLU 49 Location : 05A. Upper Deck Description : Deck Girder Paint</p>	<p>Tested for : PCB, Pb, Cd, Cr Result PCB: 0.00 mg/kg Pb: 35 mg/kg Cd: 2.1 mg/kg Cr: 93 mg/kg</p>

	
<p>Sample : G-FLU 50 Location : 05A. Upper Deck Description : Valve Gasket</p>	<p>Tested for : PCB Result : 2.50 mg/kg : :</p>

	
<p>Sample : G-FLU 51 Location : 05A. Upper Deck Description : Deck Bracket Paint</p>	<p>Tested for : PCB, Pb, Cd, Cr Result PCB: 0.00 mg/kg Pb: 1450 mg/kg Cd: 1.6 mg/kg Cr: 360 mg/kg</p>

See ABS RIO de Janeiro Letter Ref T2780202020178/NCV-2021

	
<p>Sample : G-FLU 52 Location : 05A. Upper Deck Description : Manhole Joint</p>	<p>Tested for : PCB Result : 3.30 mg/kg : :</p>
	
<p>Sample : G-FLU 53 Location : 05A. Upper Deck Description : External Paint - Red</p>	<p>Tested for : PCB, Pb, Cd, Cr Result PCB: 0.00 mg/kg Pb: 6000 mg/kg Cd: 6.8 mg/kg Cr: 1490 mg/kg</p>
	
<p>Sample : G-FLU 54 Location : 05B. Upper Deck Description : W/T Door Seal</p>	<p>Tested for : PCB Result : 4.00 mg/kg : :</p>

See ABS Rio de Janeiro Letter Ref T27189020 Dated 18/NOV/2021



<p>Sample : G-FLU 55 Location : 05B. Upper Deck Description : Anti-Slip Mat</p>	<p>Tested for : PCB Result : 0.00 mg/kg : :</p>
-----------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------





<p>Sample : G-FLU 56 Location : 05B. Upper Deck Description : Cable Run Wipe</p>	<p>Tested for : PCB Result : 0.00 µg abs : :</p>
------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------


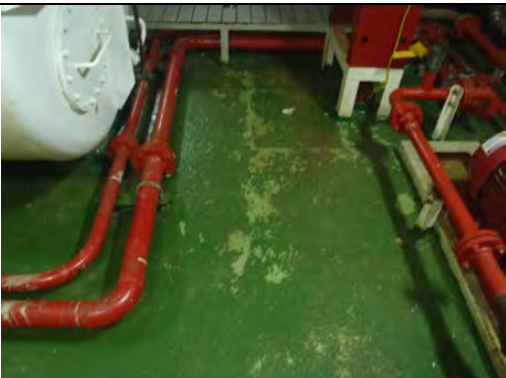


<p>Sample : G-FLU 57 Location : 05B. Upper Deck Description : External Paint - Yellow</p>	<p>Tested for : PCB, Pb, Cd, Cr Result PCB: 0.00 mg/kg Pb: 30 mg/kg Cd: 0.47 mg/kg Cr: 81 mg/kg</p>
---------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------

See ABS Rio de Janeiro Letter Ref T27189020 Dated 18-NOV-2021

	
<p>Sample : G-FLU 59 Location : 05. Upper Deck Accommodation Description : Anti-Slip Mat</p>	<p>Tested for : PCB Result : 0.00 mg/kg : :</p>

	
<p>Sample : G-FLU 60 Location : 05. Upper Deck CCR Description : Vinyl Flooring</p>	<p>Tested for : PCB Result : 0.00 mg/kg : :</p>

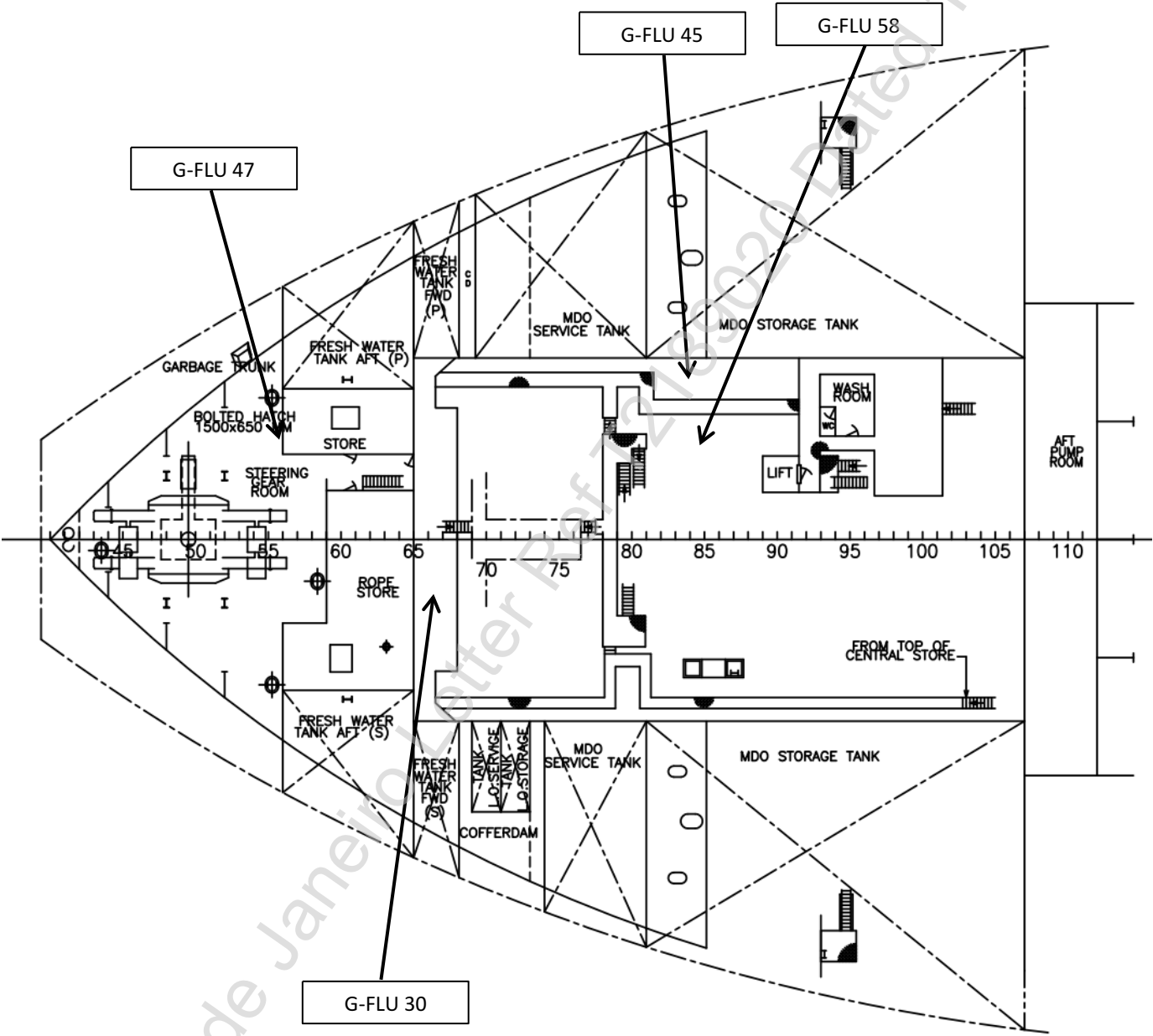
	
<p>Sample : G-FLU 61 Location : 05. Upper Deck Foam Tank Room Description : Internal Paint - Green</p>	<p>Tested for : PCB Result : 0.70 mg/kg : :</p>

See ABS Rio de Janeiro Letter Ref T2189020 Dated 78.4.2021



	
<p>Sample : G-FLU 62 Location : 05. Upper Deck Cold Stores Description : Cold Room Insulation</p>	<p>Tested for : ODS Result : 7200 mg/kg [R11] : : :</p>



See ABS Rio de Janeiro Letter Ref T2189020 Dated 18 NOV-2021

Rad 0.109
μSv/h





See ABS Rio de Janeiro Letter Ref: 173020 Dated 18-NOV-2017

	
<p>Sample : G-FLU 30 Location : 06. Upper Platform E.R. Description : Internal Paint - Yellow</p>	<p>Tested for : PCB, Pb, Cd, Cr Result PCB: 0.00 mg/kg Pb: 5.4 mg/kg Cd: <0.1 mg/kg Cr: 29 mg/kg</p>

	
<p>Sample : G-FLU 45 Location : 06. Upper Platform E.R. Description : V/V Operating Hydraulic Oil</p>	<p>Tested for : PCB Result : 0 mg/kg : :</p>

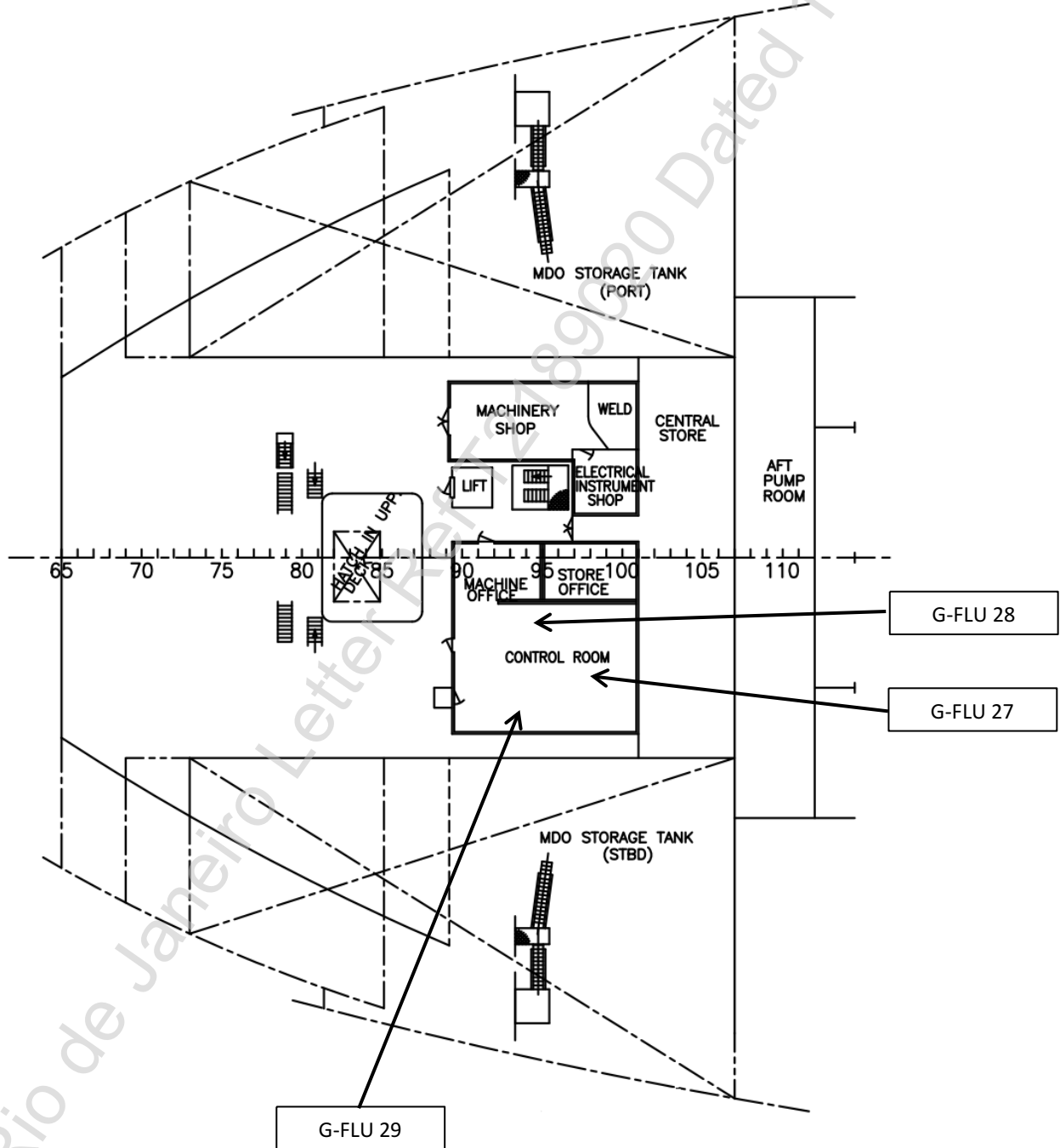
	
<p>Sample : G-FLU 47 Location : 06. Steering Gear Description : Rotary Vane Seals</p>	<p>Tested for : PCB Result : 4.00 mg/kg : :</p>

See ABS Rio de Janeiro Letter Ref T27189020 dated 18-NOV-2021

	
<p>Sample : G-FLU 58 Location : 06. Upper Platform E.R. Description : Reefer Pipe Lagging</p>	<p>Tested for : ODS Result : <5.00 mg/kg [R11] : :</p>

See ABS Rio de Janeiro Letter Ref T2189020 Dated 18/01/2021



Rad 0.066
μSv/h



See ABS Rio de Janeiro Letter Ref: 189930 Dated 18-NOV-2017

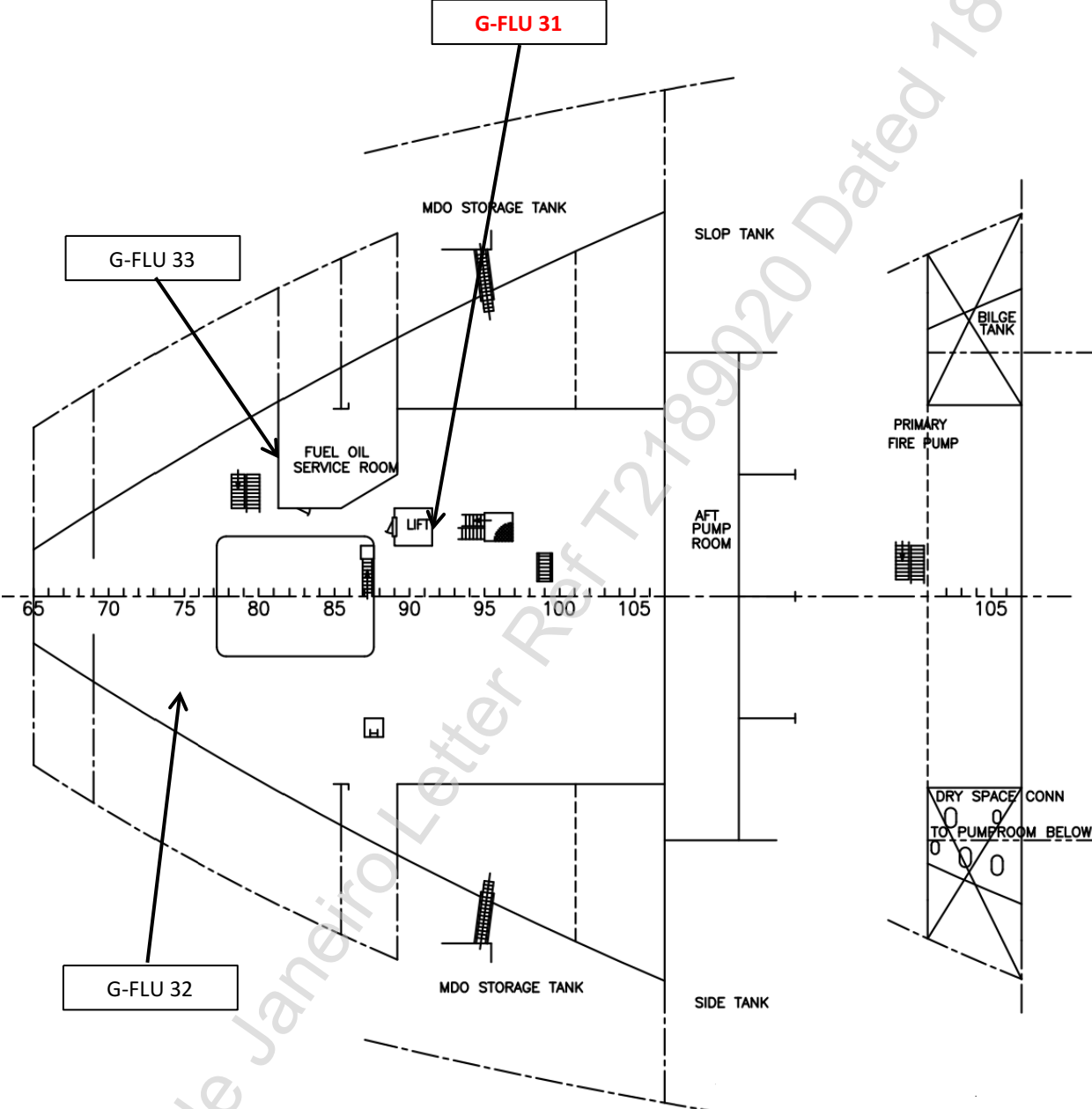
	
<p>Sample : G-FLU 27 Location : 07. Engine Control Room Description : Electrical Matting</p>	<p>Tested for : PCB Result : 0.00 mg/kg : :</p>

	
<p>Sample : G-FLU 28 Location : 07. Engine Control Room Description : Vinyl Flooring</p>	<p>Tested for : PCB Result : 0.00 mg/kg : :</p>

	
<p>Sample : G-FLU 29 Location : 07. Engine Control Room Description : Cable Run Wipe</p>	<p>Tested for : PCB Result : 0.00 µg abs : :</p>

See ABS Rio de Janeiro Letter Ref T2189020 Dated 18 NOV 2021

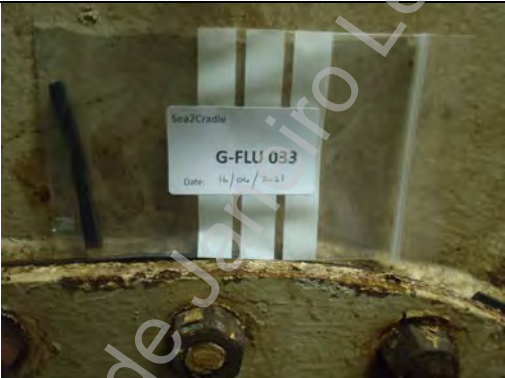

Rad 0.074
μSv/h



See ABS Rio de Janeiro Letter Ref T2189020 Dated 18-NOV-2021

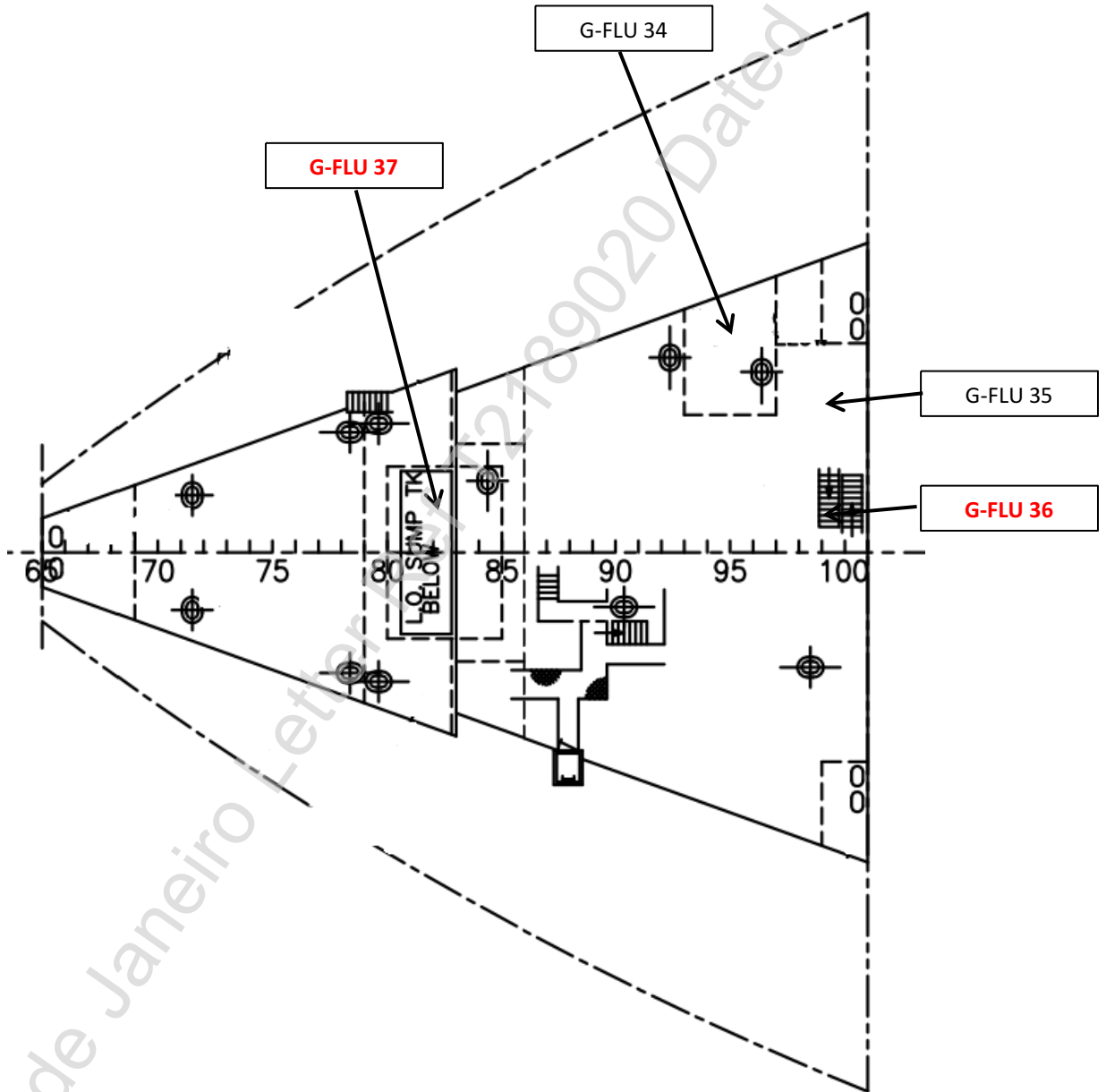
	
<p>Sample : G-FLU 31 Location : 08. Lower Platform E.R. Description : Internal Paint - White</p>	<p>Tested for : PCB, Pb, Cd, Cr Result PCB: 0.00 mg/kg Pb: 3210 mg/kg Cd: 5.3 mg/kg Cr: 1100 mg/kg</p>

	
<p>Sample : G-FLU 32 Location : 08. Lower Platform E.R. Description : Internal Paint - Green</p>	<p>Tested for : PCB, Pb, Cd, Cr Result PCB: 0.00 mg/kg Pb: 6.2 mg/kg Cd: <0.1 mg/kg Cr: 28 mg/kg</p>

	
<p>Sample : G-FLU 33 Location : 08. Lower Platform E.R. Description : Manhole Cover Joint</p>	<p>Tested for : PCB Result : 5.70 mg/kg : :</p>

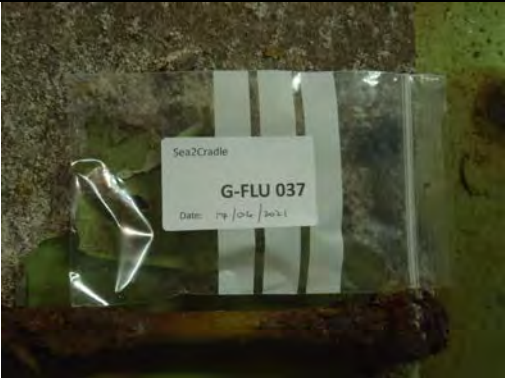

See ABS Rio de Janeiro Letter Ref T2189020 18-NOV-2021

Rad 0.040
 $\mu\text{Sv/h}$



	
<p>Sample : G-FLU 34 Location : 09. Tank Top Engine Room Description : Valve Gasket</p>	<p>Tested for : PCB Result : 5.45 mg/kg : :</p>
	
<p>Sample : G-FLU 35 Location : 09. Tank Top Engine Room Description : Worktop Sheeting</p>	<p>Tested for : PCB Result : 0.00 mg/kg : :</p>
	
<p>Sample : G-FLU 36 Location : 09. Tank Top Engine Room Description : Internal Paint - Red</p>	<p>Tested for : PCB, Pb, Cd, Cr Result PCB: 5.85 mg/kg Pb: 3190 mg/kg Cd: 0.90 mg/kg Cr: 570 mg/kg</p>

See ABS Rio de Janeiro Letter Ref T27189020 Dated 18-NOV-2021

	
<p>Sample : G-FLU 37 Location : 09. Tank Top Engine Room Description : Machinery Paint - Green</p>	<p>Tested for : PCB, Pb, Cd, Cr Result PCB: 4.10 mg/kg Pb: 5320 mg/kg Cd: <0.1 mg/kg Cr: 280 mg/kg</p>

See ABS Rio de Janeiro Letter Ref T2189020

18-NOV-2021

Visual/Sampling Check Plan (VSCP)

See ABS Rio de Janeiro Letter Ref T2189020 Dated 18-NOV-2021

**This check plan shows the Equipment and Components of which inspection will be made and for which consideration for sampling will be given.
All samples taken are listed on the attached Sample List.
All sampling locations, visually checked and found items, photographs, descriptions and analysis results are shown in the attached IHM Appendices.**

The following documents have been consulted:

Vessels particulars sheet; Capacity Plan; General Arrangement Plan; Fire and Safety Plan; Anti-fouling Certificate; IOPP; Freon CFC/HCFC/ODS Schedule; Machinery Oil & Lubricating Schedule; List of Smoke Detectors; Medical Inventory; Trim & Stability program.

Note: The separate Asbestos VSCP appears on pages 8 & 9

Zone	Equipment	Component/Part	Material	Document analysis	Check procedure	Check Result / Notes (C or NC)
Accommodation	Stairwell	Handrails	PCB		sample	Steel
		Vinyl flooring	PCB		sample	G-FLU 06
	Deck	Vinyl Flooring /Tiling	PCB		sample	G-FLU 02: G-FLU 05: G-FLU 23: G-FLU 60
		matting	PCB		sample	G-FLU 04: G-FLU 13: G-FLU 20: G-FLU 22: G-FLU 59
		Carpeting	PFOS		sample	G-FLU 14: G-FLU 38
	Gauges	Gauges	Mercury		visual	Visual
	windows	Rubber seals	PCB		sample	G-FLU 03
	electrical	Batteries	Heavy Metals		visual	Visual
		Cables	PCB		sample	G-FLU 01: G-FLU 25
		penetrations	PCB /Lead		Sample /visual	G-FLU 10
		Transformer oil	PCB		visual	Visual
		Fluorescent light ballast	PCB		visual	Visual
	Bulkhead	Panelling/plastic coating	PCB		sample	N/A
	Internal Doors	Door seals	PCB		sample	G-FLU 07
Fire protection	Smoke Detectors	Radioactive		visual	Visual	

Zone	Equipment	Component/Part	Material	Document analysis	Check procedure	Check Result / Notes (C or NC)	
	External doors	W/T seals	PCB		sample	G-FLU 09: G-FLU 21: G-FLU 24	
	Furniture	Covering materials	PFOS		sample	G-FLU 15: G-FLU 16: G-FLU 48	
	A/C units	Refrigerant	ODS		visual	Visual	
	Cold Stores	Blown insulation	ODS		Sample	G-FLU 62	
	Steel bulkheads & deckheads	Coatings (paint)	PCB Lead		Sample sample	G-FLU 08: G-FLU 11: G-FLU 12: G-FLU 19: G-FLU 61	
	Trunking	gaskets	PCB		sample	NC	
	Pipe work	Penetrations	Lead/PCB			Sample / visual	NC
		Joints/gaskets	PCB			sample	G-FLU 17
		Valve gaskets	PCB			sample	NC
		Lagging	ODS			sample	G-FLU 18
		Pipe hangers	PCB			sample	NC

Zone	Equipment	Component/Part	Material	Document analysis	Check procedure	Check Result / Notes (C or NC)
Engine Spaces	Steel bulkheads & deckheads	Coatings (paint)	PCB		Sample	G-FLU 30: G-FLU 31: G-FLU 32: G-FLU 36: G-FLU 37
			Heavy Metals		sample	G-FLU 30: G-FLU 31: G-FLU 32: G-FLU 36: G-FLU 37
	Pipe work	Penetrations	Lead/PCB		visual /sample	Visual
		Joints gaskets	PCB		sample	G-FLU 35
		Valve gaskets	PCB		sample	G-FLU 34
		Lagging	ODS		sample	G-FLU 58
		Pipe hangers	PCB		sample	NC
	Fire Protection	Smoke detectors	Radioactive		visual	Visual
	External/internal openings	W/T seals	PCB		sample	G-FLU 33
	stairs	Handrails/treads	PCB		sample	N/A
	Deck	Vinyl flooring /Tiling	PCB		sample	G-FLU 28
		matting	PCB		sample	G-FLU 27
	Gauges	Gauges	Mercury		visual	Visual
	windows	Rubber seals	PCB		sample	G-FLU 47
	Electrical	Cables	PCB		sample	G-FLU 29
		penetrations	PCB/Lead		sample/ vis	Visual
Transformer oil		PCB		visual	Visual	

Zone	Equipment	Component/Part	Material	Document analysis	Check procedure	Check Result / Notes (C or NC)
		Lighting ballast	PCB		visual	Visual
		Phase correction capacitors	PCB		visual	Visual
		2Ph motor capacitors	PCB		visual	Visual
		Batteries	Heavy Metals		visual	Visual
	Bulkhead	Panelling/plastic coating	PCB		sample	NC
		lagging	ODS		visual /sample	Visual
	Air trunking	jointing	PCB		sample	NC
	Refrigeration & A/C units	Refrigerant	ODS		visual	Visual
	Hydraulic systems	Hydraulic oil	PCB		sample	G-FLU 45
	E.G. Economiser	Lagging	ODS PCB		sample sample	NC
	Incinerator	Lagging	ODS PCB		sample sample	N/A
	Auxy Machinery	Casing gaskets	PCB		sample	NC
	Auxy Machinery	Gland packing	PCB		Sample	NC
	Auxy Machinery	Shock mountings	PCB		sample	NC

Zone	Equipment	Component/Part	Material	Document analysis	Check procedure	
Weather Decks and Deck Machinery	Coatings	Deck Paint	Heavy metals		Sample	G-FLU 49: G-FLU 51: G-FLU 53: G-FLU 57
		Bulkhead paint	Heavy metals		sample	NC
		Hull Paint	Heavy metals		sample	NC
		Antifouling coatings	TBT		visual	NC
	Pipework	Insulation	PCB		sample	NC
		Jointing	PCB		sample	G-FLU 26: G-FLU 52
	Cables	insulation	PCB		sample	G-FLU 25: G-FLU 56
		penetrations	PCB /Lead		sample / visual	NC
	Weatherdeck doors	W/T seals	PCB		sample	G-FLU 54
	Pipe work	Penetrations	Lead/PCB		Sample / visual	C
		Joints gaskets	PCB		sample	G-FLU 50
		Valve gaskets	PCB		sample	NC
		Lagging	ODS		sample	NC
		Pipe hangers	PCB		sample	NC
	Cranes	Hydraulic oil	PCB		sample	NC
	Mooring	Hydraulic oil	PCB		sample	NC

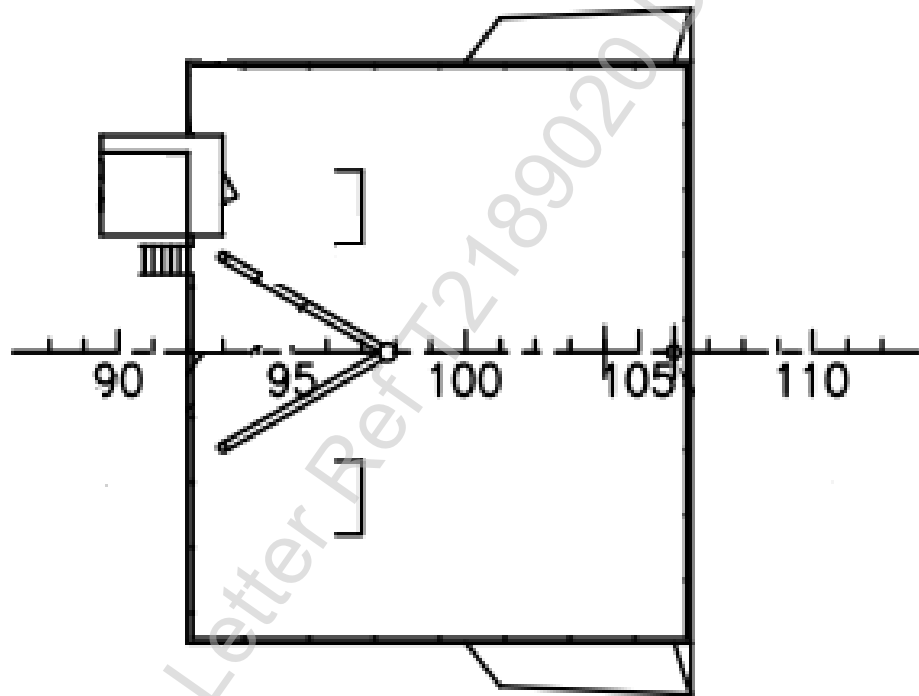
Zone	Equipment	Component/Part	Material	Document analysis	Check procedure	Check Result / Notes (C or NC)
Production Deck and Tanks	Coatings	Deck/Bulkhead Paint	Heavy metals		Sample	G-FLU 40: G-FLU 41
		Tank paint	PCB		sample	N/A
			Heavy metals		sample	N/A
	Pipework	Insulation	ODS PCB		sample	NC
		Jointing	PCB		sample	NC
		hangers	PCB		sample	NC
	Cables	insulation	PCB		sample	G-FLU 39: G-FLU 44
		penetrations	PCB /Lead		sample / visual	NC
	Deck	Electrical Mat	PCB		sample	G-FLU 43
		Anti-slip Mat	PCB		sample	G-FLU 42: G-FLU 55
	Hydraulic systems	Hydraulic oil	PCB		sample	G-FLU 46
	Hatches and trapdoors	seals	PCB		sample	NC
	Fire protection	Smoke detectors	Radioactive		visual	Visual

Zone	Equipment	Component/Part	Material	Test	Check procedure	Check Result / Notes (C or NC)
Accommodation / Engine Room	Deckhead	Insulation	Matted Fibre	Asbestos	sample	A-FLU 01
			Canvas	Asbestos	sample	N/A
			Bitumen	Asbestos	sample	N/A
	Bulkhead	Insulation	Matted Fibre	Asbestos	sample	A-FLU 04: A-FLU 05: A-FLU 10: A-FLU 12
			Canvas	Asbestos	sample	A-FLU 03: A-FLU 09: A-FLU 11
			Bitumen	Asbestos	sample	N/A
	Fire Doors	Insulation	Matted Fibre	Asbestos	visual	C
	Doors	Seal	Cordage	Asbestos	sample	NC
	Stairway	Step Grip		Asbestos	sample	A-FLU 02
	Fire Blankets		Canvas	Asbestos	visual	C
	Galley	Extractor Hood		Asbestos	sample	N/A
	Exhaust Uptakes	Heat Insulation	Matted Fibre	Asbestos	sample	A-FLU 08
			Canvas/Cord	Asbestos	sample	A-FLU 06: A-FLU 07: A-FLU 13: A-FLU 16: A-FLU 42
			Gypsum	Asbestos	sample	A-FLU 14: A-FLU 43
	Boiler / L.P. Steam Generator	Heat Insulation	Matted Fibre	Asbestos	sample	A-FLU 19: A-FLU 41
Canvas			Asbestos	sample	A-FLU 17: A-FLU 23: A-FLU 25: A-FLU 40	
Gypsum			Asbestos	sample	A-FLU 18: A-FLU 24: A-FLU 26	

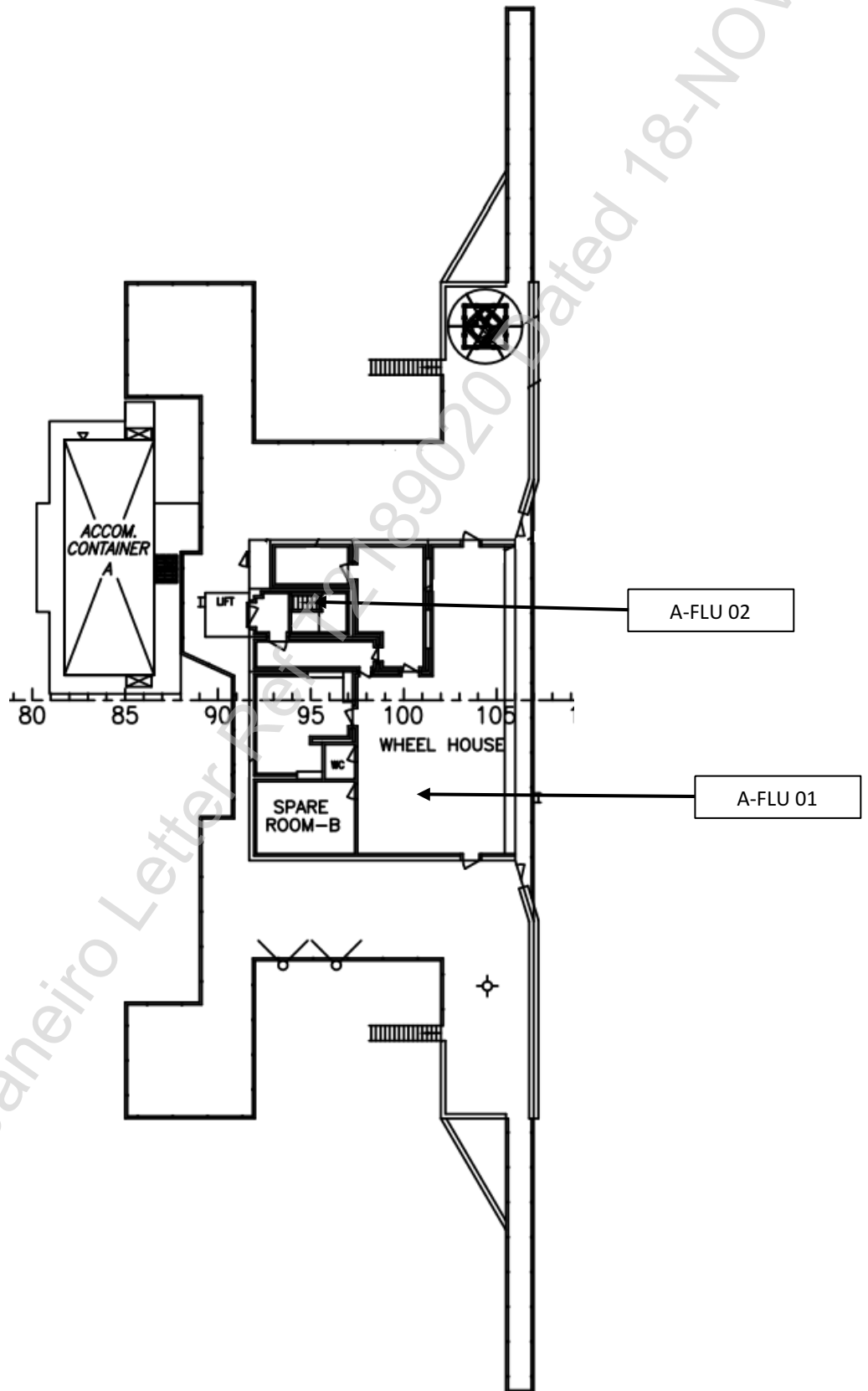
Zone	Equipment	Component/Part	Material	Test	Check procedure	Check Result / Notes (C or NC)
		Access Doors	Cordage	Asbestos	sample	A-FLU 20:
	Turbines	Heat Insulation	Matted Fibre	Asbestos	sample	A-FLU 48
			Canvas	Asbestos	sample	A-FLU 47
			Gypsum	Asbestos	sample	N/A
	Steam / Feed Pipes	Heat Insulation	Matted Fibre	Asbestos	sample	A-FLU 22
			Canvas/Cord	Asbestos	sample	A-FLU 15: A-FLU 21: A-FLU 27: A-FLU 29
			Gypsum	Asbestos	sample	A-FLU 28: A-FLU 30: A-FLU 39: A-FLU 44
	Condensers	Heat Insulation	Matted Fibre	Asbestos	sample	A-FLU 46
			Canvas	Asbestos	sample	A-FLU 45
	Valves	Packing	Cord	Asbestos	sample	A-FLU 31: A-FLU 32: A-FLU 33: A-FLU 34: A-FLU 35
	Flanges	Jointing	Card	Asbestos	sample	A-FLU 36: A-FLU 37: A-FLU 38

Asbestos documentation

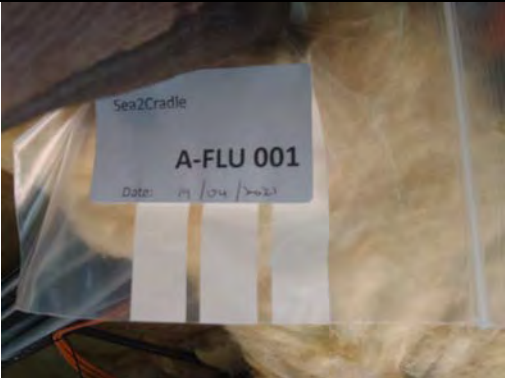

See ABS Rio de Janeiro Letter Ref T2189020 Dated 18-NOV-2021



See ABS Rio de Janeiro Letter Ref T2189020 Dated 18-NOV-2021

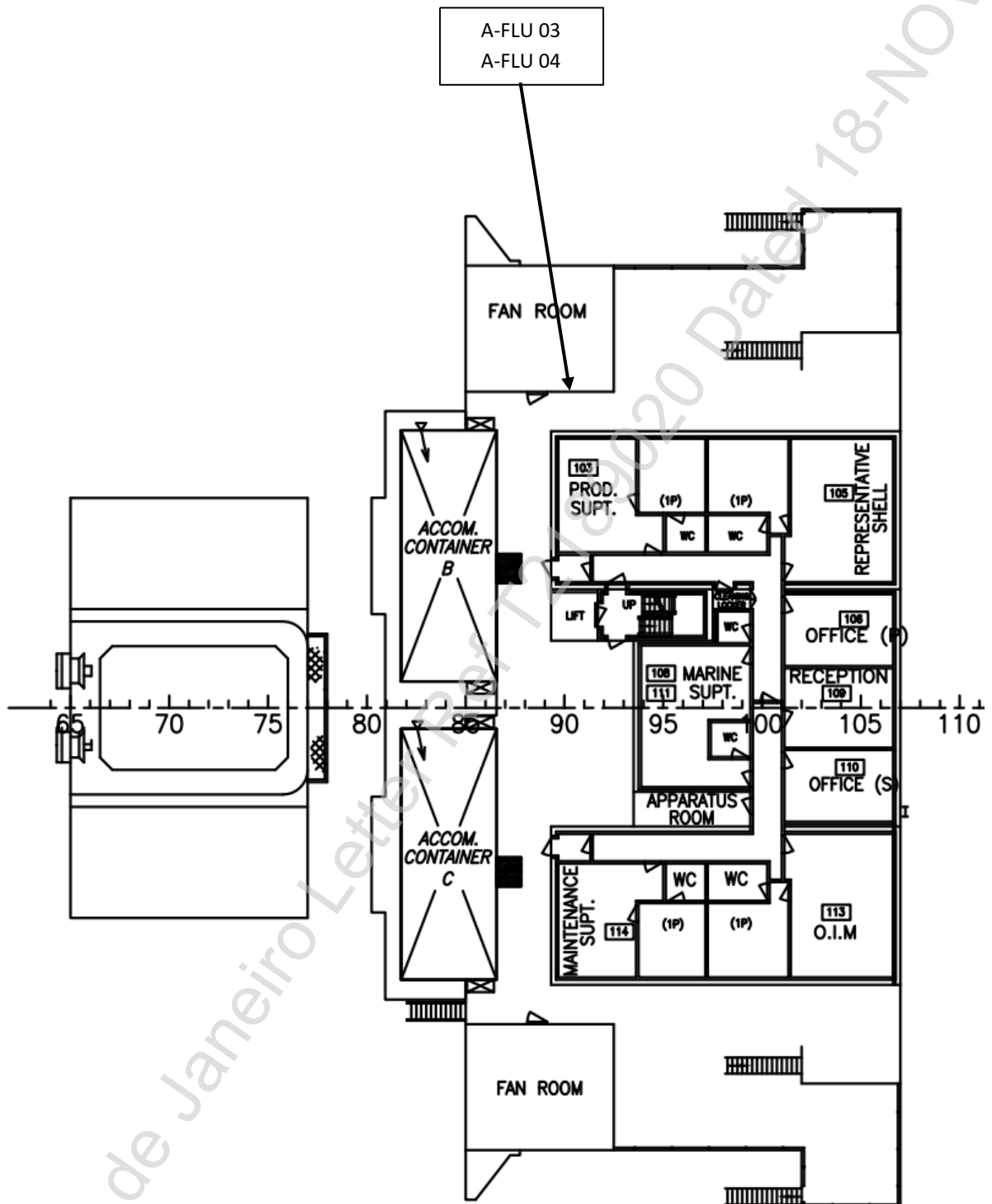


See ABS Rio de Janeiro Letter No. 189020 dated 18-NOV-2021

	
<p>Sample : A-FLU 01 Location : 01. Nav. Deck Bridge Description : Deckhead Insulation</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>

	
<p>Sample : A-FLU 02 Location : 01. Nav. Deck Stairwell Description : Step Grip</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>

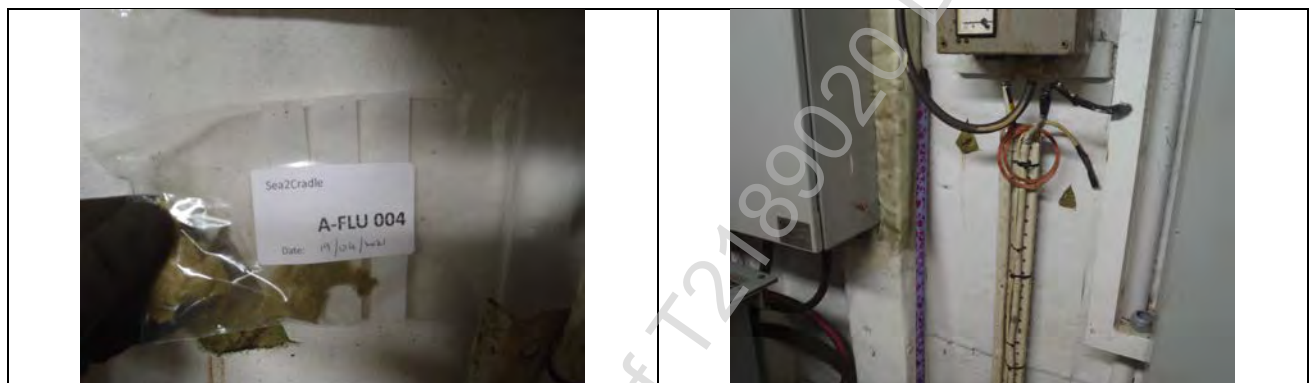
See ABS Rio de Janeiro Letter Ref T2709020 Dated 18-NOV-2021



See ABS Rio de Janeiro Letter Ref: 2020 Dated 18-NOV-2021

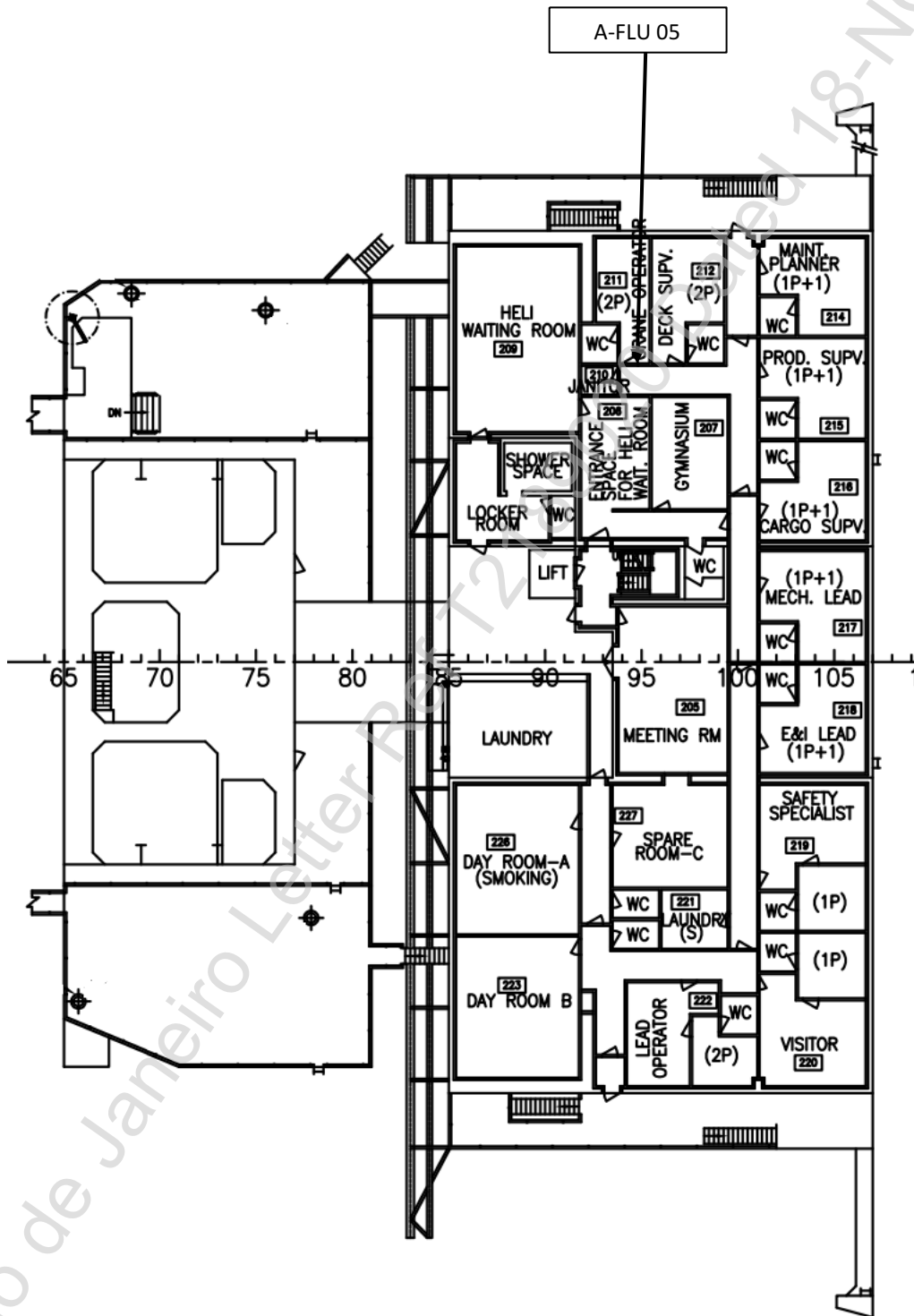


Sample : A-FLU 03	Tested for : Asbestos
Location : 02. D Deck Fan Room	Result : <0.1%
Description : Bulkhead Insulation Cover	:
	:





Sample : A-FLU 04	Tested for : Asbestos
Location : 02. D Deck Fan Room	Result : <0.1%
Description : Bulkhead Insulation	:
	:

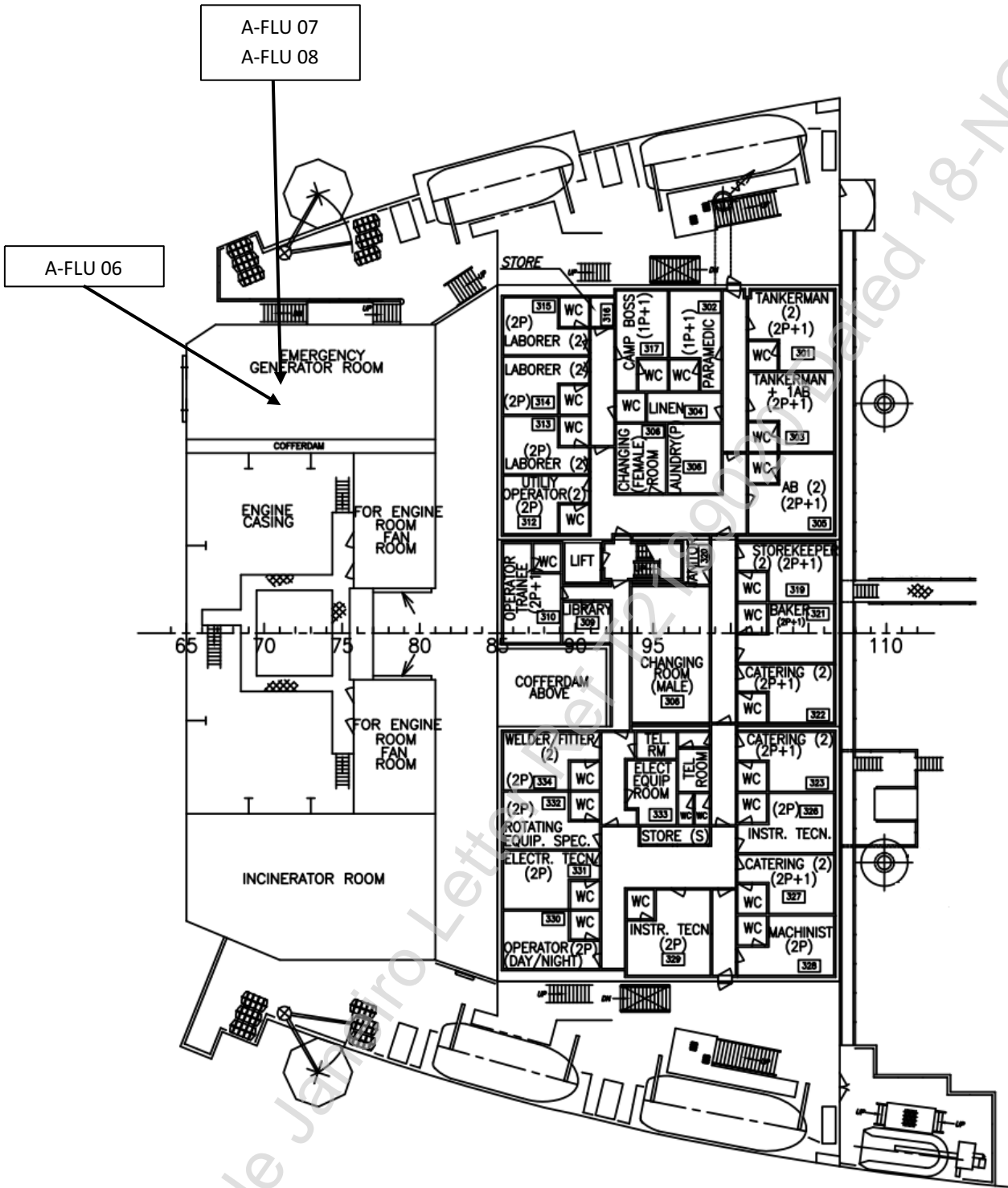
See ABS Rio de Janeiro Letter Ref T2189020 Dated 18-Nov-2021





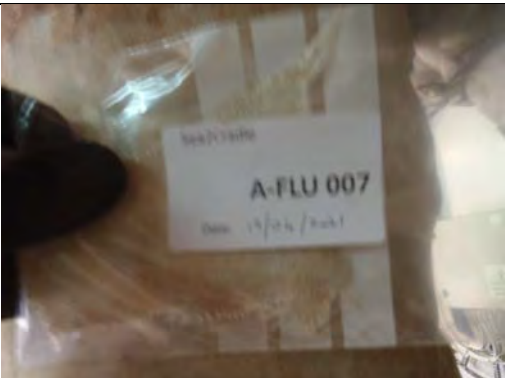

See ABS Rio de Janeiro Letter P-1278-NOV-2021


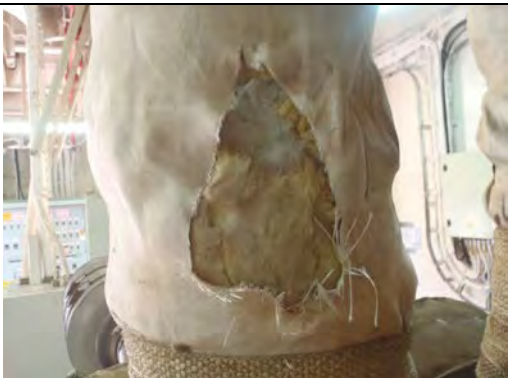
	
<p>Sample : A-FLU 05 Location : 03. C Deck Alleyway Description : Bulkhead Insulation</p>	<p>Tested for : Asbestos Result : <0.1% : : :</p>

See ABS Rio de Janeiro Letter Ref T2189020 Dated 18-NOV-2021

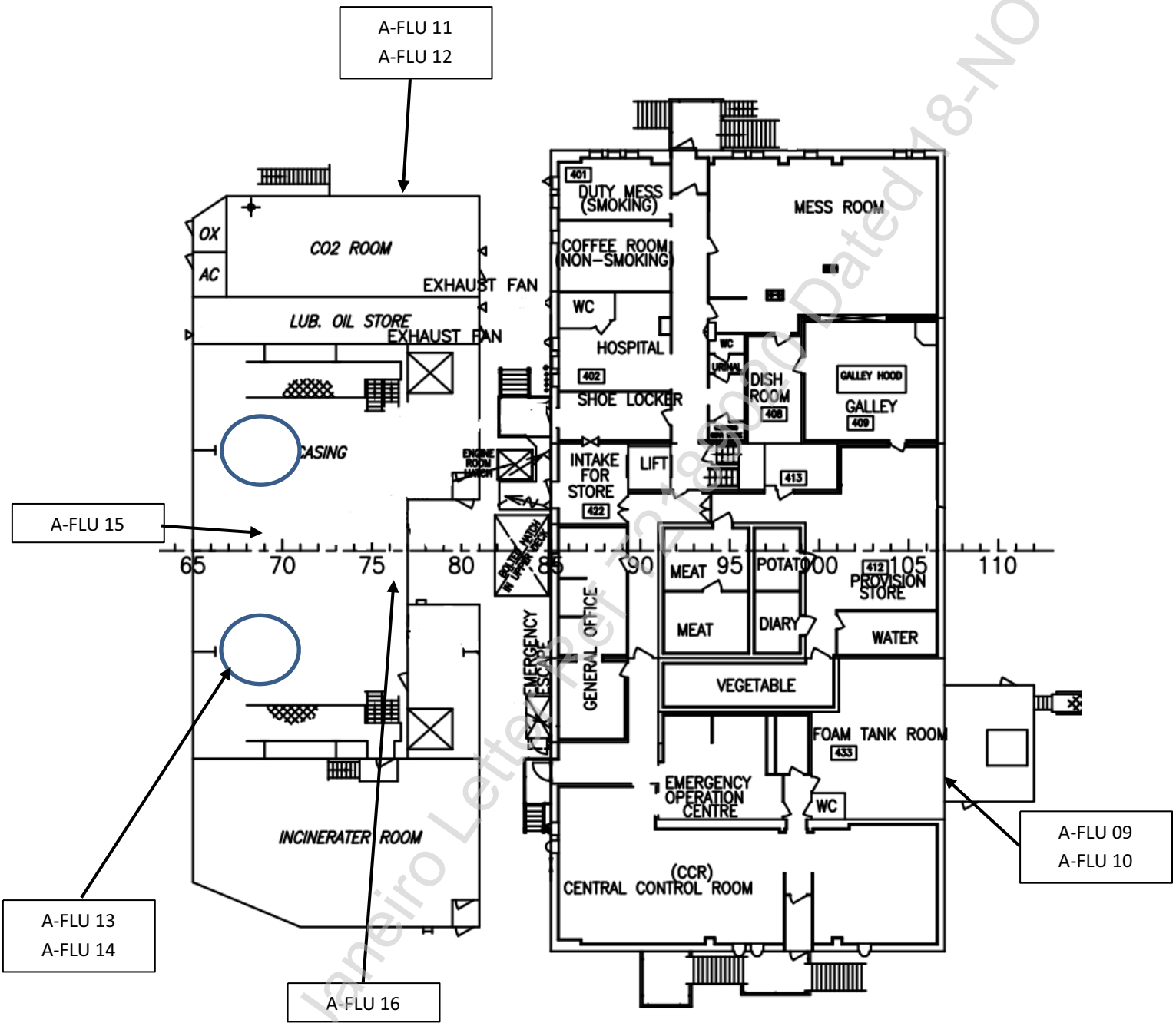


	
<p>Sample : A-FLU 06 Location : Emergency Generator Description : Exhaust Uptake Cordage</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>

	
<p>Sample : A-FLU 07 Location : Emergency Generator Description : Exhaust Uptake Lagging</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>

	
<p>Sample : A-FLU 08 Location : Emergency Generator Description : Exhaust Uptake Lagging</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>

See ABS Rio de Janeiro Letter Ref T2718990 Dated 18-04-2021

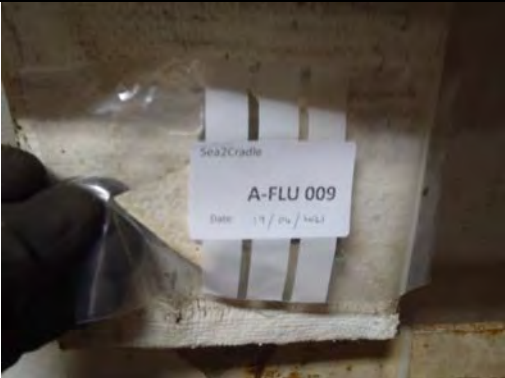



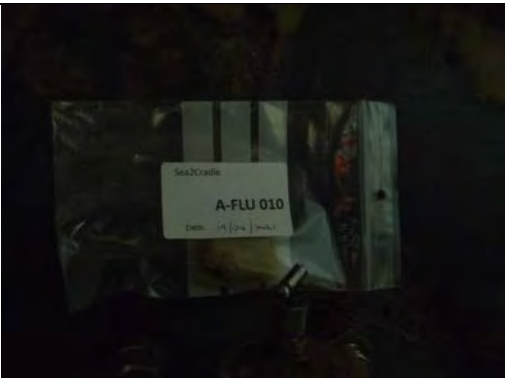

A-FLU 13
A-FLU 14



A-FLU 16

A-FLU 09
A-FLU 10



See ABS Rio de Janeiro Letter of Approval Dated 18-NOV-2017


	
<p>Sample : A-FLU 09 Location : 05. Foam Room Description : Bulkhead insulation (Canvas)</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>



	
<p>Sample : A-FLU 10 Location : 05. Foam Room Description : Bulkhead Insulation (Fibre)</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>

	
<p>Sample : A-FLU 11 Location : 05. CO2 Room Description : Bulkhead Insulation (Canvas)</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>

See ABS Rio de Janeiro Letter Ref T27189020 Dated 18-NOV-2021

	
<p>Sample : A-FLU 12 Location : 05. CO2 Room Description : Bulkhead Insulation (Fibre)</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>

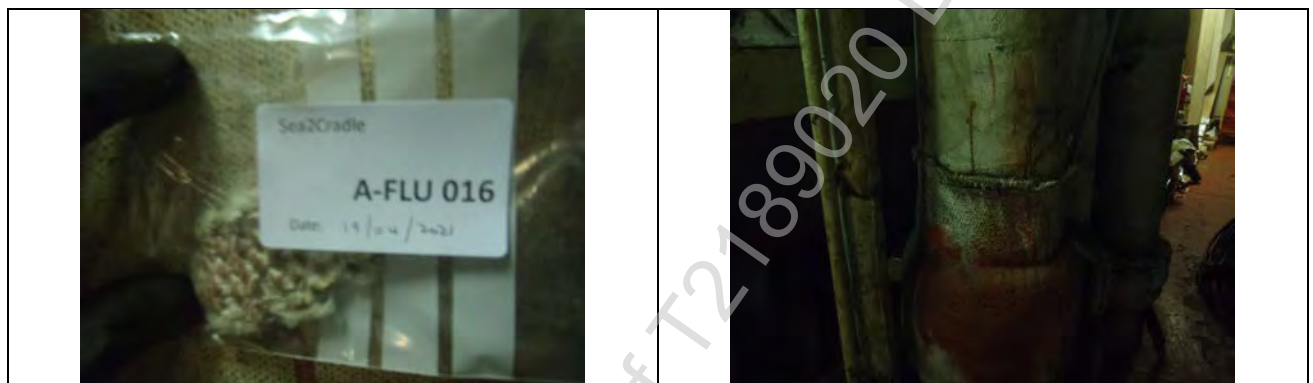
	
<p>Sample : A-FLU 13 Location : 05. Boiler Uptake Description : Heat Insulation (Canvas)</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>

	
<p>Sample : A-FLU 14 Location : 05. Boiler Uptake Description : Heat Insulation (Gypsum)</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>

See ABS Rio de Janeiro Letter Ref T27189020 Dated 18/09/2021

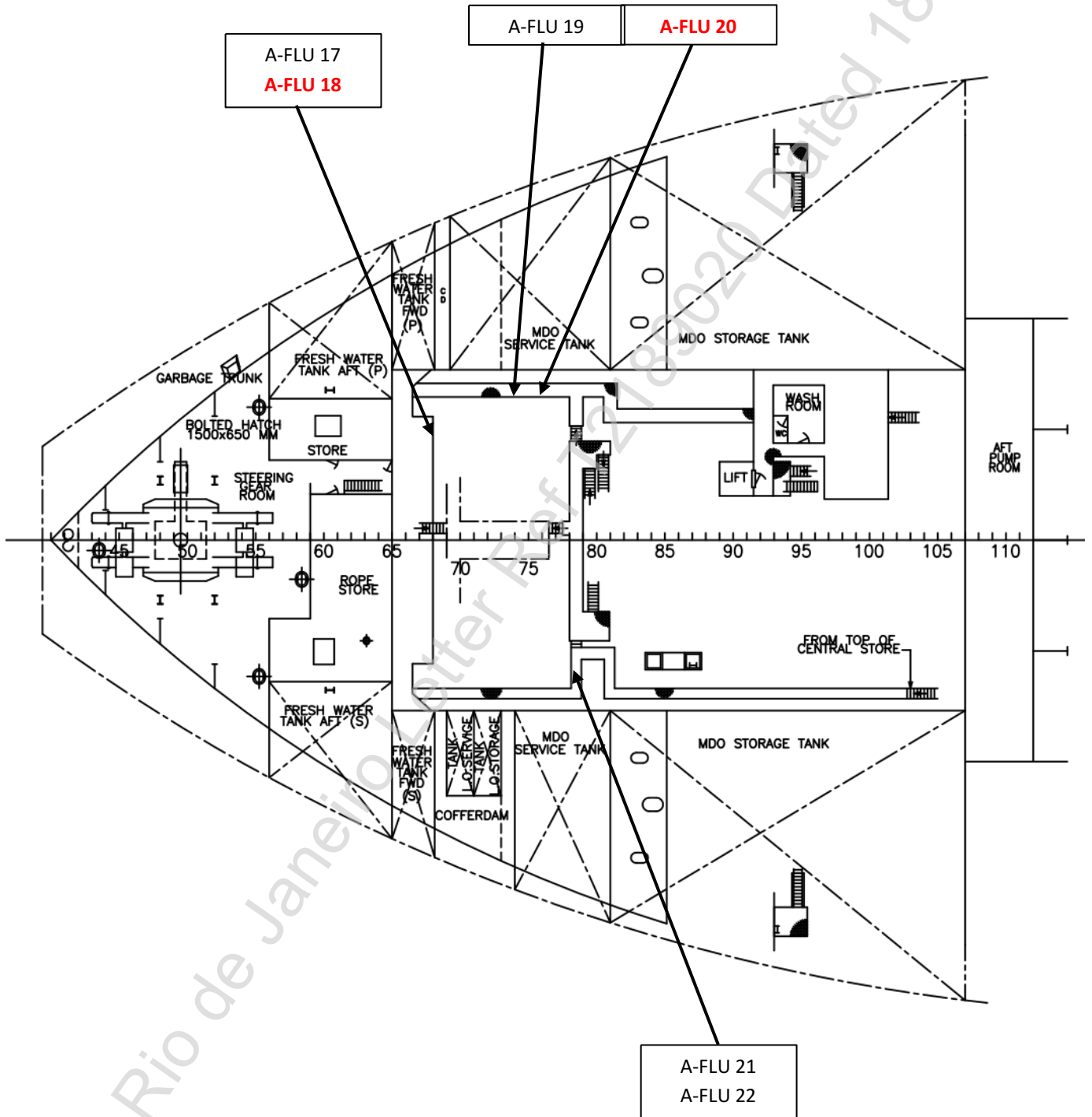


<p>Sample : A-FLU 15 Location : 05. Pipework Description : Heat Insulation</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>
----------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------



<p>Sample : A-FLU 16 Location : 05. Exhaust Uptake Description : Cordage Bandage</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>
----------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------

See ABS Rio de Janeiro Letter Ref T2189020 Dated 18-NOV-2021





See ABS Rio de Janeiro Letter Ref 1218020 Dated 18-NOV-2021

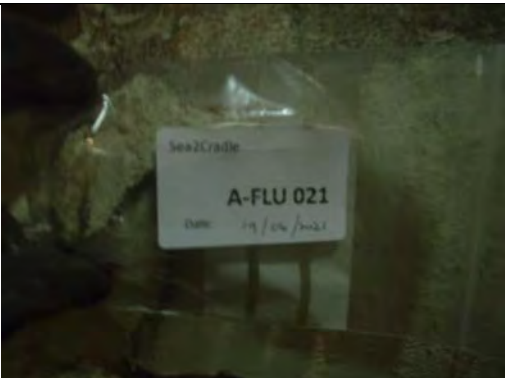

<p>Sample : A-FLU 17 Location : 06. Boiler Steam Drum Description : Heat Insulation (Canvas)</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>



<p>Sample : A-FLU 18 Location : 06. Boiler Steam Drum Description : Heat Insulation (Gypsum)</p>	<p>Tested for : Asbestos Result : 2% to 5% Chrysotile : 2% to 5% Amosite : :</p>

<p>Sample : A-FLU 19 Location : 06. Boiler Side Wall Description : Heat Insulation</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>


See ABS Rio de Janeiro Letter Ref T2189020 Dated 18/04/2021

	
<p>Sample : A-FLU 20 Location : 06. Boiler Access Door Description : Door Joint</p>	<p>Tested for : Asbestos Result : >60% Chrysotile : :</p>

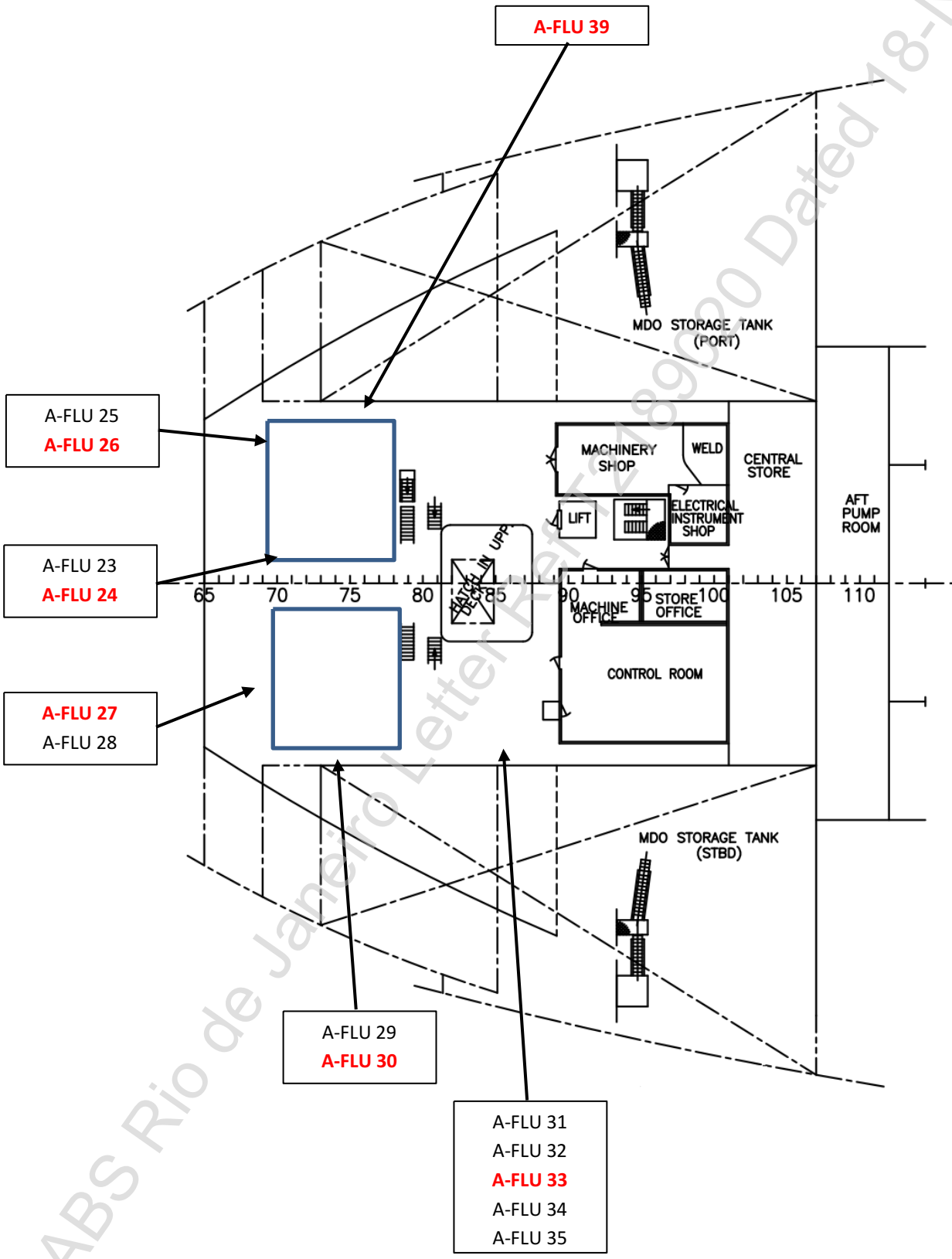
	
<p>Sample : A-FLU 21 Location : 06. Main Steam Pipe Description : Heat Insulation (Canvas)</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>

	
<p>Sample : A-FLU 22 Location : 06. Main Steam Pipe Description : Heat Insulation (Fibre)</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>

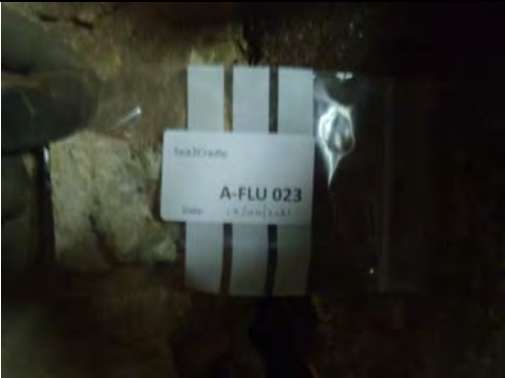

See ABS Rio de Janeiro Letter Ref T27189020 Dated 18 NOV 2021

		
Sample	: Visual	Observed : Canvas & Rockwool
Location	: 06. Main Steam Pipe	:
Description	: Heat Insulation	:
		:

See ABS Rio de Janeiro Letter Ref T2189020 Dated 18-NOV-2021




See ABS Rio de Janeiro Letter Ref: 18930 Dated 18-NOV-2021

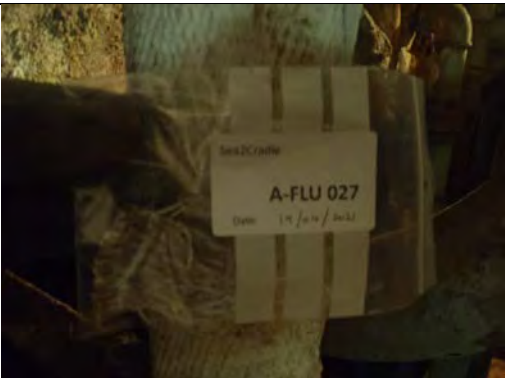

	
<p>Sample : A-FLU 23 Location : 07. Boiler Bottom Header Description : Heat Insulation (Canvas)</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>



	
<p>Sample : A-FLU 24 Location : 07. Boiler Bottom Header Description : Heat Insulation (Gypsum)</p>	<p>Tested for : Asbestos Result : 5% to 10% Chrysotile : :</p>

	
<p>Sample : A-FLU 25 Location : 07. Boiler Water Drum Description : Heat Insulation (Canvas)</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>



See ABS Rio de Janeiro Letter Ref T27189020 Dated 18-NOV-2021



	
<p>Sample : A-FLU 26 Location : 07. Boiler Water Drum Description : Heat Insulation (Gypsum)</p>	<p>Tested for : Asbestos Result : 2% to 5% Chrysotile : 2% to 5% Amosite :</p>



	
<p>Sample : A-FLU 27 Location : 07. Boiler Feed Pipe Description : Heat Insulation (Cordage)</p>	<p>Tested for : Asbestos Result : >60% Chrysotile : :</p>

	
<p>Sample : A-FLU 28 Location : 07. Boiler Feed Pipe Description : Heat Insulation (Gypsum)</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>



See ABS Rio de Janeiro Letter Ref T27189020 Dated NOV-2021



	
<p>Sample : A-FLU 29 Location : 07. Boiler Steam Pipe Description : Heat Insulation (Canvas)</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>

	
<p>Sample : A-FLU 30 Location : 07. Boiler Steam Pipe Description : Heat Insulation (Gypsum)</p>	<p>Tested for : Asbestos Result : 5% to 10% Chrysotile : :</p>

	
<p>Sample : A-FLU 31 Location : 07. Starboard Shelving Description : Valve Packing (Cord)</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>

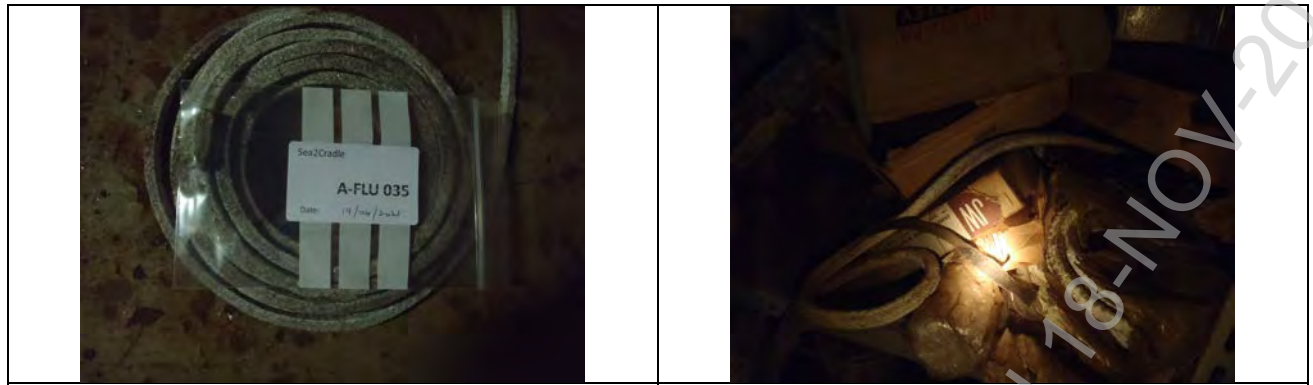
See ABS Rio de Janeiro Letter Ref T27189020 Dated 18-NOV-2021

	
<p>Sample : A-FLU 32 Location : 07. Starboard Shelving Description : Valve Packing (Cord)</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>

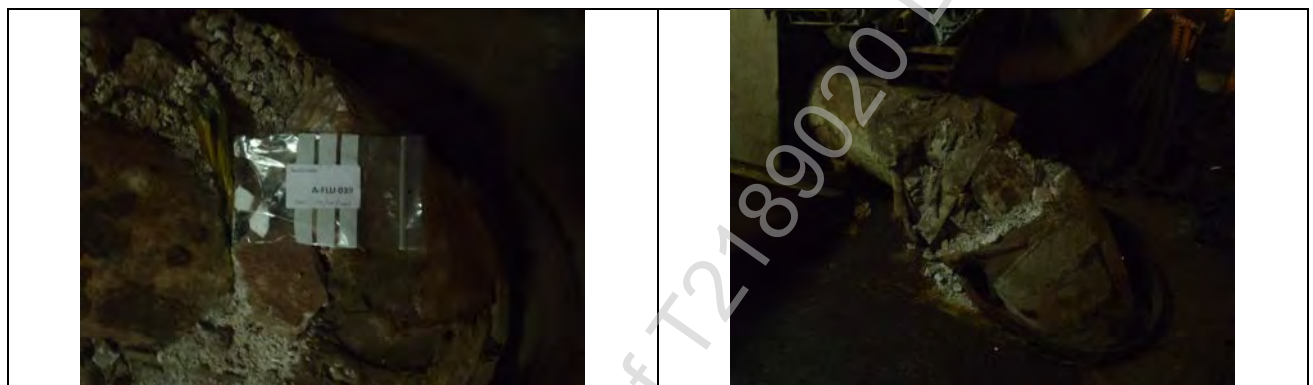
	
<p>Sample : A-FLU 33 Location : 07. Starboard Shelving Description : Valve Packing (Cord)</p>	<p>Tested for : Asbestos Result : >60% Chrysotile : :</p>

	
<p>Sample : A-FLU 34 Location : 07. Starboard Shelving Description : Valve Packing (Cord)</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>

See ABS Rio de Janeiro Letter Ref T27189020 Dated 18-NOV-2021



Sample : A-FLU 35	Tested for : Asbestos
Location : 07. Starboard Shelving	Result : <0.1%
Description : Valve Packing (Cord)	:
	:

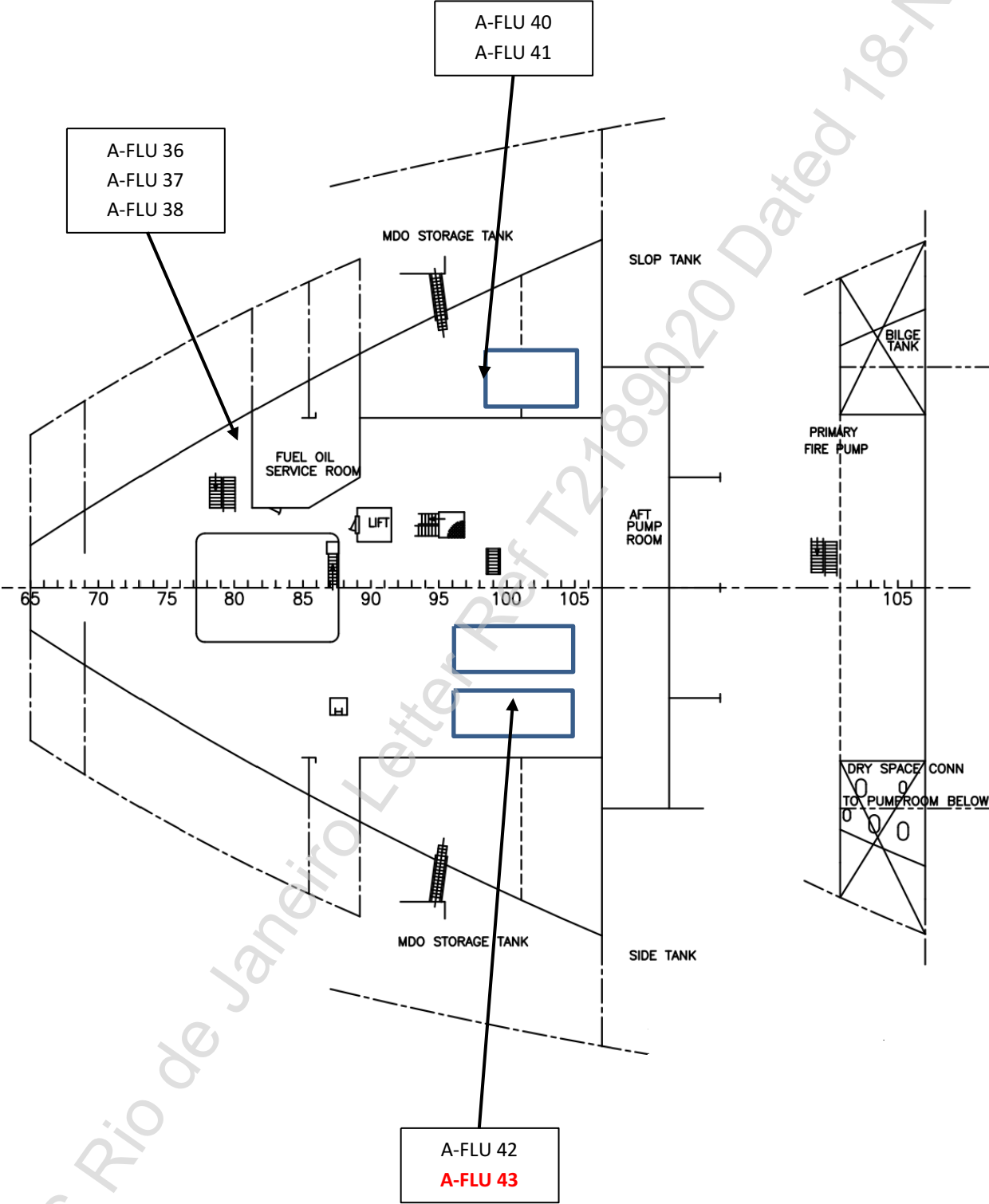


Sample : A-FLU 39	Tested for : Asbestos
Location : 07. Main Steam Pipe	Result : 5% to 10% Chrysotile
Description : Damaged	:
	:



Sample : Visual	Observed : Canvas & Rockwool
Location : 07. Steam Pipe	:
Description : Heat Insulation	:
	:

See ABS Rio de Janeiro Letter Ref T27189020 Dated 18-NOV-2021



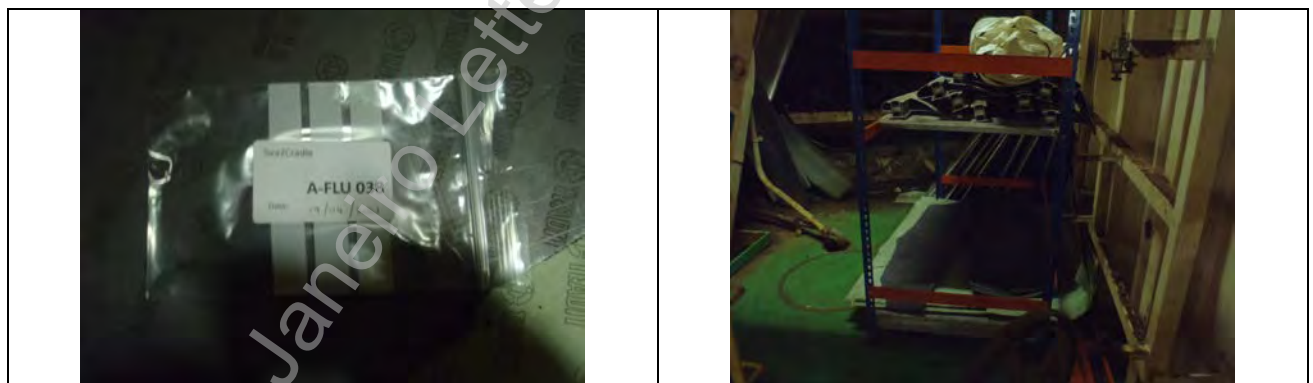
See ABS Rio de Janeiro Letter Ref T2189020 Dated 18-NOV-2021



Sample : A-FLU 36	Tested for : Asbestos
Location : 08. Port Shelving	Result : <0.1%
Description : Card Jointing Roll	:
	:



Sample : A-FLU 37	Tested for : Asbestos
Location : 08. Port Shelving	Result : <0.1%
Description : Card Jointing Roll	:
	:



Sample : A-FLU 38	Tested for : Asbestos
Location : 08. Port Shelving	Result : <0.1%
Description : Card Jointing Roll	:
	:

See ABS Rio de Janeiro Letter Ref T27189020 Dated 18-NOV-2021

<p>Sample : A-FLU 40 Location : 08. LP Steam Generator Description : Heat Insulation (Canvas)</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>

<p>Sample : A-FLU 41 Location : 08. LP Steam Generator Description : Heat Insulation (Fibre)</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>

<p>Sample : A-FLU 42 Location : 08. Generator Exhaust Description : Heat Insulation (Canvas)</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>

See ABS Rio de Janeiro Letter Ref T27189020 Dated 18-NOV-2021

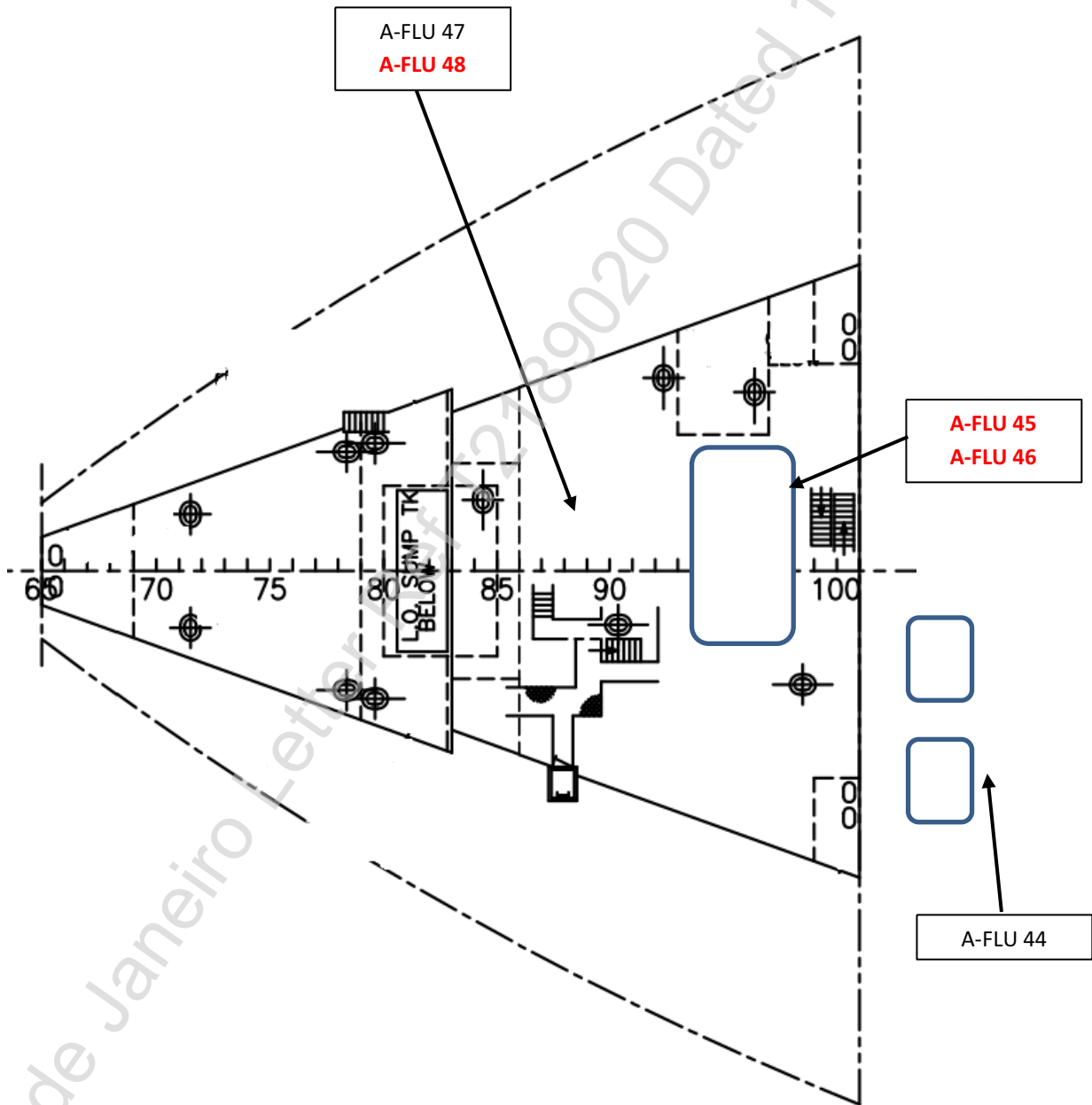


<p>Sample : A-FLU 43 Location : 08. Generator Exhaust Description : Heat Insulation (Gypsum)</p>	<p>Tested for : Asbestos Result : 2% to 5% Chrysotile : 2% to 5% Amosite :</p>
----------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------







<p>Sample : Visual Location : 08. Steam Pipe Description : Heat Insulation</p>	<p>Observed : Canvas & Rockwool : : :</p>
----------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------



See ABS Rio de Janeiro Letter Ref T2189020 Dated 18-NOV-2021





See ABS Rio de Janeiro Letter #12789020 Dated 18-NOV-2021

	
<p>Sample : A-FLU 44 Location : 09. FW Evaporator Feed Description : Heat Insulation (Gypsum)</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>

	
<p>Sample : A-FLU 45 Location : 09. Main Condenser Description : Heat Insulation (Canvas)</p>	<p>Tested for : Asbestos Result : 15% to 30% Chrysotile : 2% to 5% Amosite : :</p>

	
<p>Sample : A-FLU 46 Location : 09. Main Condenser Description : Heat Insulation (Fibre)</p>	<p>Tested for : Asbestos Result : 30% to 60% Chrysotile : 2% to 5% Amosite : :</p>

See ABS Rio de Janeiro Letter Ref T27189020 Dated 18-NOV-2021

	
<p>Sample : A-FLU 47 Location : 09. L.P. Turbine Description : Heat Insulation (Canvas)</p>	<p>Tested for : Asbestos Result : <0.1% : :</p>

	
<p>Sample : A-FLU 48 Location : 09. L.P. Turbine Description : Heat Insulation (Fibre)</p>	<p>Tested for : Asbestos Result : 2% to 5% Chrysotile : :</p>

See ABS Rio de Janeiro Letter Ref T2789020 Dated 18-NOV-2021

Asbestos Sample List - FLU

Sample No.	Location	Material Use	Material Type	Analysis required
A FLU 001	01. Nav. Deck Bridge	Deckhead Insulation	Matted Fibre	Asbestos
A FLU 002	01. Nav. Deck Stairwell	Step Grip	Fabric	Asbestos
A FLU 003	02. D Deck Fan Room Port	Bulkhead Covering	Canvas	Asbestos
A FLU 004	02. D Deck Fan Room Port	Bulkhead Insulation	Matted Fibre	Asbestos
A FLU 005	03. C Deck Alleyway	Bulkhead Insulation	Matted Fibre	Asbestos
A FLU 006	04. Emergency Generator	Exhaust Uptake	Cordage mat	Asbestos
A FLU 007	04. Emergency Generator	Exhaust Uptake	Canvas	Asbestos
A FLU 008	04. Emergency Generator	Exhaust Uptake	Matted Fibre	Asbestos
A FLU 009	05. Foam Room	Bulkhead Insulation	Canvas	Asbestos
A FLU 010	05. Foam Room	Bulkhead Insulation	Matted Fibre	Asbestos
A FLU 011	05. CO2 Room	Bulkhead Insulation	Canvas	Asbestos
A FLU 012	05. CO2 Room	Bulkhead Insulation	Matted Fibre	Asbestos
A FLU 013	05. Boiler Exhaust Uptake	Heat Insulation	Canvas	Asbestos
A FLU 014	05. Boiler Exhaust Uptake	Heat Insulation	Gypsum	Asbestos
A FLU 015	05. Piping	Heat Insulation	Canvas	Asbestos
A FLU 016	05. Exhaust Uptake	Heat Insulation	Cordage Mat	Asbestos
A FLU 017	06. Boiler Steam Drum	Heat Insulation	Canvas	Asbestos
A FLU 018	06. Boiler Steam Drum	Heat Insulation	Gypsum	Asbestos
A FLU 019	06. Boiler Side Wall	Heat Insulation	Fibre	Asbestos
A FLU 020	06. Boiler Door	Jointing	Cordage Mat	Asbestos
A FLU 021	06. Main Steam Pipe	Heat Insulation	Canvas	Asbestos
A FLU 022	06. Main Steam Pipe	Heat Insulation	Fibre	Asbestos
A FLU 023	07. Boiler Bottom Header	Heat Insulation	Canvas	Asbestos
A FLU 024	07. Boiler Bottom Header	Heat Insulation	Gypsum	Asbestos
A FLU 025	07. Boiler Water Drum	Heat Insulation	Canvas	Asbestos
A FLU 026	07. Boiler Water Drum	Heat Insulation	Gypsum	Asbestos
A FLU 027	07. Boiler Feed Pipe	Heat Insulation	Cordage Mat	Asbestos
A FLU 028	07. Boiler Feed Pipe	Heat Insulation	Gypsum	Asbestos
A FLU 029	07. Boiler Steam Pipe	Heat Insulation	Canvas	Asbestos
A FLU 030	07. Boiler Steam Pipe	Heat Insulation	Gypsum	Asbestos
A FLU 031	07. Stbd Shelving	Valve Packing	Cord	Asbestos
A FLU 032	07. Stbd Shelving	Valve Packing	Cord	Asbestos
A FLU 033	07. Stbd Shelving	Valve Packing	Cord	Asbestos

Asbestos Sample List - FLU

A FLU 034	07. Stbd Shelving	Valve Packing	Cord	Asbestos
A FLU 035	07. Stbd Shelving	Valve Packing	Cord	Asbestos
A FLU 036	08. Port Shelving	Flange Jointing Roll	Card	Asbestos
A FLU 037	08. Port Shelving	Flange Jointing Roll	Card	Asbestos
A FLU 038	08. Port Shelving	Flange Jointing Roll	Card	Asbestos
A FLU 039	07. Main Steam Pipe	Heat Insulation	Gypsum	Asbestos
A FLU 040	08. L.P. Steam Generator	Heat Insulation	Canvas	Asbestos
A FLU 041	08. L.P. Steam Generator	Heat Insulation	Fibre	Asbestos
A FLU 042	08. Generator Exhaust	Heat Insulation	Canvas	Asbestos
A FLU 043	08. Generator Exhaust	Heat Insulation	Gypsum	Asbestos
A FLU 044	09. FW Evaporator Feed P/P	Heat Insulation	Gypsum	Asbestos
A FLU 045	09. Main Condenser	Heat Insulation	Canvas	Asbestos
A FLU 046	09. Main Condenser	Heat Insulation	Fibre	Asbestos
A FLU 047	09. L.P. Turbine	Heat Insulation	Canvas	Asbestos
A FLU 048	09. L.P. Turbine	Heat Insulation	Fibre	Asbestos

SGI Compliance Consultancy B.V.
Hongkongstraat 5
3047 BR Rotterdam
Nederland

Certificate of Analysis

Certificate number	A00059319.2
Reporting date	31-05-2021
Version	2
Number of pages including cover	3
Verification code	YnTID8Jq
Your reference	MA-1003032
Our projectnumber	A164487
Client description	MA-1003032 - FLU - Sea2cradle
Date received samples	27-05-2021
Sampling by	Client
Type of analysis	NEN 5896
Date of analysis	28-05-2021
Analysis location	Rotterdam

Dear Sir / Madam,

Hereby you will receive the analytical results of the laboratory research for your reference: MA-1003032. The research was conducted in accordance with your assignment. The results relate solely to the samples examined.

SGI Compliance Environmental Control is not responsible for any interpretations or conclusions that have been made based on the results obtained. Sampling by "Client" can not be ruled out about the data, origin, representativeness and safety obtained during sampling.

The analyzes conducted by SGI Compliance Environmental Control are, unless otherwise stated, accredited under L140 by the Accreditation Board. A list of transactions is included on the website of the Board of Accreditation <http://www.rva.nl>. If desired, we can send you the operation list.

This analysis report applies to our terms and conditions. The analysis report is a whole and must be used as such. All documents associated with this report have been verified and authorized by the Manager Laboratory or its substitute. If there is any doubt about the authenticity of this document, you can verify it at verification@sgicompliance.nl, mentioning the report number.

Yours sincerely, i.o.



Mrs. M. Bot, PhD
Manager Laboratory

This report replaces report A00059319.1 version 1 dated 28-05-2021.

Reason new version: English report, version 1 Dutch report.

Certificate of Analysis

Certificate number: A00059319.2

Our project number: A164487

Qualitative analysis of asbestos using polarization microscopy in accordance with NEN 5896

Sample number	Client sample description	Material type *1 *3	Asbestos type	Mass (%)	Friability *2
A164487-001	A FLU 001	Insulation	No asbestos	<0,1% *	N/A
A164487-002	A FLU 002	Coating	No asbestos	<0,1% *	N/A
A164487-003	A FLU 003	Coating	No asbestos	<0,1% *	N/A
A164487-004	A FLU 004	Insulation	No asbestos	<0,1% *	N/A
A164487-005	A FLU 005	Insulation	No asbestos	<0,1% *	N/A
A164487-006	A FLU 006	Insulation	No asbestos	<0,1% *	N/A
A164487-007	A FLU 007	Insulation	No asbestos	<0,1% *	N/A
A164487-008	A FLU 008	Insulation	No asbestos	<0,1% *	N/A
A164487-009	A FLU 009	Insulation	No asbestos	<0,1% *	N/A
A164487-010	A FLU 010	Insulation	No asbestos	<0,1% *	N/A
A164487-011	A FLU 011	Insulation	No asbestos	<0,1% *	N/A
A164487-012	A FLU 012	Insulation	No asbestos	<0,1% *	N/A
A164487-013	A FLU 013	Insulation	No asbestos	<0,1% *	N/A
A164487-014	A FLU 014	Insulation	No asbestos	<0,1% *	N/A
A164487-015	A FLU 015	Coating	No asbestos	<0,1% *	N/A
A164487-016	A FLU 016	Insulation	No asbestos	<0,1% *	N/A
A164487-017	A FLU 017	Insulation	No asbestos	<0,1% *	N/A
A164487-018	A FLU 018	Insulation	Chrysotile Amosite	2-5% 2-5%	friable
A164487-019	A FLU 019	Insulation	No asbestos	<0,1% *	N/A
A164487-020	A FLU 020	Cord	Chrysotile	>60%	friable
A164487-021	A FLU 021	Insulation	No asbestos	<0,1% *	N/A
A164487-022	A FLU 022	Insulation	No asbestos	<0,1% *	N/A
A164487-023	A FLU 023	Insulation	No asbestos	<0,1% *	N/A
A164487-024	A FLU 024	Insulation	Chrysotile	5-10%	friable
A164487-025	A FLU 025	Insulation	No asbestos	<0,1% *	N/A
A164487-026	A FLU 026	Insulation	Chrysotile Amosite	2-5% 2-5%	friable
A164487-027	A FLU 027	Cord	Chrysotile	>60%	friable
A164487-028	A FLU 028	Insulation	No asbestos	<0,1% *	N/A
A164487-029	A FLU 029	Insulation	No asbestos	<0,1% *	N/A

Certificate of Analysis

Certificate number: A00059319.2

Our projectnumber: A164487

Qualitative analysis of asbestos using polarization microscopy in accordance with NEN 5896

Sample number	Client sample description	Material type *1 *3	Asbestos type	Mass (%)	Friability *2
A164487-030	A FLU 030	Insulation	Chrysotile	5-10%	friable
A164487-031	A FLU 031	Cord	No asbestos	<0,1% *	N/A
A164487-032	A FLU 032	Insulation	No asbestos	<0,1% *	N/A
A164487-033	A FLU 033	Cord	Chrysotile	>60%	friable
A164487-034	A FLU 034	Insulation	No asbestos	<0,1% *	N/A
A164487-035	A FLU 035	Insulation	No asbestos	<0,1% *	N/A
A164487-036	A FLU 036	Gasket	No asbestos	<0,1% *	N/A
A164487-037	A FLU 037	Gasket	No asbestos	<0,1% *	N/A
A164487-038	A FLU 038	Gasket	No asbestos	<0,1% *	N/A
A164487-039	A FLU 039	Insulation	Chrysotile	5-10%	friable
A164487-040	A FLU 040	Insulation	No asbestos	<0,1% *	N/A
A164487-041	A FLU 041	Insulation	No asbestos	<0,1% *	N/A
A164487-042	A FLU 042	Insulation	No asbestos	<0,1% *	N/A
A164487-043	A FLU 043	Insulation	Chrysotile Amosite	2-5% 2-5%	friable
A164487-044	A FLU 044	Insulation	No asbestos	<0,1% *	N/A
A164487-045	A FLU 045	Insulation	Chrysotile Amosite	15-30% 2-5%	friable
A164487-046	A FLU 046	Insulation	Chrysotile Amosite	30-60% 2-5%	friable
A164487-047	A FLU 047	Insulation	No asbestos	<0,1% *	N/A
A164487-048	A FLU 048	Insulation	Chrysotile	2-5%	friable

*: <0.1% (not demonstrable)

*1 The material type subscribes the findings from SGI Compliance Environmental Control laboratory. Due to the method of sampling method, it cannot be excluded that the laboratory findings deviate from the type of material established in the field.

*2 The friability subscribes the findings from the SGI Compliance Environmental Control laboratory. Due to the method of sampling as well as the condition of the sample presented, it cannot be excluded that the laboratory findings deviate from the conclusion established in the field.

*3 SGI Compliance Environmental Control recommends scanning electron microscopy (SEM - ISO14966) analysis on organically bound materials (eg. floor tile, mastics, roofing materials, joint compounds) and adhesive tape when PLM analysis shows undetectable quantities of asbestos. These materials often contain milled asbestos with fibre diameters and lengths too small to be resolved by the PLM and the analysis may yield a false negative result.

Hazmat Samples Documentation

See ABS Rio de Janeiro Letter Ref T2189020 Dated 18-NOV-2021

General Sample List - FLU

Sample No.	Location	Material Use	Material Type	Analysis required
G FLU 001	01. Nav. Deck	Cable Run Console	Wipe	PCB
G FLU 002	01. Nav. Deck	Flooring	Vinyl	PCB
G FLU 003	01. Nav. Deck	Window Seal	Rubber	PCB
G FLU 004	01. Nav. Deck	Matting	Rubber	PCB
G FLU 005	01. Nav. Deck	Shelf Protection	Vinyl	PCB
G FLU 006	01. Nav. Deck Stairwell	Flooring	Vinyl	PCB
G FLU 007	01. Nav. Deck	Internal Door Seal	Rubber	PCB
G FLU 008	01. Nav. Deck	Coating - External	Deck Paint - Yellow	PCB Pb, Cd, Cr
G FLU 009	01. Nav. Deck	W/T Door Seal	Rubber	PCB
G FLU 010	00. Top of Nav. Deck	Cable Penetration	Rubber	PCB
G FLU 011	00. Top of Nav. Deck	Coating - External	Deck Paint – Red	PCB Pb, Cd, Cr
G FLU 012	02. D Deck	Coating - External	Bulkhead Paint - White	PCB Pb, Cd, Cr
G FLU 013	02. D Deck	Anti-Slip Mat	Rubber	PCB
G FLU 014	02. D Deck	Matting	Rubber	PCB
G FLU 015	02. D Deck Cabin	Curtain Material	Fabric	PFOS
G FLU 016	02. D Deck Cabin	Chair Material	Fabric	PFOS
G FLU 017	02. D Deck Fan Room	Pipe Flange	Rubber	PCB
G FLU 018	02. D Deck Fan Room	Reefer Pipe Lagging		ODS
G FLU 019	03. Heli-Deck	Special Coating	Paint - Green	PCB Pb, Cd, Cr
G FLU 020	03. C Deck	Anti- Slip Mat	Rubber	PCB
G FLU 021	03. C Deck	W/T Vent Seal	Rubber	PCB
G FLU 022	04. B Deck	Anti-Slip Mat	Rubber	PCB
G FLU 023	04. B Deck	Flooring	Vinyl	PCB
G FLU 024	04. B Deck	External W/T Door Seal	Rubber	PCB
G FLU 025	05. Upper Deck Accom.	Cable Run	Wipe	PCB
G FLU 026	05. Upper Deck Accom.	Manhole Door Joint	Rubber	PCB
G FLU 027	07. Engine Control Room	Electrical Matting	Rubber	PCB
G FLU 028	07. Engine Control Room	Flooring	Vinyl	PCB
G FLU 029	07. Engine Control Room	Cable Run Breaker	Wipe	PCB
G FLU 030	06. Upper Platform E.R.	Coating - Internal	Deck Paint - Yellow	PCB Pb, Cd, Cr
G FLU 031	08. Lower Platform E.R.	Coating - Internal	Bulkhead Paint - White	PCB Pb, Cd, Cr

General Sample List - FLU

G FLU 032	08. Lower Platform E.R.	Coating - Internal	Deck Paint – Green	PCB Pb, Cd, Cr
G FLU 033	08. Lower Platform E.R.	Manhole Cover Joint	Rubber	PCB
G FLU 034	09. Tank Top Engine Room	Valve Gasket	Rubber	PCB
G FLU 035	09. Tank Top Engine Room	Worktop Sheeting	Rubber	PCB
G FLU 036	09. Tank Top Engine Room	Coating - Internal	Ladder Paint Red	PCB Pb, Cd, Cr
G FLU 037	09. Tank Top Engine Room	Coating - Internal	Machinery Paint - Green	PCB Pb, Cd, Cr
G FLU 038	01. Nav. Deck	Floor Covering Carpet	Material	PFOS
G FLU 039	04A. Topside Hyd. Unit Rm	Cable Run	Wipe	PCB
G FLU 040	04A. Topside Hyd. Unit Rm	Coating - Internal	Bulkhead Paint - White	PCB Pb, Cd, Cr
G FLU 041	04B. Topside Module 1	Coating - Pipe	Paint - Silverene	PCB Pb, Cd, Cr
G FLU 042	04A. MCC & Control Room	Anti-Slip Mat	Rubber	PCB
G FLU 043	04A. MCC & Control Room	Electrical Matting	Rubber	PCB
G FLU 044	04A. MCC & Control Room	Cable Run	Wipe	PCB
G FLU 045	06. Upper Platform E.R.	Valve Operating System	Hydraulic Oil	PCB
G FLU 046	05A. Upper Deck	Deck Hydraulic Line	Hydraulic Oil	PCB
G FLU 047	06. Steering Gear Room	Rotary Vane Seal	Rubber	PCB
G FLU 048	01. Nav. Deck	Curtain Material	Fabric	PFOS
G FLU 049	05A. Upper Deck	Coating – Deck Girder	Paint-Grey	PCB Pb, Cd, Cr
G FLU 050	05A. Upper Deck	Valve Gasket	Card	PCB
G FLU 051	05A. Upper Deck	Coating – Deck Bracket	Paint - Red	PCB Pb, Cd, Cr
G FLU 052	05A. Upper Deck	Manhole Joint	Rubber	PCB
G FLU 053	05A. Upper Deck	Coating - External	Deck Paint – Red	PCB Pb, Cd, Cr
G FLU 054	05B. Upper Deck	W/T Door Seal	Rubber	PCB
G FLU 055	05B. Upper Deck	Anti-Slip Mat	Rubber	PCB
G FLU 056	05B. Upper Deck	Cable Run	Wipe	PCB
G FLU 057	05B. Upper Deck	Coating - External	Deck Paint – Yellow	PCB Pb, Cd, Cr
G FLU 058	06. Upper Platform E.R.	Reefer Pipe Lagging		ODS
G FLU 059	05. Upper Deck Accom.	Anti-Slip Mat	Rubber	PCB
G FLU 060	05. Upper Deck CCR	Flooring	Vinyl	PCB
G FLU 061	05. Upper Deck Foam Tank Room	Coating - Internal	Deck Paint – Green	PCB
G FLU 062	05. Cold Stores	Insulation	PUR	ODS

UCL Umwelt Control Labor GmbH // Köpenicker Str. 59 // 24111 Kiel // DE

Sea2cradle B. V.
 - Herr Taco Moll -
 Scheepmakershaven 59
 3011 VD ROTTERDAM
 NIEDERLANDE

Bianca Rucks
 T 04316964151
 F 0431-6964-189
 bianca.rucks@ucl-labor.de

Report-No.: 21-26371/1

Sample Matrix: 6 x Swipe Sample, 54 x Material Sample, 2 x Oil
Client / Customer ID: Sea2cradle B. V., Scheepmakershaven 59, 3011 VD Rotterdam, Niederlande / 61422
Project: 173.19 HAZMAT
Sampling on / by: 16.04.2021 - 18.04.2021 / Auftraggeber
Delivery on / by: 27.05.2021 / TNT
Testing period: 28.05.2021 - 21.06.2021

Parameter	Sample-ID	G FLU 001	G FLU 025	G FLU 029	G FLU 039	Method
	Sample-No. Unit	21-26371-001	21-26371-025	21-26371-029	21-26371-039	
Analysis of Original sample						
PCB						
PCB-028	µg abs	<0,01	<0,01	<0,01	<0,01	DIN 38414-20: 1996-01,L
PCB-052	µg abs	<0,01	<0,01	<0,01	<0,01	DIN 38414-20: 1996-01,L
PCB-101	µg abs	<0,01	<0,01	<0,01	<0,01	DIN 38414-20: 1996-01,L
PCB-118	µg abs	<0,01	<0,01	<0,01	<0,01	DIN 38414-20: 1996-01,L
PCB-138	µg abs	0,010	<0,01	<0,01	<0,01	DIN 38414-20: 1996-01,L
PCB-153	µg abs	0,023	<0,01	<0,01	<0,01	DIN 38414-20: 1996-01,L
PCB-180	µg abs	0,024	<0,01	<0,01	<0,01	DIN 38414-20: 1996-01,L
sum det. PCB-6	µg abs	0,057	0,000	0,000	0,000	berechnet,L
sum of det. PCB total	µg abs	0,285	0,000	0,000	0,000	berechnet,L

n.b. = not determinable n.a. = not analysed ° = not accredited FV=Outsourcing UA = Subcontract AG=Customers data + = carried out
 site identifier (letters postpositioned the standard method): H=Hannover, KI=Kiel, L=Lünen, HE=Heide, BS=Braunschweig

Parameter	Sample-ID	G FLU 044	G FLU 056			Method
	Sample-No. Unit	21-26371-044	21-26371-056			
Analysis of Original sample						
PCB						
PCB-028	µg abs	<0,01	<0,01			DIN 38414-20: 1996-01,L
PCB-052	µg abs	<0,01	<0,01			DIN 38414-20: 1996-01,L

Parameter	Sample-ID	G FLU 044	G FLU 056			Method
	Sample-No. Unit	21-26371-044	21-26371-056			
PCB-101	µg abs	<0,01	<0,01			DIN 38414-20: 1996-01;L
PCB-118	µg abs	<0,01	<0,01			DIN 38414-20: 1996-01;L
PCB-138	µg abs	<0,01	<0,01			DIN 38414-20: 1996-01;L
PCB-153	µg abs	<0,01	<0,01			DIN 38414-20: 1996-01;L
PCB-180	µg abs	<0,01	<0,01			DIN 38414-20: 1996-01;L
sum det. PCB-6	µg abs	0,000	0,000			berechnet;L
sum of det. PCB total	µg abs	0,000	0,000			berechnet;L

n.b. = not determinable n.a. = not analysed ° = not accredited FV=Outsourcing UA = Subcontract AG=Customers data + = carried out
 site identifier (letters postpositioned the standard method): H=Hannover, KI=Kiel, L=Lünen, HE=Heide, BS=Braunschweig

See ABS Rio de Janeiro Letter Ref T2189020 Dated 18-NOV-2021

Parameter	Sample-ID	G FLU 002	G FLU 003	G FLU 004	G FLU 005	Method
	Sample-No. Unit	21-26371-002	21-26371-003	21-26371-004	21-26371-005	
PCB						
PCB-028	mg/kg OS	<0,1	<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-052	mg/kg OS	<0,1	1,5	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-101	mg/kg OS	0,17	4,4	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-138	mg/kg OS	0,29	2,0	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-153	mg/kg OS	0,20	1,3	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-180	mg/kg OS	<0,1	0,29	<0,1	<0,1	DIN 38414-20: 1996-01;L
sum det. PCB-6	mg/kg OS	0,66	9,49	0,00	0,00	berechnet;L
sum of det. PCB total	mg/kg OS	3,30	47,45	0,00	0,00	berechnet;L

n.b. = not determinable n.a. = not analysed ° = not accredited FV=Outsourcing UA = Subcontract AG=Customers data + = carried out site identifier (letters postpositioned the standard method): H=Hannover, KI=Kiel, L=Lüden, HE=Heide, BS=Braunschweig

Parameter	Sample-ID	G FLU 006	G FLU 007	G FLU 008	G FLU 009	Method
	Sample-No. Unit	21-26371-006	21-26371-007	21-26371-008	21-26371-009	
Analysis of Original sample						
Lead	mg/kg OS			10600		DIN ISO 22036: 2009-06;L
Cadmium	mg/kg OS			4,2		DIN ISO 22036: 2009-06;L
Chromium total	mg/kg OS			270		DIN ISO 22036: 2009-06;L
PCB						
PCB-028	mg/kg OS	<0,1	<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-052	mg/kg OS	<0,1	<0,1	0,65	<0,1	DIN 38414-20: 1996-01;L
PCB-101	mg/kg OS	<0,1	0,81	1,2	<0,1	DIN 38414-20: 1996-01;L
PCB-138	mg/kg OS	<0,1	1,2	1,1	<0,1	DIN 38414-20: 1996-01;L
PCB-153	mg/kg OS	<0,1	1,0	0,63	<0,1	DIN 38414-20: 1996-01;L
PCB-180	mg/kg OS	<0,1	0,23	0,23	<0,1	DIN 38414-20: 1996-01;L
sum det. PCB-6	mg/kg OS	0,00	3,24	3,81	0,00	berechnet;L
sum of det. PCB total	mg/kg OS	0,00	16,20	19,05	0,00	berechnet;L
Sample preparation						
Microwave digestion				+		DIN EN 13657: 2003-01;L

n.b. = not determinable n.a. = not analysed ° = not accredited FV=Outsourcing UA = Subcontract AG=Customers data + = carried out site identifier (letters postpositioned the standard method): H=Hannover, KI=Kiel, L=Lüden, HE=Heide, BS=Braunschweig

Parameter	Sample-ID	G FLU 010	G FLU 011	G FLU 012	G FLU 013	Method
	Sample-No. Unit	21-26371-010	21-26371-011	21-26371-012	21-26371-013	
Analysis of Original sample						
Lead	mg/kg OS		170	45		DIN ISO 22036: 2009-06;L
Cadmium	mg/kg OS		0,14	0,13		DIN ISO 22036: 2009-06;L
Chromium total	mg/kg OS		20	21		DIN ISO 22036: 2009-06;L
PCB						
PCB-028	mg/kg OS	<0,1	<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-052	mg/kg OS	<0,1	<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-101	mg/kg OS	<0,1	<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-138	mg/kg OS	<0,1	<0,1	0,11	<0,1	DIN 38414-20: 1996-01;L
PCB-153	mg/kg OS	<0,1	<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-180	mg/kg OS	<0,1	<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
sum det. PCB-6	mg/kg OS	0,00	0,00	0,11	0,00	berechnet;L
sum of det. PCB total	mg/kg OS	0,00	0,00	0,55	0,00	berechnet;L
Sample preparation						
Microwave digestion			+	+		DIN EN 13657: 2003-01;L

n.b. = not determinable n.a. = not analysed ° = not accredited FV=Outsourcing UA = Subcontract AG=Customers data + = carried out site identifier (letters postpositioned the standard method): H=Hannover, KI=Kiel, L=Lünen, HE=Heide, BS=Braunschweig

Parameter	Sample-ID	G FLU 014	G FLU 015	G FLU 016	G FLU 017	Method
	Sample-No. Unit	21-26371-014	21-26371-015	21-26371-016	21-26371-017	
PCB						
PCB-028	mg/kg OS	<0,1			<0,1	DIN 38414-20: 1996-01;L
PCB-052	mg/kg OS	<0,1			<0,1	DIN 38414-20: 1996-01;L
PCB-101	mg/kg OS	<0,1			<0,1	DIN 38414-20: 1996-01;L
PCB-138	mg/kg OS	<0,1			<0,1	DIN 38414-20: 1996-01;L
PCB-153	mg/kg OS	<0,1			<0,1	DIN 38414-20: 1996-01;L
PCB-180	mg/kg OS	<0,1			<0,1	DIN 38414-20: 1996-01;L
sum det. PCB-6	mg/kg OS	0,00			0,00	berechnet;L
sum of det. PCB total	mg/kg OS	0,00			0,00	berechnet;L
PFT						
Perfluorooctanesulfonic acid (PFOS)	mg/kg OS		<0,04	<0,03		i.A.a.DIN 38414-14*: 2011-08;KI

n.b. = not determinable n.a. = not analysed ° = not accredited FV=Outsourcing UA = Subcontract AG=Customers data + = carried out site identifier (letters postpositioned the standard method): H=Hannover, KI=Kiel, L=Lünen, HE=Heide, BS=Braunschweig

Parameter	Sample-ID	G FLU 018	G FLU 019	G FLU 020	G FLU 021	Method
	Sample-No. Unit	21-26371-018	21-26371-019	21-26371-020	21-26371-021	
Analysis of Original sample						
Lead	mg/kg OS		28			DIN ISO 22036: 2009-06;L
Cadmium	mg/kg OS		<0,1			DIN ISO 22036: 2009-06;L
Chromium total	mg/kg OS		17			DIN ISO 22036: 2009-06;L
PCB						
PCB-028	mg/kg OS		<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-052	mg/kg OS		<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-101	mg/kg OS		<0,1	<0,1	0,40	DIN 38414-20: 1996-01;L
PCB-138	mg/kg OS		<0,1	<0,1	0,90	DIN 38414-20: 1996-01;L
PCB-153	mg/kg OS		<0,1	<0,1	0,71	DIN 38414-20: 1996-01;L
PCB-180	mg/kg OS		<0,1	<0,1	0,46	DIN 38414-20: 1996-01;L
sum det. PCB-6	mg/kg OS		0,00	0,00	2,47	berechnet;L
sum of det. PCB total	mg/kg OS		0,00	0,00	12,35	berechnet;L
Ozone depleting substances						
R 141 b (1,1-dichloro-1-fluoroethane)	mg/kg OS	<1,00				LA-GC-013.01 2018-10;FV
R 134 a (1,1,1,2-tetrafluoroethane)	mg/kg OS	<1,00				LA-GC-013.01 2018-10;FV
R 114 (1,2-dichloro-1,1,2,2-tetrafluoroethane)	mg/kg OS	<5,00				LA-GC-013.01 2018-10;FV
R 22 (chlorodifluoromethane)	mg/kg OS	<1,00				LA-GC-013.01 2018-10;FV
R 11 (trichlorofluoromethane)	mg/kg OS	<5,00				LA-GC-013.01 2018-10;FV
R 111 (1,1,1,2,2-pentachlorofluoroethane)	mg/kg OS	n.b.				LA-GC-013.01 2018-10;FV
R 113/ R113a (total 1,1,2-trichloro-1,2,2-trifluoroethane/ 1,1,1-trichloro-2,2,2-trifluoroethane)	mg/kg OS	<5,00				LA-GC-013.01 2018-10;FV
R 112 (1,1,2,2-tetrachloro-1,2-difluoroethane)	mg/kg OS	n.b.				LA-GC-013.01 2018-10;FV
R 12 (dichlorodifluoromethane)	mg/kg OS	<5,00				LA-GC-013.01 2018-10;FV
R 123 a (1,2-dichloro-1,1,2-trifluoroethane)	mg/kg OS	<1,00				LA-GC-013.01 2018-10;FV
R 123 (2,2-dichloro-1,1,1-trifluoroethane)	mg/kg OS	<1,00				LA-GC-013.01 2018-10;FV
R 141 (1,2-dichlorofluoroethane)	mg/kg OS	<5,00				LA-GC-013.01 2018-10;FV
R 1132 a (1,1-difluoroethene)	mg/kg OS	n.b.				LA-GC-013.01 2018-10;FV
R 132c (1,1-dichloro-1,2-difluoroethane)	mg/kg OS	n.b.				LA-GC-013.01 2018-10;FV
R21 (Dichlorofluoromethane)	mg/kg OS	<1,00				LA-GC-013.01 2018-10;FV

Parameter	Sample-ID	G FLU 018	G FLU 019	G FLU 020	G FLU 021	Method
	Sample-No. Unit	21-26371-018	21-26371-019	21-26371-020	21-26371-021	
Sample preparation						
Microwave digestion			+			DIN EN 13657: 2003-01;L

n.b. = not determinable n.a. = not analysed ° = not accredited FV=Outsourcing UA = Subcontract AG=Customers data + = carried out site identifier (letters postpositioned the standard method): H=Hannover, KI=Kiel, L=Lünen, HE=Heide, BS=Braunschweig

Parameter	Sample-ID	G FLU 022	G FLU 023	G FLU 024	G FLU 026	Method
	Sample-No. Unit	21-26371-022	21-26371-023	21-26371-024	21-26371-026	
PCB						
PCB-028	mg/kg OS	<0,1	<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-052	mg/kg OS	<0,1	<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-101	mg/kg OS	<0,1	<0,1	0,12	<0,1	DIN 38414-20: 1996-01;L
PCB-138	mg/kg OS	<0,1	<0,1	0,27	<0,1	DIN 38414-20: 1996-01;L
PCB-153	mg/kg OS	<0,1	<0,1	0,17	<0,1	DIN 38414-20: 1996-01;L
PCB-180	mg/kg OS	<0,1	<0,1	0,14	<0,1	DIN 38414-20: 1996-01;L
sum det. PCB-6	mg/kg OS	0,00	0,00	0,70	0,00	berechnet;L
sum of det. PCB total	mg/kg OS	0,00	0,00	3,50	0,00	berechnet;L

n.b. = not determinable n.a. = not analysed ° = not accredited FV=Outsourcing UA = Subcontract AG=Customers data + = carried out site identifier (letters postpositioned the standard method): H=Hannover, KI=Kiel, L=Lünen, HE=Heide, BS=Braunschweig

Parameter	Sample-ID	G FLU 027	G FLU 028	G FLU 030	G FLU 031	Method
	Sample-No. Unit	21-26371-027	21-26371-028	21-26371-030	21-26371-031	
Analysis of Original sample						
Lead	mg/kg OS			5,4	3210	DIN ISO 22036: 2009-06;L
Cadmium	mg/kg OS			<0,1	5,3	DIN ISO 22036: 2009-06;L
Chromium total	mg/kg OS			29	1100	DIN ISO 22036: 2009-06;L
PCB						
PCB-028	mg/kg OS	<0,1	<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-052	mg/kg OS	<0,1	<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-101	mg/kg OS	<0,1	<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-138	mg/kg OS	<0,1	<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-153	mg/kg OS	<0,1	<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-180	mg/kg OS	<0,1	<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
sum det. PCB-6	mg/kg OS	0,00	0,00	0,00	0,00	berechnet;L
sum of det. PCB total	mg/kg OS	0,00	0,00	0,00	0,00	berechnet;L

Parameter	Sample-ID	G FLU 027	G FLU 028	G FLU 030	G FLU 031	Method
	Sample-No. Unit	21-26371-027	21-26371-028	21-26371-030	21-26371-031	
Sample preparation						
Microwave digestion				+	+	DIN EN 13657: 2003-01;L

n.b. = not determinable n.a. = not analysed ° = not accredited FV=Outsourcing UA = Subcontract AG=Customers data + = carried out site identifier (letters postpositioned the standard method): H=Hannover, KI=Kiel, L=Lünen, HE=Heide, BS=Braunschweig

Parameter	Sample-ID	G FLU 032	G FLU 033	G FLU 034	G FLU 035	Method
	Sample-No. Unit	21-26371-032	21-26371-033	21-26371-034	21-26371-035	
Analysis of Original sample						
Lead	mg/kg OS	6,2				DIN ISO 22036: 2009-06;L
Cadmium	mg/kg OS	<0,1				DIN ISO 22036: 2009-06;L
Chromium total	mg/kg OS	28				DIN ISO 22036: 2009-06;L
PCB						
PCB-028	mg/kg OS	<0,1	<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-052	mg/kg OS	<0,1	<0,1	0,45	<0,1	DIN 38414-20: 1996-01;L
PCB-101	mg/kg OS	<0,1	0,17	0,12	<0,1	DIN 38414-20: 1996-01;L
PCB-138	mg/kg OS	<0,1	0,43	0,24	<0,1	DIN 38414-20: 1996-01;L
PCB-153	mg/kg OS	<0,1	0,32	0,18	<0,1	DIN 38414-20: 1996-01;L
PCB-180	mg/kg OS	<0,1	0,22	0,10	<0,1	DIN 38414-20: 1996-01;L
sum det. PCB-6	mg/kg OS	0,00	1,14	1,09	0,00	berechnet;L
sum of det. PCB total	mg/kg OS	0,00	5,70	5,45	0,00	berechnet;L
Sample preparation						
Microwave digestion		+				DIN EN 13657: 2003-01;L

n.b. = not determinable n.a. = not analysed ° = not accredited FV=Outsourcing UA = Subcontract AG=Customers data + = carried out site identifier (letters postpositioned the standard method): H=Hannover, KI=Kiel, L=Lünen, HE=Heide, BS=Braunschweig

Parameter	Sample-ID	G FLU 036	G FLU 037	G FLU 038	G FLU 040	Method
	Sample-No. Unit	21-26371-036	21-26371-037	21-26371-038	21-26371-040	
Analysis of Original sample						
Lead	mg/kg OS	3190	5320		95	DIN ISO 22036: 2009-06;L
Cadmium	mg/kg OS	0,90	<0,1		0,22	DIN ISO 22036: 2009-06;L
Chromium total	mg/kg OS	570	280		120	DIN ISO 22036: 2009-06;L
PCB						
PCB-028	mg/kg OS	<0,1	<0,1		<0,1	DIN 38414-20: 1996-01;L
PCB-052	mg/kg OS	0,12	0,11		<0,1	DIN 38414-20: 1996-01;L

Parameter	Sample-ID	G FLU 036	G FLU 037	G FLU 038	G FLU 040	Method
	Sample-No. Unit	21-26371-036	21-26371-037	21-26371-038	21-26371-040	
PCB-101	mg/kg OS	0,33	0,29		<0,1	DIN 38414-20: 1996-01;L
PCB-138	mg/kg OS	0,37	0,26		<0,1	DIN 38414-20: 1996-01;L
PCB-153	mg/kg OS	0,24	0,16		<0,1	DIN 38414-20: 1996-01;L
PCB-180	mg/kg OS	0,11	<0,1		<0,1	DIN 38414-20: 1996-01;L
sum det. PCB-6	mg/kg OS	1,17	0,82		0,00	berechnet;L
sum of det. PCB total	mg/kg OS	5,85	4,10		0,00	berechnet;L
PFT						
Perfluorooctanesulfonic acid (PFOS)	mg/kg OS			0,028		i.A.a.DIN 38414-14*: 2011-08;KI
Sample preparation						
Microwave digestion		+	+		+	DIN EN 13657: 2003-01;L

n.b. = not determinable n.a. = not analysed ° = not accredited FV=Outsourcing UA = Subcontract AG=Customers data + = carried out site identifier (letters postpositioned the standard method): H=Hannover, KI=Kiel, L=Lünen, HE=Heide, BS=Braunschweig

Parameter	Sample-ID	G FLU 041	G FLU 042	G FLU 043	G FLU 047	Method
	Sample-No. Unit	21-26371-041	21-26371-042	21-26371-043	21-26371-047	
Analysis of Original sample						
Lead	mg/kg OS	10				DIN ISO 22036: 2009-06;L
Cadmium	mg/kg OS	0,13				DIN ISO 22036: 2009-06;L
Chromium total	mg/kg OS	39				DIN ISO 22036: 2009-06;L
PCB						
PCB-028	mg/kg OS	<0,1	<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-052	mg/kg OS	<0,1	<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-101	mg/kg OS	<0,1	<0,1	<0,1	0,11	DIN 38414-20: 1996-01;L
PCB-138	mg/kg OS	<0,1	<0,1	<0,1	0,31	DIN 38414-20: 1996-01;L
PCB-153	mg/kg OS	<0,1	<0,1	<0,1	0,22	DIN 38414-20: 1996-01;L
PCB-180	mg/kg OS	<0,1	<0,1	<0,1	0,16	DIN 38414-20: 1996-01;L
sum det. PCB-6	mg/kg OS	0,00	0,00	0,00	0,80	berechnet;L
sum of det. PCB total	mg/kg OS	0,00	0,00	0,00	4,00	berechnet;L
Sample preparation						
Microwave digestion		+				DIN EN 13657: 2003-01;L

n.b. = not determinable n.a. = not analysed ° = not accredited FV=Outsourcing UA = Subcontract AG=Customers data + = carried out site identifier (letters postpositioned the standard method): H=Hannover, KI=Kiel, L=Lünen, HE=Heide, BS=Braunschweig

Parameter	Sample-ID	G FLU 048	G FLU 049	G FLU 050	G FLU 051	Method
	Sample-No. Unit	21-26371-048	21-26371-049	21-26371-050	21-26371-051	
Analysis of Original sample						
Lead	mg/kg OS		35		1450	DIN ISO 22036: 2009-06;L
Cadmium	mg/kg OS		2,1		1,6	DIN ISO 22036: 2009-06;L
Chromium total	mg/kg OS		93		360	DIN ISO 22036: 2009-06;L
PCB						
PCB-028	mg/kg OS		<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-052	mg/kg OS		<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-101	mg/kg OS		<0,1	0,11	<0,1	DIN 38414-20: 1996-01;L
PCB-138	mg/kg OS		<0,1	0,22	<0,1	DIN 38414-20: 1996-01;L
PCB-153	mg/kg OS		<0,1	0,17	<0,1	DIN 38414-20: 1996-01;L
PCB-180	mg/kg OS		<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
sum det. PCB-6	mg/kg OS		0,00	0,50	0,00	berechnet;L
sum of det. PCB total	mg/kg OS		0,00	2,50	0,00	berechnet;L
PFT						
Perfluorooctanesulfonic acid (PFOS)	mg/kg OS	<0,01				i.A.a.DIN 38414-14*: 2011-08;KI
Sample preparation						
Microwave digestion			+		+	DIN EN 13657: 2003-01;L

n.b. = not determinable n.a. = not analysed ° = not accredited FV=Outsourcing UA = Subcontract AG=Customers data + = carried out site identifier (letters postpositioned the standard method): H=Hannover, KI=Kiel, L=Lüden, HE=Heide, BS=Braunschweig

Comments
DIN ISO 22036:2009-06

049: Aufgrund der Probenmatrix wurden die Bestimmungsgrenzen für die Schwermetalle um den Faktor 10 erhöht.

Parameter	Sample-ID	G FLU 052	G FLU 053	G FLU 054	G FLU 055	Method
	Sample-No. Unit	21-26371-052	21-26371-053	21-26371-054	21-26371-055	
Analysis of Original sample						
Lead	mg/kg OS		6000			DIN ISO 22036: 2009-06;L
Cadmium	mg/kg OS		6,8			DIN ISO 22036: 2009-06;L
Chromium total	mg/kg OS		1490			DIN ISO 22036: 2009-06;L
PCB						
PCB-028	mg/kg OS	<0,1	<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-052	mg/kg OS	<0,1	<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-101	mg/kg OS	0,11	<0,1	0,16	<0,1	DIN 38414-20: 1996-01;L

Parameter	Sample-ID	G FLU 052	G FLU 053	G FLU 054	G FLU 055	Method
	Sample-No. Unit	21-26371-052	21-26371-053	21-26371-054	21-26371-055	
PCB-138	mg/kg OS	0,26	<0,1	0,36	<0,1	DIN 38414-20: 1996-01;L
PCB-153	mg/kg OS	0,16	<0,1	0,28	<0,1	DIN 38414-20: 1996-01;L
PCB-180	mg/kg OS	0,13	<0,1	<0,1	<0,1	DIN 38414-20: 1996-01;L
sum det. PCB-6	mg/kg OS	0,66	0,00	0,80	0,00	berechnet;L
sum of det. PCB total	mg/kg OS	3,30	0,00	4,00	0,00	berechnet;L
Sample preparation						
Microwave digestion			+			DIN EN 13657: 2003-01;L

n.b. = not determinable n.a. = not analysed ° = not accredited FV=Outsourcing UA = Subcontract AG=Customers data + = carried out site identifier (letters postpositioned the standard method): H=Hannover, KI=Kiel, L=Lünnen, HE=Heide, BS=Braunschweig

Parameter	Sample-ID	G FLU 057	G FLU 058	G FLU 059	G FLU 060	Method
	Sample-No. Unit	21-26371-057	21-26371-058	21-26371-059	21-26371-060	
Analysis of Original sample						
Lead	mg/kg OS	30				DIN ISO 22036: 2009-06;L
Cadmium	mg/kg OS	0,47				DIN ISO 22036: 2009-06;L
Chromium total	mg/kg OS	81				DIN ISO 22036: 2009-06;L
PCB						
PCB-028	mg/kg OS	<0,1		<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-052	mg/kg OS	<0,1		<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-101	mg/kg OS	<0,1		<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-138	mg/kg OS	<0,1		<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-153	mg/kg OS	<0,1		<0,1	<0,1	DIN 38414-20: 1996-01;L
PCB-180	mg/kg OS	<0,1		<0,1	<0,1	DIN 38414-20: 1996-01;L
sum det. PCB-6	mg/kg OS	0,00		0,00	0,00	berechnet;L
sum of det. PCB total	mg/kg OS	0,00		0,00	0,00	berechnet;L
Ozone depleting substances						
R 141 b (1,1-dichloro-1-fluoroethane)	mg/kg OS		<1,00			LA-GC-013.01 2018-10;FV
R 134 a (1,1,1,2-tetrafluoroethane)	mg/kg OS		<1,00			LA-GC-013.01 2018-10;FV
R 114 (1,2-dichloro-1,1,2,2-tetrafluoroethane)	mg/kg OS		<5,00			LA-GC-013.01 2018-10;FV
R 22 (chlorodifluoromethane)	mg/kg OS		<1,00			LA-GC-013.01 2018-10;FV
R 11 (trichlorofluoromethane)	mg/kg OS		<5,00			LA-GC-013.01 2018-10;FV
R 111 (1,1,1,2,2-pentachlorofluoroethane)	mg/kg OS		n.b.			LA-GC-013.01 2018-10;FV

Parameter	Sample-ID	G FLU 057	G FLU 058	G FLU 059	G FLU 060	Method
	Sample-No. Unit	21-26371-057	21-26371-058	21-26371-059	21-26371-060	
R 113/ R113a (total 1,1,2-trichloro-1,2,2-trifluoroethane/ 1,1,1-trichloro-2,2,2-trifluoroethane)	mg/kg OS		<5,00			LA-GC-013.01 2018-10;FV
R 112 (1,1,2,2-tetrachloro-1,2-difluoroethane)	mg/kg OS		n.b.			LA-GC-013.01 2018-10;FV
R 12 (dichlorodifluoromethane)	mg/kg OS		<5,00			LA-GC-013.01 2018-10;FV
R 123 a (1,2-dichloro-1,1,2-trifluoroethane)	mg/kg OS		<1,00			LA-GC-013.01 2018-10;FV
R 123 (2,2-dichloro-1,1,1-trifluoroethane)	mg/kg OS		<1,00			LA-GC-013.01 2018-10;FV
R 141 (1,2-dichlorofluoroethane)	mg/kg OS		<5,00			LA-GC-013.01 2018-10;FV
R 1132 a (1,1-difluoroethene)	mg/kg OS		n.b.			LA-GC-013.01 2018-10;FV
R 132c (1,1-dichloro-1,2-difluoroethane)	mg/kg OS		n.b.			LA-GC-013.01 2018-10;FV
R21 (Dichlorofluoromethane)	mg/kg OS		<1,00			LA-GC-013.01 2018-10;FV
Sample preparation						
Microwave digestion		+				DIN EN 13857: 2003-01;L

n.b. = not determinable n.a. = not analysed * = not accredited FV=Outsourcing UA = Subcontract AG=Customers data + = carried out site identifier (letters postpositioned the standard method): H=Hannover, KI=Kiel, L=Lünen, HE=Heide, BS=Braunschweig

Parameter	Sample-ID	G FLU 061	G FLU 062			Method
	Sample-No. Unit	21-26371-061	21-26371-062			
PCB						
PCB-028	mg/kg OS	<0,1				DIN 38414-20: 1996-01;L
PCB-052	mg/kg OS	<0,1				DIN 38414-20: 1996-01;L
PCB-101	mg/kg OS	0,14				DIN 38414-20: 1996-01;L
PCB-138	mg/kg OS	<0,1				DIN 38414-20: 1996-01;L
PCB-153	mg/kg OS	<0,1				DIN 38414-20: 1996-01;L
PCB-180	mg/kg OS	<0,1				DIN 38414-20: 1996-01;L
sum det. PCB-6	mg/kg OS	0,14				berechnet;L
sum of det. PCB total	mg/kg OS	0,70				berechnet;L
Ozone depleting substances						
R 141 b (1,1-dichloro-1-fluoroethane)	mg/kg OS		<1,00			LA-GC-013.01 2018-10;FV
R 134 a (1,1,1,2-tetrafluoroethane)	mg/kg OS		<1,00			LA-GC-013.01 2018-10;FV
R 114 (1,2-dichloro-1,1,2,2-tetrafluoroethane)	mg/kg OS		<5,00			LA-GC-013.01 2018-10;FV

Parameter	Sample-ID	G FLU 061	G FLU 062			Method
	Sample-No. Unit	21-26371-061	21-26371-062			
R 22 (chlorodifluoromethane)	mg/kg OS		<1,00			LA-GC-013.01 2018-10;FV
R 11 (trichlorofluoromethane)	mg/kg OS		7200,00			LA-GC-013.01 2018-10;FV
R 111 (1,1,1,2,2-pentachlorofluoroethane)	mg/kg OS		n.b.			LA-GC-013.01 2018-10;FV
R 113/ R113a (total 1,1,2-trichloro-1,2,2-trifluoroethane/ 1,1,1-trichloro-2,2,2-trifluoroethane)	mg/kg OS		<5,00			LA-GC-013.01 2018-10;FV
R 112 (1,1,2,2-tetrachloro-1,2-difluoroethane)	mg/kg OS		n.b.			LA-GC-013.01 2018-10;FV
R 12 (dichlorodifluoromethane)	mg/kg OS		<5,00			LA-GC-013.01 2018-10;FV
R 123 a (1,2-dichloro-1,1,2-trifluoroethane)	mg/kg OS		n.b.			LA-GC-013.01 2018-10;FV
R 123 (2,2-dichloro-1,1,1-trifluoroethane)	mg/kg OS		n.b.			LA-GC-013.01 2018-10;FV
R 141 (1,2-dichlorofluoroethane)	mg/kg OS		<5,00			LA-GC-013.01 2018-10;FV
R 1132 a (1,1-difluoroethene)	mg/kg OS		n.b.			LA-GC-013.01 2018-10;FV
R 132c (1,1-dichloro-1,2-difluoroethane)	mg/kg OS		n.b.			LA-GC-013.01 2018-10;FV
R21 (Dichlorofluoromethane)	mg/kg OS		<1,00			LA-GC-013.01 2018-10;FV

n.b. = not determinable n.a. = not analysed ° = not accredited FV=Outsourcing UA = Subcontract AG=Customers data + = carried out
 site identifier (letters postpositioned the standard method): H=Hannover, KI=Kiel, L=Lünen, HE=Heide, BS=Braunschweig

Comments
LA-GC-013.01 2018-10

062: Due to matrix-related influences (overlay with Trichlorfluormethan) 2,2-Dichlor-1,1,1-trifluorethan and 1,2-Dichlor-1,1,2-trifluorethan could not be analyzed. The quantification of Trichlorfluormethan is semi-quantitativ due to its high content.

Parameter	Sample-ID	G FLU 045	G FLU 046			Method
	Sample-No.	21-26371-045	21-26371-046			
	Unit					
Analysis of Original sample						
PCB						
PCB-028	mg/kg OS	<0,1	<0,1			DIN EN 12766-1: 2000-11;L
PCB-052	mg/kg OS	<0,1	<0,1			DIN EN 12766-1: 2000-11;L
PCB-101	mg/kg OS	<0,1	<0,1			DIN EN 12766-1: 2000-11;L
PCB-138	mg/kg OS	<0,1	<0,1			DIN EN 12766-1: 2000-11;L
PCB-153	mg/kg OS	<0,1	<0,1			DIN EN 12766-1: 2000-11;L
PCB-180	mg/kg OS	<0,1	<0,1			DIN EN 12766-1: 2000-11;L
sum det. PCB-6	mg/kg OS	0	0			berechnet;L
sum of det. PCB total	mg/kg OS	0	0			berechnet nach DIN EN 12766-2 Verfahren B: 2001-12;L

n.b. = not determinable n.a. = not analysed ° = not accredited FV=Outsourcing UA = Subcontract AG=Customers data + = carried out
 site identifier (letters postpositioned the standard method): H=Hannover, KI=Kiel, L=Lünen, HE=Heide, BS=Braunschweig

Der Prüfbericht wurde elektronisch erstellt und ist ohne Unterschrift rechtsgültig.

21.06.2021

i.A. Bianca Rucks (Kundenbetreuer)

Radiation Documentation

See ABS Rio de Janeiro Letter Ref T2189020 Dated 18-NOV-2021

Radiation Survey



Unit surveyed	FPSO FLUMINENCE
Date	21/04/2021
Location of survey	BJSA Bijupira and Salema Field, Macae, Brazil
S2C Project No.	173.19
Name of surveyor	Frank Fox
By order of	Sea2Cradle B.V.

Contents

1. Terms of reference
2. Equipment
3. Survey

1 Terms of reference

Whilst every care has been taken to ensure that the information provided in this survey is accurate, up-to-date and complete, Sea2Cradle does not accept any liability for any errors or omissions in the information or for any acts or omissions of any person in the handling, removal or disposal of these substances, whether done in reliance on the information in this report or otherwise.

It is stressed that the information provided in this survey is not a contractual statement of precise quantities of residues and materials on board. Any quantities given are estimates only and no guarantee of their accuracy is either given or implied.

The aim of this radiation survey to is:

- A. To list all sources (provided by the ship-owner) of radioactive equipment which are part of the structure of the vessel
- B. To measure the background radiation in micro Sievert / hour
- C. To determine unlisted / not recorded radioactive equipment or sources which are constructed to the structure of the vessel. The radiation is measured as dose rate which represents a figure measured in micro Sievert/hour and may not exceed local threshold levels. The dose rates are measured at 0.1 meter and 1 meter distance from any (potential) source and at locations where people could be present.

For reference, instantaneous dose limits for members of the public is worldwide 1 mSv/annum (average 0.114 $\mu\text{Sv/hr}$) above background levels (sources 2014: Euratom, ICRP and IAEA, US Nuclear Regulatory Commission).

Importation of ships for recycling, containing radioactive sources is in 2014 restricted at:

- China : 0.25 $\mu\text{Sv/hr}$ above background
- Turkey : 0.20 $\mu\text{Sv/hr}$ absolute

When levels exceed dose limits for the public or local threshold levels, importation needs to be verified.

2 Equipment

Gamma Scout

Serial number: 64277

Measurement range: 0.01 $\mu\text{Sv/h}$ to 1000 $\mu\text{Sv/h}$

Calibration Certificate attached.

3 SURVEY

A. List of equipment containing radioactive sources (state nil in case no sources):

Name	Marks/type	location (s)	Qty
Ionization chamber smoke detectors		As per SD listings	210
Instruments/signs containing gaseous tritium light sources			Nil
Instruments/signs containing radioactive painting			Nil
High intensity discharge lamps			Nil
Radioactive lighting rods			Nil
Radioactive level gauges			Nil
Radioactive dredger gauges			Nil
Radioactive conveyor gauges			Nil
Radioactive spinning pipe gauges			Nil

B. Background reading: 0.032 μ Sv/h
 Measured at: 00. Top of Nav. Deck
 Picture:



C. Readings throughout the vessel

Location	Dose rate ($\mu\text{Sv/h}$)
01. Nav. Deck	0.109
02. D Deck	0.118
03. C Deck + Heli Deck	0.109
04. B Deck	0.092
04A. Topside	0.04
05. Upper Deck Accommodation	0.160
05A. Upper Deck	0.074
06. Upper Platform Engine Room	0.109
07. Boiler Platform Engine Room	0.066
08. Lower Platform Engine Room	0.074
09. Tank Top Engine Room	0.040
In way of Topside Separators (Module 1)	0.308
In way of NORM Locker (Starboard Side under Module 3)	1.924

D. NORM Locker





Signed :

Name : Frank Fox
Date : 21/04/2021
Sea2Cradle BV

See ABS Rio de Janeiro Letter Ref T2189020 Dated 13-NOV-2021



Certificate

The GAMMA-SCOUT® unit No. **64277** was used to measure the environmental radiation for three days. The results were compared with those of a reference device and found to deviate from these by less than $\pm 5\%$.

The reference devices were measured at the Institute for Radiochemistry and Radiation Protection of the public College of Technology and Design in a dose equivalent range up to $10 \mu\text{Sv/h}$, and determined suitable.

The reference devices are regularly checked.

The measuring performance of the GAMMA-SCOUT® unit No. **64277** can therefore be certified as being very good.

Prof. Dr. E. Folz

- Head of the Institute -

Medicines Documentation

See ABS Rio de Janeiro Letter Ref T2189020 Dated 18-NOV-2021

Grupo	Região	Empresa	Medicamento	Quantidade Mínima	Quantidade Máxima	Quantidade em Estoque
Grupo	Região	HOSPITAL_FLU	ABAIXADOR DE LÍNGUA EM UNIDADE 0229891	5	5	302
Grupo	Região	HOSPITAL_FLU	ABSORVENTE INTIMO (MODESS) 0342963	2	2	0
Grupo	Região	HOSPITAL_FLU	Aciclovir 50mg/g Bisnaga 0340288	3	5	5
Grupo	Região	HOSPITAL_FLU	Acido Acetil Salicilico 100 mg comprimido 0287810	10	50	40
Grupo	Região	HOSPITAL_FLU	Ácido Acetilsalicílico 500mg comprimido 0312962	100	300	120
Grupo	Região	HOSPITAL_FLU	Ácido mefenâmico compr. 500 mg comprimido 0315023	10	50	0
Grupo	Região	HOSPITAL_FLU	Adenosina 3mg/ml injetável 0313555	3	5	15
Grupo	Região	HOSPITAL_FLU	Adesivo de pele Dermabond Prineo 0344933	1	1	2
Grupo	Região	HOSPITAL_FLU	Adrenalina 1mg/ml ampola	10	50	35
Grupo	Região	HOSPITAL_FLU	AFASTADOR DE PALBEPRAS BLEFARO ARAME ADULTO	1	1	1
Grupo	Região	HOSPITAL_FLU	Água Bidestilada Ampola com 10ml	50	100	106
Grupo	Região	HOSPITAL_FLU	Água Boricada 3% 100 ml frasco	5	20	1
Grupo	Região	HOSPITAL_FLU	AGULHA DESCARTAVEL 0,38 X 13MM - CAIXA COM 100UNIDADES	10	10	0
Grupo	Região	HOSPITAL_FLU	AGULHA DESCARTAVEL 0,55 X 20MM- CAIXA COM 100UNIDADES	1	1	0
Grupo	Região	HOSPITAL_FLU	AGULHA DESCARTAVEL 0,70 X 25MM- CAIXA COM 100UNIDADES	1	1	13
Grupo	Região	HOSPITAL_FLU	AGULHA DESCARTAVEL 0,80 X 30MM- CAIXA COM 100UNIDADES	1	1	0
Grupo	Região	HOSPITAL_FLU	AGULHA DESCARTAVEL 1.20 X 40MM- CAIXA COM 100UNIDADES	1	1	119
Grupo	Região	HOSPITAL_FLU	Alcool 70%100 ml frasco	10	50	9
Grupo	Região	HOSPITAL_FLU	ALCOOL SWAB CAIXA COM 100 UNIDADES	4	4	800
Grupo	Região	HOSPITAL_FLU	ALGODAO HIDROFILO BOLA PACOTE 100G	3	3	6
Grupo	Região	HOSPITAL_FLU	ALGODAO HIDROFILO ROLO 500G	3	3	0
Grupo	Região	HOSPITAL_FLU	ALMOTOLIA PLASTICA 250ML MARRON	2	2	0
Grupo	Região	HOSPITAL_FLU	Aminofilina 24mg/ml Ampola	10	20	15
Grupo	Região	HOSPITAL_FLU	Amiodarona 100 mg	20	60	150
Grupo	Região	HOSPITAL_FLU	Amiodarona 50mg Ampola	20	50	0
Grupo	Região	HOSPITAL_FLU	Amoxicilina 500mg	50	100	42

Quantidade a Repor	Situação	Lotes
0	Suficiente	015, 115, 23
2	Insuficiente	
0	Suficiente	19005171
10	Suficiente	1P2976
180	Suficiente	027538, 2011196, OX2086
50	Insuficiente	
0	Suficiente	BC002/19, BC004/20, BC005/19
0	Suficiente	PGH439
15	Suficiente	D001/20, D026/19
0	Baixo	000
0	Suficiente	2080073, 9070147
19	Insuficiente	0927
10	Insuficiente	
1	Insuficiente	
0	Suficiente	53117114
1	Insuficiente	
0	Suficiente	SAGAAA102F
41	Insuficiente	012
0	Suficiente	18030091, 18050160, B2796
0	Suficiente	228-18, 3615
3	Insuficiente	
2	Insuficiente	
5	Suficiente	AF18L023, AF19H041
0	Suficiente	1810362, ARA03109, ARA03857
50	Insuficiente	
58	Insuficiente	1N9502

Grupo	Região	Empresa	Medicamento	Quantidade Mínima	Quantidade Máxima	Quantidade em Estoque
Grupo	Região	HOSPITAL_FLU	APARELHO DE HAEMOGLUCOTEST ACCU CHEK ACTIVE C/ ACESSORIOS	2	2	7
Grupo	Região	HOSPITAL_FLU	APARELHO DE PRESSAO DIGITAL G-TECH COM CERTIFICADO DE CALIBRACAO	2	2	0
Grupo	Região	HOSPITAL_FLU	APARELHO DE PRESSAO MANUAL WELCH ALLYN DURASHOCK DS44-BR ADULTO C/ CERTIFICADO DE CALIBRACAO	5	5	0
Grupo	Região	HOSPITAL_FLU	APARELHO DE TRICOTOMIA - GILLETE (DESCARTAVEL)	10	10	4
Grupo	Região	HOSPITAL_FLU	ASPIRADOR DE SECREÇÃO ELETRICO - LAERDAL LSU	1	1	1
Grupo	Região	HOSPITAL_FLU	ASPIRADOR MANUAL COMFY VAC	2	2	6
Grupo	Região	HOSPITAL_FLU	ATADURA CREPOM 06CM	1	1	6
Grupo	Região	HOSPITAL_FLU	ATADURA CREPOM 10 CM	12	12	20
Grupo	Região	HOSPITAL_FLU	ATADURA CREPOM 15 CM	12	12	21
Grupo	Região	HOSPITAL_FLU	ATADURA DE RAYON 7,5 CM X 5 TAM. M ESTÉRIL	20	20	10
Grupo	Região	HOSPITAL_FLU	ATADURA ELASTICA 10CM	40	40	4
Grupo	Região	HOSPITAL_FLU	Atenolol 50mg	10	60	60
Grupo	Região	HOSPITAL_FLU	Atropina 0,25mg/ml injetável	20	50	70
Grupo	Região	HOSPITAL_FLU	AVENTAL CIRURGICO DESCARTAVEL MANGA LONGA TAM. G PACOTE C/ 10 UNID.	10	10	0
Grupo	Região	HOSPITAL_FLU	Azitromicina 500mg	50	100	48
Grupo	Região	HOSPITAL_FLU	BACIA INOX 35CM 4700ML	2	2	1
Grupo	Região	HOSPITAL_FLU	BALANÇA ANTROPOMETRICA DIGITAL 200KG C/ CERTIFICADO DE CALIBRACAO VALIDO	1	1	0
Grupo	Região	HOSPITAL_FLU	BANDAGEM TRIANGULAR RESGATE TNT TAM. M	15	15	6
Grupo	Região	HOSPITAL_FLU	BATERIA AED PLUS 1-8-0007 PCT.C/10 UNIDADES	1	1	0
Grupo	Região	HOSPITAL_FLU	BATERIA PARA APARELHO ACCU CHEK ACTIVE (CR2032)	10	10	0
Grupo	Região	HOSPITAL_FLU	BATERIA RECARREGAVEL E SERIES/R SERIES 1-8 -0001	1	1	1
Grupo	Região	HOSPITAL_FLU	Benzinamina 3mg pastilhas	50	100	0

Quantidade a Repor	Situação	Lotes
0	Suficiente	061702, 11803, G103117H03, GU05968249, GU08289122
2	Insuficiente	
5	Insuficiente	
6	Insuficiente	000
0	Baixo	110200004199
0	Suficiente	150310, 1506404
0	Suficiente	1945A
0	Suficiente	138580101, 20390091
0	Suficiente	06776/15, 140040201, 3266/16
10	Insuficiente	132257, 19918B4
36	Insuficiente	35492
0	Suficiente	284854
0	Suficiente	0050324, AT20H004
10	Insuficiente	
52	Insuficiente	1355229, 19003852
1	Insuficiente	000
1	Insuficiente	
9	Insuficiente	000
1	Insuficiente	
10	Insuficiente	
0	Baixo	G25817307
100	Insuficiente	

Grupo	Região	Empresa	Medicamento	Quantidade Mínima	Quantidade Máxima	Quantidade em Estoque
Grupo	Região	HOSPITAL_FLU	Betam+Genta+Tolnaftato+Clioquinol pomada	5	10	0
Grupo	Região	HOSPITAL_FLU	Bicarbonato de Sódio 8,4% injetável Ampola	20	40	10
Grupo	Região	HOSPITAL_FLU	Bisacodil	40	80	40
Grupo	Região	HOSPITAL_FLU	BISTURI COM CABO E LAMINA DESCARTAVEL N° 15	3	3	5
Grupo	Região	HOSPITAL_FLU	BISTURI COM CABO E LAMINA DESCARTAVEL N° 23	7	7	18
Grupo	Região	HOSPITAL_FLU	Black Book (Clinica Medica)	1	1	0
Grupo	Região	HOSPITAL_FLU	BOLSA AGUA QUENTE 2LTS	5	5	0
Grupo	Região	HOSPITAL_FLU	BOLSA COLETORA DE URINA POR SISTEMA FECHADO 2000ML	3	3	2
Grupo	Região	HOSPITAL_FLU	BOLSA DE GELO MEDIA	2	2	0
Grupo	Região	HOSPITAL_FLU	BOLSA KIT DE PRIMEIROS SOCORROS - CURTLO, Medidas 17x13x5 cm	10	10	0
Grupo	Região	HOSPITAL_FLU	BOLSA PARA ACONDICIONAMENTO DO AMBU	3	3	0
Grupo	Região	HOSPITAL_FLU	BOLSA TERMICA GEL	10	10	0
Grupo	Região	HOSPITAL_FLU	BOLSA VERDE PARA CILINDRO OXIGENIO 03LTS DE ALUMINIO. AxLxP = 58x32x22	12	12	3
Grupo	Região	HOSPITAL_FLU	BOMBA DE INFUSÃO LIFEMED SMART	2	2	0
Grupo	Região	HOSPITAL_FLU	BOMBONA BRANCA 60 LITROS, COM TAMPA DE ROSCA	10	10	1
Grupo	Região	HOSPITAL_FLU	BORNAL SOCORRISTAS RESGATE APH IMPERMEAVEL, COR AZUL	2	2	0
Grupo	Região	HOSPITAL_FLU	BRAÇADEIRA REGULAVEL P/INJEÇÃO EM AÇO INOX C/ CAPA ESTOFADA NO APOIO DO BRAÇO. (ALT. MIN. 65CM).	1	1	1
Grupo	Região	HOSPITAL_FLU	Bromazepan 3mg comprimido	10	30	90
Grupo	Região	HOSPITAL_FLU	Budesonida (Susp. em spray nasal. 32 mcg/dose)	5	15	6
Grupo	Região	HOSPITAL_FLU	CABO PARA LARINGOSCOPIO CONVENCIONAL - MEDIO PILHA TIPO C	3	3	3
Grupo	Região	HOSPITAL_FLU	CADEIRA DE RESGATE EM ALUMINIO DOBRAVEL	1	1	0
Grupo	Região	HOSPITAL_FLU	CAIXA TERMICA P/ GELO 34 LITROS	1	1	0

Quantidade a Repor	Situação	Lotes
10	Insuficiente	
30	Insuficiente	BS20F018
40	Baixo	2041653
0	Suficiente	E1357
0	Suficiente	D3279
1	Insuficiente	
5	Insuficiente	
1	Insuficiente	161220, 181007
2	Insuficiente	
10	Insuficiente	
3	Insuficiente	
10	Insuficiente	
9	Insuficiente	000
2	Insuficiente	
9	Insuficiente	000
2	Insuficiente	
0	Baixo	000
0	Suficiente	0U2824, B19J0250, L0U2824
9	Suficiente	2001934, 2005993, 2007116
0	Baixo	000
1	Insuficiente	
1	Insuficiente	

Grupo	Região	Empresa	Medicamento	Quantidade Mínima	Quantidade Máxima	Quantidade em Estoque
Grupo	Região	HOSPITAL_FLU	CAMA HOSPITALAR MECANICA C/ OS MOVIMENTOS FAWLER, TRENDELEMBURG E REVERSO	2	2	1
Grupo	Região	HOSPITAL_FLU	CAMPO CIRURGICO FENESTRADO 40X40CM	10	10	5
Grupo	Região	HOSPITAL_FLU	CÂNULA DE GUEDEL Nº3 ADULTO C/ ABERTURA LATERAL P/ ASPIRACAO DA BOCA	20	20	10
Grupo	Região	HOSPITAL_FLU	CÂNULA DE GUEDEL Nº4 ADULTO C/ ABERTURA LATERAL P/ ASPIRACAO DA BOCA	20	20	8
Grupo	Região	HOSPITAL_FLU	CÂNULA DE GUEDEL Nº5 ADULTO C/ ABERTURA LATERAL P/ ASPIRACAO DA BOCA	20	20	8
Grupo	Região	HOSPITAL_FLU	CÂNULA NASOFARINGEA Nº 6 C/ CONECTOR REMOVIVEL P/ PERMITIR CONEXAO AO SIST. DE VENTILACAO	4	4	3
Grupo	Região	HOSPITAL_FLU	CÂNULA NASOFARINGEA Nº 7 C/ CONECTOR REMOVIVEL P/ PERMITIR CONEXAO AO SIST. DE VENTILACAO	4	4	0
Grupo	Região	HOSPITAL_FLU	CÂNULA NASOFARINGEA Nº 8 C/ CONECTOR REMOVIVEL P/ PERMITIR CONEXAO AO SIST. DE VENTILACAO	4	4	0
Grupo	Região	HOSPITAL_FLU	CAPA DE PROTECAO PARA MACA MAMUTE RIGIDA TIPO CESTO	1	1	0
Grupo	Região	HOSPITAL_FLU	CAPA DE PROTECAO PARA MACA OFFSHORE OMB AMARELA	6	6	0
Grupo	Região	HOSPITAL_FLU	CAPA DE PROTECAO PARA PRANCHA LONGA DE POLIETILENO C/ CONJ. INTERNO DE TIRAS DE VELCRO P/ FIXAR BOLS	5	5	0
Grupo	Região	HOSPITAL_FLU	Captopril 25mg	30	60	104
Grupo	Região	HOSPITAL_FLU	CARBOGEL GEL PARA ECG 100GR AZUL	2	2	2
Grupo	Região	HOSPITAL_FLU	CARRINHO PARA SALA DE EMERGÊNCIA PEQUENO	1	1	1
Grupo	Região	HOSPITAL_FLU	CARRO SUPORTE PARA ELETROCARDIGRAFO CARDIOCARE 2000	1	1	0
Grupo	Região	HOSPITAL_FLU	Carvao Vegetal	20	60	80
Grupo	Região	HOSPITAL_FLU	CATETER NASAL OXIGENIO TIPO OCULOS	20	20	13
Grupo	Região	HOSPITAL_FLU	Cefalexina 500mg	50	100	104

Quantidade a Repor	Situação	Lotes
1	Insuficiente	000
5	Insuficiente	35906A4
10	Insuficiente	0000
12	Insuficiente	0000
12	Insuficiente	0000
1	Insuficiente	1901010150
4	Insuficiente	
4	Insuficiente	
1	Insuficiente	
6	Insuficiente	
5	Insuficiente	
0	Suficiente	1666642
0	Baixo	19/0400
0	Baixo	000
1	Insuficiente	
0	Suficiente	1944405
7	Insuficiente	1800036669, FY1901059
0	Suficiente	09411327, 09411340

Grupo	Região	Empresa	Medicamento	Quantidade Mínima	Quantidade Máxima	Quantidade em Estoque
Grupo	Região	HOSPITAL_FLU	Cerumin	5	10	8
Grupo	Região	HOSPITAL_FLU	Cetoconazol 20mg/g Creme	5	10	3
Grupo	Região	HOSPITAL_FLU	Cetoprofeno 150mg	30	60	28
Grupo	Região	HOSPITAL_FLU	CHAVE INGLESA ROBUST-19112	1	1	0
Grupo	Região	HOSPITAL_FLU	CILINDRO OXIGENIO 03LTS DE ALUMINIO C/ CERTIFICADO DE FABRICACAO, TESTE HIDROSTATICO E CALIBRACAO	12	12	6
Grupo	Região	HOSPITAL_FLU	CILINDRO OXIGENIO 40LTS DE ALUMINIO C/ CERTIFICADO DE FABRICACAO, TESTE HIDROSTATICO E CALIBRACAO	5	5	0
Grupo	Região	HOSPITAL_FLU	Clonidina 0,100	30	120	180
Grupo	Região	HOSPITAL_FLU	Cloranfenicol 0,5% + Metionina 0,5% + Retinol 10.000 UI pomada oft.	5	10	5
Grupo	Região	HOSPITAL_FLU	Cloreto de Potássio 10% injetável Ampola	20	40	10
Grupo	Região	HOSPITAL_FLU	Cloreto de Sódio 0,9% Fr/500ml (Garrafa) p/Lavagem feridas	20	30	0
Grupo	Região	HOSPITAL_FLU	Cloreto de Sódio 20% injetável Ampola	20	40	60
Grupo	Região	HOSPITAL_FLU	Clorhexedina alcoolica 0,5% 100ml frasco	5	10	7
Grupo	Região	HOSPITAL_FLU	Cloridrato de Ciprofloxacino 500mg	50	140	70
Grupo	Região	HOSPITAL_FLU	Cloridrato de Procaína + associações	2	5	8
Grupo	Região	HOSPITAL_FLU	COBERTOR TÉRMICO	20	20	12
Grupo	Região	HOSPITAL_FLU	COLAR CERVICAL RESGATE REGULAVEL STIFNECK SELECT - LAERDAL	20	20	9
Grupo	Região	HOSPITAL_FLU	COLCHAO IMPERMEAVEL PARA CAMA HOSPITALAR	2	2	1
Grupo	Região	HOSPITAL_FLU	COLCHAO IMPERMEAVEL PARA MACA HOSPITALAR	1	1	1
Grupo	Região	HOSPITAL_FLU	COLETE IMOBILIZACAO PARA RESGATE - KED "KENDRICK EXTRICATION DEVICE"	2	2	2
Grupo	Região	HOSPITAL_FLU	COLETOR DE URINA POR SISTEMA ABERTO DESCARTAVEL 1200ML	2	2	2
Grupo	Região	HOSPITAL_FLU	COLETOR PARA ABSORVENTE FEMININO - OBEG - CAIXA C/ 25 UNIDADES	8	8	0
Grupo	Região	HOSPITAL_FLU	Colirio Fluoresceína	2	5	0

Quantidade a Repor	Situação	Lotes
2	Suficiente	72250, 72961
7	Insuficiente	1923829
32	Insuficiente	9RA02186, 9RA06106
1	Insuficiente	
6	Insuficiente	BX476264, BX682469, BX995855, JB12923, JB17039, JB17117
5	Insuficiente	
0	Suficiente	B46660
5	Baixo	20100395
30	Insuficiente	2019010C
30	Insuficiente	
0	Suficiente	19M11327D, 9030378
3	Suficiente	1805001
70	Suficiente	20003116
0	Suficiente	190505DD, 190908DD
8	Insuficiente	111016194, 140317-194, 170217-194
11	Insuficiente	000, 211016-194
1	Insuficiente	000
0	Baixo	000
0	Baixo	000
0	Baixo	1203193701
8	Insuficiente	
5	Insuficiente	

Grupo	Região	Empresa	Medicamento	Quantidade Mínima	Quantidade Máxima	Quantidade em Estoque
Grupo	Região	HOSPITAL_FLU	COMADRE EM ACO INOX 40X30	2	2	0
Grupo	Região	HOSPITAL_FLU	COMPRESSA BURNSHIELD HIDROGEL 10X10CM PARA QUEIMADURA	15	15	10
Grupo	Região	HOSPITAL_FLU	COMPRESSA DE CAMPO OPERATORIO 25X28CM - PACOTE C/ 05 UNIDADES	30	30	0
Grupo	Região	HOSPITAL_FLU	COMPRESSA DE GAZE ESTÉRIL 7,5X7,5CM	200	200	157
Grupo	Região	HOSPITAL_FLU	CONJUNTO DE CINTO PACOTE C/3 PEÇAS "UNIDADES COLORIDAS".	3	3	0
Grupo	Região	HOSPITAL_FLU	CONJUNTO P/CRICOTIROTOMIA DE EMERGENCIA CUMPRIM. DO CATETER 7,5	2	2	0
Grupo	Região	HOSPITAL_FLU	COTONETES CAIXA C/ 75 UNIDADES	2	2	2
Grupo	Região	HOSPITAL_FLU	CUBA RIM 26X12X6CM 750ML	2	2	3
Grupo	Região	HOSPITAL_FLU	CURATIVO BAND AID ISABABY TRADICIONAL C/35 UNIDADES 0342992	6	6	0
Grupo	Região	HOSPITAL_FLU	Deocil	20	60	53
Grupo	Região	HOSPITAL_FLU	DESCARPACK 7LITROS	24	24	14
Grupo	Região	HOSPITAL_FLU	DEFIBRILADOR E SERIES 12 DERIVAÇÕES ZOLL 1-2-0010 (ACOMPANHA OS ACESSORIOS DESCRITOS)	1	1	1
Grupo	Região	HOSPITAL_FLU	DEFIBRILADOR ZOLL AED PLUS 1-4-1001	1	1	1
Grupo	Região	HOSPITAL_FLU	Dexam 0.1% + Neom. 0.35% + Polim B 6.000 UI colirio	5	10	5
Grupo	Região	HOSPITAL_FLU	Dexametasona amp 4mg	5	10	15
Grupo	Região	HOSPITAL_FLU	Dexclorfeniramina 2mg	10	20	20
Grupo	Região	HOSPITAL_FLU	Diazepan 5mg	10	30	168
Grupo	Região	HOSPITAL_FLU	Diazepan 5mg/mL Injetável Ampola 2ml	5	15	10
Grupo	Região	HOSPITAL_FLU	Diclofenaco de Sódio 50mg	50	100	40
Grupo	Região	HOSPITAL_FLU	Diclofenaco dietilamonio 60G	2	10	0
Grupo	Região	HOSPITAL_FLU	Diclofenaco Injetável amp 75mg	5	10	6
Grupo	Região	HOSPITAL_FLU	Dicloridrato de Flunarizina - 10mg	10	50	50
Grupo	Região	HOSPITAL_FLU	Difenidramina + Calamina + Canfora Locao	2	5	13
Grupo	Região	HOSPITAL_FLU	Dimenidrinato 100mg	50	200	180
Grupo	Região	HOSPITAL_FLU	Dimeticona 40mg	50	200	0

Quantidade a Repor	Situação	Lotes
2	Insuficiente	
5	Insuficiente	684
30	Insuficiente	
43	Insuficiente	02156/16, 19104, 20502
3	Insuficiente	
2	Insuficiente	
0	Baixo	196772
0	Suficiente	000
6	Insuficiente	
7	Suficiente	D190249
10	Insuficiente	98036
0	Baixo	AF13J031952
0	Baixo	1028033
5	Baixo	2015568
0	Suficiente	5198256, DX20F054
0	Suficiente	B19H0592
0	Suficiente	1V7873, 1X6651
5	Suficiente	20102220, 20102220.
60	Insuficiente	2000223
10	Insuficiente	
4	Suficiente	DC19M110
0	Suficiente	51456
0	Suficiente	1806512, 1920281
20	Suficiente	429350, 457183, 465274
200	Insuficiente	

Grupo	Região	Empresa	Medicamento	Quantidade Mínima	Quantidade Máxima	Quantidade em Estoque
Grupo	Região	HOSPITAL_FLU	Dinitrato de Isossorbida 5mg	30	60	240
Grupo	Região	HOSPITAL_FLU	Dipirona + Cafeina + orfenadrina	20	100	572
Grupo	Região	HOSPITAL_FLU	Dipirona 300mg+ isometepteno 30mg+ cafeína 30mg	20	100	0
Grupo	Região	HOSPITAL_FLU	Dipirona 500mg	50	200	338
Grupo	Região	HOSPITAL_FLU	Dipirona Sódica 500mg/mL Ampola com 2mL	10	30	10
Grupo	Região	HOSPITAL_FLU	Diprosan injetável	5	15	10
Grupo	Região	HOSPITAL_FLU	DISPENSER PARA DESCARTE DE ABSORVENTE COMPATIVEL COM A MARCA OBEG.	6	6	0
Grupo	Região	HOSPITAL_FLU	DISPOSITIVO BVM ADULTO DE SILICONE COM BOLSA RESERVATORIO DE SILICONE E EXTENSAO "Ambu Completo"	5	5	6
Grupo	Região	HOSPITAL_FLU	DISPOSITIVO MASCULINO PARA INCONTINÊNCIA URINÁRIA SANOBIO C/ EXTENSAO (TIPO PRESERVATIVO).	4	4	0
Grupo	Região	HOSPITAL_FLU	Dopamina 5mg/ml	5	10	10
Grupo	Região	HOSPITAL_FLU	Doxiciclina 100mg	50	100	75
Grupo	Região	HOSPITAL_FLU	DUCHA OFTALMICA	4	4	0
Grupo	Região	HOSPITAL_FLU	ELETROCARDIOG. 12 CANAIS CARDIOCARE 2000	1	1	0
Grupo	Região	HOSPITAL_FLU	ELETRODO 3M PACOTE C/50	5	5	0
Grupo	Região	HOSPITAL_FLU	ELETRODO AED PLUS ADULTO MULTIFUNÇÃO 8900-0400 (1-7-0015)	1	1	1
Grupo	Região	HOSPITAL_FLU	ENVELOPES AUTO SELANTES COLANTES 90 X 260 MM PAPEL GRAU CIRÚRGICO CAIXA C/100 UN. "Saco para esteril	1	1	0
Grupo	Região	HOSPITAL_FLU	ENXOVAL PARA CAMA HOSPITALAR, COR AZUL CLARO (SEM TRAVESSEIRO)	5	5	0
Grupo	Região	HOSPITAL_FLU	EQUIPO MACROGOTAS C/ CAMARA GOTEJADORA C/ FILTRO DE AR 0,2 MICRONS, PARA INFUSAO (B-BRAUN)	40	40	26
Grupo	Região	HOSPITAL_FLU	EQUIPO MICROGOTAS C/ CAMARA GOTEJADORA C/ FILTRO DE AR 0,2 MICRONS, PARA INFUSAO (B-BRAUN)	20	20	0
Grupo	Região	HOSPITAL_FLU	EQUIPO MULTIVIAS C/ CLAMP "POLIFIX" (B-BRAUN)	30	30	9

Quantidade a Repor	Situação	Lotes
0	Suficiente	102997, 1P4588, 1W9334
0	Suficiente	9115171, 9RA06466, 9RA07226, 9RA07608
100	Insuficiente	
0	Suficiente	24720, 75020
20	Baixo	DP20B064
5	Suficiente	614649, 672499
6	Insuficiente	
0	Suficiente	000
4	Insuficiente	
0	Suficiente	9074076
25	Suficiente	LH9400
4	Insuficiente	
1	Insuficiente	
5	Insuficiente	
0	Baixo	3918
1	Insuficiente	
5	Insuficiente	
14	Insuficiente	16D01A, SEMAAA0139, SEMK6377, SEMKG296
20	Insuficiente	
21	Insuficiente	20D04LA112

Grupo	Região	Empresa	Medicamento	Quantidade Mínima	Quantidade Máxima	Quantidade em Estoque
Grupo	Região	HOSPITAL_FLU	EQUIPO P/BOMBA DE INFUSAO EQL LF SMART	20	20	0
Grupo	Região	HOSPITAL_FLU	ESCADA 2 DEGRAUS 40X45X40	2	2	0
Grupo	Região	HOSPITAL_FLU	Escopolamina 10mg + Dipirona 250mg comprimido	50	100	50
Grupo	Região	HOSPITAL_FLU	Escopolamina 10mg comprimido	50	100	60
Grupo	Região	HOSPITAL_FLU	Escopolamina 20mg/ml Ampola	10	20	9
Grupo	Região	HOSPITAL_FLU	Escopolamina 4 mg/ml + Dipirona 500mg/mL Ampola	20	60	0
Grupo	Região	HOSPITAL_FLU	ESPARADRAPO 10CM X 4,5M	5	5	0
Grupo	Região	HOSPITAL_FLU	ESPARADRAPO HIPOALERGENICO TRANSPORE REGULAR 25MM X 4,5M	2	2	0
Grupo	Região	HOSPITAL_FLU	ESPARADRAPO IMPERMEÁVEL 100MM X 3M	3	3	16
Grupo	Região	HOSPITAL_FLU	ESPARADRAPO MICROPORE COR DA PELE 25MM X 4,5M	3	3	0
Grupo	Região	HOSPITAL_FLU	ESPARADRAPO MICROPORE REGULAR 50MM X 4,5M	5	5	7
Grupo	Região	HOSPITAL_FLU	ESPECULO AURICULAR REUTILIZAVEL 2,5MM WELCH ALLYN	30	30	20
Grupo	Região	HOSPITAL_FLU	ESPECULO HARTMANN NASAL ADULTO N.3	1	1	1
Grupo	Região	HOSPITAL_FLU	ESPELHO BUCAL/DENTAL PLANO Nº5 COM CABO	2	2	0
Grupo	Região	HOSPITAL_FLU	ESTETOSCOPIO LITTMANN CLASSIC III	2	2	11
Grupo	Região	HOSPITAL_FLU	ESTOJO INOX 28X14X06CM	1	1	0
Grupo	Região	HOSPITAL_FLU	ESTOJO PARA ACONDICIONAMENTO DO OFTALMOSCOPIO POCKET JUNIOR WELCH ALLYN	1	1	1
Grupo	Região	HOSPITAL_FLU	ESTOJO PARA ACONDICIONAMENTO DO OTOSCOPIO 22820 WELCH ALLYN	1	1	1
Grupo	Região	HOSPITAL_FLU	ESTOJO PARA LARINGOSCOPIO EM COURINO "Laryngoscope Set"	3	3	1
Grupo	Região	HOSPITAL_FLU	FAIXA SMARCH 10CM	10	10	13
Grupo	Região	HOSPITAL_FLU	Fenoterol 0,5% Fr/20ml p/Nebulizacao	2	5	5
Grupo	Região	HOSPITAL_FLU	Fexofenadina 180mg	20	140	30
Grupo	Região	HOSPITAL_FLU	FIO DE SUTURA CATGUT SIMPLES 1 C/AGULHA CAIXA C/24 UNIDADES	1	1	0

Quantidade a Repor	Situação	Lotes
20	Insuficiente	
2	Insuficiente	
50	Baixo	B20A0506
40	Suficiente	1944924
11	Insuficiente	9780031
60	Insuficiente	
5	Insuficiente	
2	Insuficiente	
0	Suficiente	138580101
3	Insuficiente	
0	Suficiente	CSA14301
10	Insuficiente	000
0	Baixo	000
2	Insuficiente	
0	Suficiente	000, 203572
1	Insuficiente	
0	Baixo	000
0	Baixo	000
2	Insuficiente	000
0	Suficiente	EA03N7, EC03919
0	Suficiente	B19H0714
110	Suficiente	686257
1	Insuficiente	

Grupo	Região	Empresa	Medicamento	Quantidade Mínima	Quantidade Máxima	Quantidade em Estoque
Grupo	Região	HOSPITAL_FLU	FIO DE SUTURA CATGUT SIMPLES 3-0 C/AGULHA CAIXA C/24 UNIDADES	1	1	5
Grupo	Região	HOSPITAL_FLU	FIO DE SUTURA NYLON 2-0 C/AGULHA CAIXA C/24 UNIDADES	1	1	0
Grupo	Região	HOSPITAL_FLU	FIO DE SUTURA NYLON 3-0 C/AGULHA CAIXA C/24 UNIDADES	1	1	24
Grupo	Região	HOSPITAL_FLU	FIO DE SUTURA NYLON 4-0 C/AGULHA CAIXA C/24 UNIDADES	1	1	5
Grupo	Região	HOSPITAL_FLU	FIXADOR ENDOFIX TUBO ENDOTRAQUEAL	10	10	8
Grupo	Região	HOSPITAL_FLU	Fluconazol 150mg	10	30	11
Grupo	Região	HOSPITAL_FLU	Fluocinolona+Polimixina B+ Neomicina+Lidocaína	3	5	15
Grupo	Região	HOSPITAL_FLU	FLUOREISCINA SODICA SOLUCAO OFTALMICA COLIRIO 1% FRASCO 3mL	1	1	0
Grupo	Região	HOSPITAL_FLU	FOCO DE LUZ MULTIUSO C/LAMPADA	1	1	2
Grupo	Região	HOSPITAL_FLU	FRALDA GERIATRICA DESCARTAVEL TAM. G PACOTE C/ 07 UNIDADES	1	1	0
Grupo	Região	HOSPITAL_FLU	FRASCO ASPIRADOR VENTURI 1/2 P/OXIGENIO COMPLETO	1	1	1
Grupo	Região	HOSPITAL_FLU	Furosemida Injetável 10mg/ml Ampola com 2 ml	10	20	10
Grupo	Região	HOSPITAL_FLU	GARROTE PREMIUM AZUL ADULTO	5	5	0
Grupo	Região	HOSPITAL_FLU	GAZE DE RAYON ESTÉRIL EMBEBIDA EM AGE 7,5X7,5CM. MARCA: PIELSANA	20	20	0
Grupo	Região	HOSPITAL_FLU	GAZE DO COMBATE "QUICKCLOT" - (gaze z-dobrada impregnada com caulim).	10	10	0
Grupo	Região	HOSPITAL_FLU	GELO REUTILIZAVEL FLEXIVEL GELOX GRANDE 13 x 18,5 CM	8	8	0
Grupo	Região	HOSPITAL_FLU	GELO REUTILIZAVEL FLEXIVEL GELOX PEQUENO 8 x 13,5 CM	20	20	0
Grupo	Região	HOSPITAL_FLU	Glicose 25% Solução Hipertônica injetável	20	50	20
Grupo	Região	HOSPITAL_FLU	GUIA MÉDICO INTERNACIONAL P/ NAVIOS EM PORTUGUES EDICAO ATUALIZADA	1	1	1
Grupo	Região	HOSPITAL_FLU	Heparina sol injetável 5000UI/ml	2	5	7
Grupo	Região	HOSPITAL_FLU	Hidroclorotiazida 25mg	10	30	59
Grupo	Região	HOSPITAL_FLU	Hidrocortisona 500mg + amp. com diluente	5	10	11

Quantidade a Repor	Situação	Lotes
0	Suficiente	39161253
1	Insuficiente	
0	Suficiente	41817101
0	Suficiente	L031700082
2	Insuficiente	000, 17096907, 1807011266
19	Baixo	003399, 89569S
0	Suficiente	1903222, 1912463, 2011700
1	Insuficiente	
0	Suficiente	000
1	Insuficiente	
0	Baixo	000
10	Baixo	FS20E040
5	Insuficiente	
20	Insuficiente	
10	Insuficiente	
8	Insuficiente	
20	Insuficiente	
30	Baixo	LWJ2
0	Baixo	000
0	Suficiente	19030508, 20050619
0	Suficiente	241295
0	Suficiente	20070761, 25961176

Grupo	Região	Empresa	Medicamento	Quantidade Mínima	Quantidade Máxima	Quantidade em Estoque
Grupo	Região	HOSPITAL_FLU	Hidrocortisona creme 1%	2	5	6
Grupo	Região	HOSPITAL_FLU	Hidrocortisona/sulfato neomicina/vit C/toxerrutina/benzocaína	5	10	10
Grupo	Região	HOSPITAL_FLU	hidróxido de alumínio+hidróxido de magnésio +dimeticona	3	5	3
Grupo	Região	HOSPITAL_FLU	Hidroxizina 25mg	10	30	60
Grupo	Região	HOSPITAL_FLU	Hipromelose colirio	5	10	10
Grupo	Região	HOSPITAL_FLU	Ibuprofeno 400mg	100	500	49
Grupo	Região	HOSPITAL_FLU	IMOBILIZADOR DE CABECA IMPERMEAVEL COMPATIVEL C/ PRANCHA FLUTUANTE DE POLIETILENO "HEAD BLOCK".	8	8	6
Grupo	Região	HOSPITAL_FLU	INALADOR INALAR COMPACT NS	2	2	0
Grupo	Região	HOSPITAL_FLU	Insulina Regular 100UI/10ml	1	3	3
Grupo	Região	HOSPITAL_FLU	Ipratropio p/Nebulizacao	2	5	2
Grupo	Região	HOSPITAL_FLU	Ivermectina 6 mg	12	20	20
Grupo	Região	HOSPITAL_FLU	JELCO Nº 14 MARCA B BRAUN OU SMITHS MEDICAL	10	10	0
Grupo	Região	HOSPITAL_FLU	JELCO Nº 16 MARCA B BRAUN OU SMITHS MEDICAL	10	10	9
Grupo	Região	HOSPITAL_FLU	JELCO Nº 18 MARCA B BRAUN OU SMITHS MEDICAL	15	15	0
Grupo	Região	HOSPITAL_FLU	JELCO Nº 20 MARCA B BRAUN OU SMITHS MEDICAL	30	30	9
Grupo	Região	HOSPITAL_FLU	JELCO Nº 22 MARCA B BRAUN OU SMITHS MEDICAL	20	20	0
Grupo	Região	HOSPITAL_FLU	JELCO Nº 24 MARCA B BRAUN OU SMITHS MEDICAL	20	20	0
Grupo	Região	HOSPITAL_FLU	K + Na + Cl + Glicose oral	50	200	130
Grupo	Região	HOSPITAL_FLU	Kit catastrophe multiplas vitimas	2	2	0
Grupo	Região	HOSPITAL_FLU	KIT CURATIVO ESTERIL - DESCARTAVEL	30	30	0
Grupo	Região	HOSPITAL_FLU	KIT DE INSTRUMENTOS ODONTOLOGICOS PCT. C/5 PEÇAS	1	1	0
Grupo	Região	HOSPITAL_FLU	KIT IMOBILIZADOR FRATURA PROSPLINT	2	2	0
Grupo	Região	HOSPITAL_FLU	Kit Intra ossea adulto	5	5	0

Quantidade a Repor	Situação	Lotes
0	Suficiente	3297118
0	Suficiente	181541, b19e0715
2	Baixo	154124, 162816
0	Suficiente	1P4474
0	Suficiente	71552, 72520
451	Insuficiente	B19G2594, B20D2179
2	Insuficiente	000
2	Insuficiente	
0	Suficiente	0116737
3	Baixo	1441202
0	Suficiente	055425
10	Insuficiente	
1	Insuficiente	41810B
15	Insuficiente	
21	Insuficiente	8129572
20	Insuficiente	
20	Insuficiente	
70	Suficiente	1926940, 973-13/20
2	Insuficiente	
30	Insuficiente	
1	Insuficiente	
2	Insuficiente	
5	Insuficiente	

Grupo	Região	Empresa	Medicamento	Quantidade Mínima	Quantidade Máxima	Quantidade em Estoque
Grupo	Região	HOSPITAL_FLU	KIT PARA SWAB	1	1	0
Grupo	Região	HOSPITAL_FLU	KIT SUTURA ESTERIL - DESCARTAVEL	15	15	10
Grupo	Região	HOSPITAL_FLU	KIT TALA P/IMOBILIZAÇÃO CONFECCIONADA EM EVA C/4UNIDADES	2	2	7
Grupo	Região	HOSPITAL_FLU	Kit teste rápido multidrogas para 6 drogas	1	1	105
Grupo	Região	HOSPITAL_FLU	KIT TESTE RÁPIDO TROPONINA	1	1	0
Grupo	Região	HOSPITAL_FLU	Kollagenase + Cloranfenicol	5	10	9
Grupo	Região	HOSPITAL_FLU	LACRE PLASTICO TAM. 16CM - MODELO ZNESC DT - COR AZUL (NUMERO 1 A 1000).	1000	1000	0
Grupo	Região	HOSPITAL_FLU	LÂMINA LARINGOSCOPIO CURVA CONVENCIONAL -STANDARD MACINTOSH TAM. N°02	3	3	1
Grupo	Região	HOSPITAL_FLU	LÂMINA LARINGOSCOPIO CURVA CONVENCIONAL -STANDARD MACINTOSH TAM. N°03	3	3	1
Grupo	Região	HOSPITAL_FLU	LÂMINA LARINGOSCOPIO CURVA CONVENCIONAL -STANDARD MACINTOSH TAM. N°04	3	3	1
Grupo	Região	HOSPITAL_FLU	LÂMINA LARINGOSCOPIO CURVA CONVENCIONAL -STANDARD MACINTOSH TAM. N°05	3	3	0
Grupo	Região	HOSPITAL_FLU	LÂMINA LARINGOSCOPIO RETA CONVENCIONAL -STANDARD MILLER TAM. N°01	2	2	0
Grupo	Região	HOSPITAL_FLU	LÂMINA LARINGOSCOPIO RETA CONVENCIONAL -STANDARD MILLER TAM. N°02	2	2	0
Grupo	Região	HOSPITAL_FLU	LÂMINA LARINGOSCOPIO RETA CONVENCIONAL -STANDARD MILLER TAM. N°03	2	2	1
Grupo	Região	HOSPITAL_FLU	LÂMPADA HALOGENA 2,5V 03900-U PARA OFTALMOSCOPIO POCKET JUNIOR 12850 WELCH ALLYN	1	1	0
Grupo	Região	HOSPITAL_FLU	LÂMPADA HALOGENA 2,5V 07600-U WELCH ALLYN	2	2	0
Grupo	Região	HOSPITAL_FLU	LÂMPADA P/ LÂMINA DE LARINGOSCOPIO CONVENCIONAL	5	5	0

Quantidade a Repor	Situação	Lotes
1	Insuficiente	
5	Insuficiente	1200430014
0	Suficiente	000, OP1172
0	Suficiente	852460
1	Insuficiente	
1	Suficiente	19070432, 19110299
1000	Insuficiente	
2	Insuficiente	000
2	Insuficiente	000
2	Insuficiente	000
3	Insuficiente	
2	Insuficiente	
2	Insuficiente	
1	Insuficiente	000
1	Insuficiente	
2	Insuficiente	
5	Insuficiente	

Grupo	Região	Empresa	Medicamento	Quantidade Mínima	Quantidade Máxima	Quantidade em Estoque
Grupo	Região	HOSPITAL_FLU	LAMPADA PARA OTOSCOPIO POCKETSCOPE 22820 WELCH ALLYN	1	1	0
Grupo	Região	HOSPITAL_FLU	LANCETAS PARA HAEMOGLUCOTEST COMPATIVEL C/ APARELHO ACCU CHEK ACTIVE CX C/ 200 UN.	2	2	200
Grupo	Região	HOSPITAL_FLU	Lanexate	2	5	0
Grupo	Região	HOSPITAL_FLU	LANTERNA CLÍNICA PENLITE 76600 WELCH ALLYN	5	5	5
Grupo	Região	HOSPITAL_FLU	LENÇOL PARA MACA HOSPITALAR EM TNT COM ELASTICO, PACOTE C/ 10 UNIDADES (LARGURA 75CM).	3	3	0
Grupo	Região	HOSPITAL_FLU	Lidocaína 2% Gel Tubo	5	10	10
Grupo	Região	HOSPITAL_FLU	Lidocaína s/ Vasoconstritor 2% Frasco 20mL	3	5	4
Grupo	Região	HOSPITAL_FLU	Lidocaína+Polimixicina	2	5	0
Grupo	Região	HOSPITAL_FLU	LIVRO ATA 100 FOLHAS, SEM MARGEM	2	2	1
Grupo	Região	HOSPITAL_FLU	LIXEIRA BRANCA C/PEDAL 60LT QUADRADA	2	2	1
Grupo	Região	HOSPITAL_FLU	Loratadina 10mg	50	100	96
Grupo	Região	HOSPITAL_FLU	Loratadina 5mg+ pseudoefedrina 120mg	50	150	0
Grupo	Região	HOSPITAL_FLU	LUPA BINOCULAR COM CINTA DE CABECA, COM FOCO DE LUZ FRONTAL EX-S30 SERIES	1	1	0
Grupo	Região	HOSPITAL_FLU	LUVA CIRURGICA 8.0	10	10	20
Grupo	Região	HOSPITAL_FLU	LUVA CIRURGICA Nº 7,5	1	1	45
Grupo	Região	HOSPITAL_FLU	LUVA CIRURGICA Nº 8,5	10	10	0
Grupo	Região	HOSPITAL_FLU	LUVA DE PROCEDIMENTO TAM. G CAIXA COM 100 UNIDADES	5	5	21
Grupo	Região	HOSPITAL_FLU	LUVA DE PROCEDIMENTO TAM. M CAIXA COM 100 UNIDADES	5	5	1
Grupo	Região	HOSPITAL_FLU	LUVA DE PROCEDIMENTO TAM. P CAIXA COM 100 UNIDADES	1	1	0
Grupo	Região	HOSPITAL_FLU	MACA HOSPITALAR	1	1	0
Grupo	Região	HOSPITAL_FLU	MACA MAMUTE FLEX P/ RESGATE EM ALTURA E ESPACO CONFINADO "MACA ENVELOPE".C/CERTIFICADO	4	4	2

Quantidade a Repor	Situação	Lotes
1	Insuficiente	
0	Suficiente	42519263
5	Insuficiente	
0	Baixo	000
3	Insuficiente	
0	Suficiente	19003381, 20004142
1	Suficiente	LL-065/20
5	Insuficiente	
1	Insuficiente	000
1	Insuficiente	000
4	Suficiente	1917672, AB68210
150	Insuficiente	
1	Insuficiente	
0	Suficiente	006889
0	Suficiente	00007256, 006985
10	Insuficiente	
0	Suficiente	19050104, SDLTGG161L, SDTCAA439L
4	Insuficiente	17080103
1	Insuficiente	
1	Insuficiente	
2	Insuficiente	000

Grupo	Região	Empresa	Medicamento	Quantidade Mínima	Quantidade Máxima	Quantidade em Estoque
Grupo	Região	HOSPITAL_FLU	MACA MAMUTE RIGIDA TIPO CESTO COM CERTIFICADO	2	2	1
Grupo	Região	HOSPITAL_FLU	MACA MODELO OFFSHORE OMB DO BRASIL C/CERTIFICADO	3	3	0
Grupo	Região	HOSPITAL_FLU	MANDRIL P/ENTUB ENDOTRAQUEAL ADULTO FLEXIVEL	6	6	3
Grupo	Região	HOSPITAL_FLU	MANEQUIM ADULTO RESUSCI ANNE CORPO INTEIRO SEM MONITOR SKILLGUIDE COM MALETA RIGIDA PARA TRANSPORTE	1	1	0
Grupo	Região	HOSPITAL_FLU	MANOMETRO C/FLUXOMETRO COM CERTIFICADO DE CALIBRACAO	24	24	9
Grupo	Região	HOSPITAL_FLU	MARTELO NEUROLOGICO DE BUCK 20CM	1	1	2
Grupo	Região	HOSPITAL_FLU	MASCARA CIRURGICA DESCARTAVEL COM ELASTICO CAIXA C/ 50 UNIDADES	3	3	2
Grupo	Região	HOSPITAL_FLU	MASCARA DE PROTECAO N95 PFF2	1	1	0
Grupo	Região	HOSPITAL_FLU	MESA DE MAYO EM ACO INOX	1	1	1
Grupo	Região	HOSPITAL_FLU	Metoclopramida 10mg	50	100	172
Grupo	Região	HOSPITAL_FLU	Metoclopramida 10mg/2ml ampola com 2 ml	10	50	20
Grupo	Região	HOSPITAL_FLU	Metronidazol 500mg	40	80	0
Grupo	Região	HOSPITAL_FLU	Miconazol 2% Creme Vaginal com 80g + Aplicador	2	5	2
Grupo	Região	HOSPITAL_FLU	Miconazol creme 20%	5	10	0
Grupo	Região	HOSPITAL_FLU	Midazolan	2	5	0
Grupo	Região	HOSPITAL_FLU	MOCHILA APH (MODELO: CRUZ DA VIDA FIBRA RESGATE 729 VERMELHA).	2	2	0
Grupo	Região	HOSPITAL_FLU	Morfina 10mg/ml	2	5	10
Grupo	Região	HOSPITAL_FLU	MULETA CANADENSE ALUMINIO AJUSTAVEL	1	1	0
Grupo	Região	HOSPITAL_FLU	MULETA ORTOPEDICA AXILAR DE ALUMINIO AJUSTAVEL - ADULTO 130kg	1	1	0
Grupo	Região	HOSPITAL_FLU	Nafazolina 0,05% + Fenolsulfato de Zinco 0,1% colirio	5	10	0
Grupo	Região	HOSPITAL_FLU	Naproxeno 550mg	50	200	0
Grupo	Região	HOSPITAL_FLU	Narcan	2	5	10
Grupo	Região	HOSPITAL_FLU	Neomicina 5mg/g + Bacitrcina 250UI/g Tb 50g de Pom	10	30	4

Quantidade a Repor	Situação	Lotes
1	Insuficiente	000
3	Insuficiente	
3	Insuficiente	000, 70062001
1	Insuficiente	
15	Insuficiente	051442001, 066151001, 40105780P, MAN0120, MAN14239, MAN14241, MAN4500, MN14240, UST47698
0	Suficiente	000
1	Insuficiente	SMEFU162, SMEFU165
1	Insuficiente	
0	Baixo	000
0	Suficiente	846968, 9RA01547, 9RA02856, 9RA07951
30	Suficiente	0050070
80	Insuficiente	
3	Baixo	563
10	Insuficiente	
5	Insuficiente	
2	Insuficiente	
0	Suficiente	19080496, 20100099
1	Insuficiente	
1	Insuficiente	
10	Insuficiente	
200	Insuficiente	
0	Suficiente	BA001/20, BA002/19
26	Insuficiente	9KP05697

Grupo	Região	Empresa	Medicamento	Quantidade Mínima	Quantidade Máxima	Quantidade em Estoque
Grupo	Região	HOSPITAL_FLU	OCULOS DE PROTECAO	10	10	4
Grupo	Região	HOSPITAL_FLU	OFTALMOSCOPIO POCKET JUNIOR 12850 WELCH ALLYN	1	1	1
Grupo	Região	HOSPITAL_FLU	Oleo Mineral 100ML	2	5	1
Grupo	Região	HOSPITAL_FLU	Omeprazol 20mg	50	100	336
Grupo	Região	HOSPITAL_FLU	Ondansetrona 4mg	100	200	62
Grupo	Região	HOSPITAL_FLU	OTOSCÓPIO WELCHALLYN POCKETSCOPE 22820 COM ILUMINADOR	1	1	2
Grupo	Região	HOSPITAL_FLU	Oximetazolina 0,5mg/mL Solução nasal Frasco com 10mL	5	10	7
Grupo	Região	HOSPITAL_FLU	OXIMETRO DE PULSO TIPO DEDO C/ VISOR GRANDE	4	4	3
Grupo	Região	HOSPITAL_FLU	PAPAGAIO EM ACO INOX	2	2	0
Grupo	Região	HOSPITAL_FLU	PAPEL ECG CARDIO CARE 2000	8	8	0
Grupo	Região	HOSPITAL_FLU	Paracet 500+dimetindeno+fenilefrina 2mg+Vit C 40 mg	100	360	38
Grupo	Região	HOSPITAL_FLU	Paracetamol 500mg + Codeína 12,5mg	20	60	24
Grupo	Região	HOSPITAL_FLU	Paracetamol 750 Blister c/04 cp	100	300	90
Grupo	Região	HOSPITAL_FLU	Permetrina 1% embalagem c/ 60 ml de creme capilar	2	5	2
Grupo	Região	HOSPITAL_FLU	Peróxido de Hidrogênio 30mg/ml 10 volumes	2	3	0
Grupo	Região	HOSPITAL_FLU	PILHA ALCALINA AA	10	10	0
Grupo	Região	HOSPITAL_FLU	PILHA ALCALINA AAA	20	20	0
Grupo	Região	HOSPITAL_FLU	PILHA ENERGIZER C2 MAX NAO RECARREGAVEL PACOTE COM 12 UNIDADES	2	2	0
Grupo	Região	HOSPITAL_FLU	Pilocarpina colírio	1	2	1
Grupo	Região	HOSPITAL_FLU	PINÇA ALLIS 18CM	2	2	0
Grupo	Região	HOSPITAL_FLU	PINÇA ANATOMICA DENTE RATO 16CM	2	2	2
Grupo	Região	HOSPITAL_FLU	PINÇA MAGIL 25CM P/CATETER	2	2	0
Grupo	Região	HOSPITAL_FLU	POCKET MASK LAERDAL	30	30	16
Grupo	Região	HOSPITAL_FLU	Polimixina B 10.000UI/ML, + Neomic 5mg/ML, + Hidroc. 10mg/mL Sol. Otol.	2	5	0
Grupo	Região	HOSPITAL_FLU	PORTA AGULHA MAYO HEGAR 15CM	2	2	0
Grupo	Região	HOSPITAL_FLU	PRANCHA FLUTUANTE DE POLIETILENO AMARELA C/JG DE CINTO 3 PARTES	5	5	5

Quantidade a Repor	Situação	Lotes
6	Insuficiente	000
0	Baixo	000
4	Insuficiente	0729
0	Suficiente	1923331, 1L8228
138	Insuficiente	1046133, 1046172, 19050389, 20060498
0	Suficiente	000
3	Suficiente	1P6243, 2336263
1	Insuficiente	0346843, SB150200734
2	Insuficiente	
8	Insuficiente	
322	Insuficiente	1851333
36	Suficiente	1E0665, 1H7380
210	Insuficiente	1V3948
3	Baixo	14386
3	Insuficiente	
10	Insuficiente	
20	Insuficiente	
2	Insuficiente	
1	Baixo	F62917
2	Insuficiente	
0	Baixo	000
2	Insuficiente	
14	Insuficiente	150604, 151019
5	Insuficiente	
2	Insuficiente	
0	Baixo	000

Grupo	Região	Empresa	Medicamento	Quantidade Mínima	Quantidade Máxima	Quantidade em Estoque
Grupo	Região	HOSPITAL_FLU	Prednisona 20 mg comprimido	10	50	19
Grupo	Região	HOSPITAL_FLU	Prometazina Amp 50mg	5	10	10
Grupo	Região	HOSPITAL_FLU	Prometazina creme	2	5	6
Grupo	Região	HOSPITAL_FLU	PROTETOR OCULAR CAIXA C/ 20 UNIDADES	5	5	2
Grupo	Região	HOSPITAL_FLU	Protetor Solar FPS 50 2.8l frasco	3	6	50
Grupo	Região	HOSPITAL_FLU	Racecadotril 100 mg	50	180	126
Grupo	Região	HOSPITAL_FLU	Ringer lactato 500 ml bolsa	5	20	9
Grupo	Região	HOSPITAL_FLU	Ringer simples 500ml	5	10	0
Grupo	Região	HOSPITAL_FLU	Rinosoro	5	15	0
Grupo	Região	HOSPITAL_FLU	SACO DE LIXO 100L INFECTANTE BRANCO - PACOTE COM 100 UNIDADES	1	1	12
Grupo	Região	HOSPITAL_FLU	SACO PARA OBITO 2M "COBERTURA PARA OBITO".	10	10	12
Grupo	Região	HOSPITAL_FLU	Salbutamol 6mg/ml Solução Jato Dose / Spray	2	5	0
Grupo	Região	HOSPITAL_FLU	SCALP INTRAVENOSO Nº21	20	20	25
Grupo	Região	HOSPITAL_FLU	SCALP INTRAVENOSO Nº25	20	20	9
Grupo	Região	HOSPITAL_FLU	SERINGA 01ML COM AGULHA	20	20	50
Grupo	Região	HOSPITAL_FLU	SERINGA BICO LUER SLIP SEM AGULHA 01ML	20	20	48
Grupo	Região	HOSPITAL_FLU	SERINGA BICO LUER SLIP SEM AGULHA 03ML	30	30	33
Grupo	Região	HOSPITAL_FLU	SERINGA BICO LUER SLIP SEM AGULHA 05ML	30	30	22
Grupo	Região	HOSPITAL_FLU	SERINGA BICO LUER SLIP SEM AGULHA 10ML	30	30	6
Grupo	Região	HOSPITAL_FLU	SERINGA BICO LUER SLIP SEM AGULHA 20ML	30	30	19
Grupo	Região	HOSPITAL_FLU	SERINGA BICO LUER SLIP SEM AGULHA 60ML	2	2	0
Grupo	Região	HOSPITAL_FLU	SERINGA PARA LAVAGEM DE OUVIDO 100CC STYLELLE	1	1	0
Grupo	Região	HOSPITAL_FLU	SISTEMA DRENAGEM TORAX 1L C/DRENO N26	1	1	2
Grupo	Região	HOSPITAL_FLU	SISTEMA DRENAGEM TORAX 500ML C/DRENO N14	1	1	0
Grupo	Região	HOSPITAL_FLU	SONDA ASPIRACAO TRAQUEAL Nº10	5	5	0
Grupo	Região	HOSPITAL_FLU	SONDA ASPIRACAO TRAQUEAL Nº14	5	5	10
Grupo	Região	HOSPITAL_FLU	SONDA NASOGASTRICA LONGA Nº16	3	3	4
Grupo	Região	HOSPITAL_FLU	SONDA NASOGASTRICA LONGA Nº20	3	3	4

Quantidade a Repor	Situação	Lotes
31	Suficiente	14796
0	Suficiente	19070478, AY440
0	Suficiente	9RA08443, L9RA02661
3	Insuficiente	1635000704
0	Suficiente	0016, 1905029
54	Suficiente	N004, N006
11	Suficiente	19417340B4
10	Insuficiente	
15	Insuficiente	
0	Suficiente	000
0	Suficiente	000
5	Insuficiente	
0	Suficiente	0803170401, 190317
11	Insuficiente	20190320
0	Suficiente	8029781, E195T
0	Suficiente	8029781, E185T
0	Baixo	E544S, SSSLAA002A.
8	Insuficiente	C536P
24	Insuficiente	E342P
11	Insuficiente	SSSLAA0507
2	Insuficiente	
1	Insuficiente	
0	Suficiente	043739, 17349
1	Insuficiente	
5	Insuficiente	
0	Suficiente	FY1707063
0	Suficiente	FY1707051
0	Suficiente	11792

Grupo	Região	Empresa	Medicamento	Quantidade Mínima	Quantidade Máxima	Quantidade em Estoque
Grupo	Região	HOSPITAL_FLU	SONDA URETRAL Nº 10	4	4	0
Grupo	Região	HOSPITAL_FLU	SONDA URETRAL Nº 12	4	4	0
Grupo	Região	HOSPITAL_FLU	SONDA VESICAL FOLEY 2 VIAS Nº14	2	2	4
Grupo	Região	HOSPITAL_FLU	SONDA VESICAL FOLEY 2 VIAS Nº20	2	2	0
Grupo	Região	HOSPITAL_FLU	Soro Fisiológico 0,9% 500 ML BOLSA	10	30	21
Grupo	Região	HOSPITAL_FLU	Soro Glicosado 5% (Dextrose Anidra 5%) solução injetável frasco com 500ml	10	30	10
Grupo	Região	HOSPITAL_FLU	STERI-STRIP - SUTURA CUTANEA 0,6CM x 7,5CM	40	40	13
Grupo	Região	HOSPITAL_FLU	Steri-Strip 2 tamanhos mais utilizados	1	1	5
Grupo	Região	HOSPITAL_FLU	Steri-Strip 2 tamanhos mais utilizados	1	1	5
Grupo	Região	HOSPITAL_FLU	Sulfadiazina de Prata 1% Creme	5	10	5
Grupo	Região	HOSPITAL_FLU	Sulfametoxazol 800mg + Trimetropim 160mg	10	30	40
Grupo	Região	HOSPITAL_FLU	Sumatriptana 25 mg	5	20	16
Grupo	Região	HOSPITAL_FLU	SUPORTE PARA COLETOR PERFURO CORTANTE 13 LITROS - MARCA VACUPLAST	3	3	5
Grupo	Região	HOSPITAL_FLU	SUPORTE PARA SORO ALTURA REGULAVEL EM ACO INOX SEM RODINHAS	3	3	1
Grupo	Região	HOSPITAL_FLU	SUSPENSORIO ESCROTAL	10	10	2
Grupo	Região	HOSPITAL_FLU	TALA DE TRACAO FEMURAL REGULAVEL	2	2	0
Grupo	Região	HOSPITAL_FLU	TALA INFLAVEL PARA BRACO INTEIRO	2	2	0
Grupo	Região	HOSPITAL_FLU	TALA INFLAVEL PARA MEIA PERNA	2	2	0
Grupo	Região	HOSPITAL_FLU	TALA INFLAVEL PARA MEIO BRACO	2	2	0
Grupo	Região	HOSPITAL_FLU	TALA INFLAVEL PARA O PE E TORNOZELO	2	2	0
Grupo	Região	HOSPITAL_FLU	TALA INFLAVEL PARA PERNA INTEIRA	2	2	0
Grupo	Região	HOSPITAL_FLU	TALA INFLAVEL PARA PUNHO	2	2	0
Grupo	Região	HOSPITAL_FLU	TALA METALICA 12X180MM PCT.C/12 UNIDADES C/ESPUMA	2	2	2
Grupo	Região	HOSPITAL_FLU	TALA MOLDAVEL TIPO/SIMILAR A SAM SPLINT TAM. 11X46CM "ROLO DE ALUMINIO/SPLINT".	15	15	0
Grupo	Região	HOSPITAL_FLU	TAMBOR INOX 14X14CM	2	2	2
Grupo	Região	HOSPITAL_FLU	TENTACANULA/SONDA ACANELADA 15CM	2	2	0
Grupo	Região	HOSPITAL_FLU	TERMOMETRO AXILAR DIGITAL GERATHERM FLEX - (AXILAR/ORAL/RETAL)	5	5	2

Quantidade a Repor	Situação	Lotes
4	Insuficiente	
4	Insuficiente	
0	Suficiente	08417091, 08418012, 191161202
2	Insuficiente	
9	Suficiente	141302, 19035129
20	Baixo	19075135
27	Insuficiente	07AZ, 202009AZ, 202109AY
0	Suficiente	07AZ
0	Suficiente	09AY
5	Baixo	190580
0	Suficiente	L49857
4	Suficiente	2010197
0	Suficiente	000
2	Insuficiente	000
8	Insuficiente	11016PA
2	Insuficiente	
2	Insuficiente	
2	Insuficiente	
2	Insuficiente	
2	Insuficiente	
2	Insuficiente	
2	Insuficiente	
0	Baixo	000, 2200561
15	Insuficiente	
0	Baixo	000
2	Insuficiente	
3	Insuficiente	DI179

Grupo	Região	Empresa	Medicamento	Quantidade Mínima	Quantidade Máxima	Quantidade em Estoque
Grupo	Região	HOSPITAL_FLU	TERMOMETRO INCOTERM MAXIMA/ MINIMA 7427 COM CERTIFICADO	4	4	0
Grupo	Região	HOSPITAL_FLU	TESOURA ESCOLAR PONTA ARRENDONDADA TAM. 11.67CM	2	2	0
Grupo	Região	HOSPITAL_FLU	TESOURA MD PARA BANDAGEM ROMBA/ROMBA 19CM - MARCA MD	4	4	7
Grupo	Região	HOSPITAL_FLU	TESOURA PONTA ROMBA CURVA 15CM	2	2	0
Grupo	Região	HOSPITAL_FLU	TIPOIA VELPEAU ESTOFADA BILATERAL	4	4	10
Grupo	Região	HOSPITAL_FLU	TIRAS REAGENTES PARA TESTE DE GLICEMIA ACCHU CHECK ACTIVE CX C/100 UN	5	5	250
Grupo	Região	HOSPITAL_FLU	Tobramicina 3mg + Dexametasona 1mg colírio	5	15	0
Grupo	Região	HOSPITAL_FLU	Tramadol Comprimido	10	50	37
Grupo	Região	HOSPITAL_FLU	TRAVESSEIRO HOSPITALAR IMPERMEAVEL REVESTIDOS EM COURVIN AZUL 70X50	3	3	1
Grupo	Região	HOSPITAL_FLU	TRENA ANTROPOMETRICA R88 - WISO	2	2	0
Grupo	Região	HOSPITAL_FLU	Triancinolona 1mg/g Pomada Tubo com 10g Orobase	5	10	5
Grupo	Região	HOSPITAL_FLU	Tribenosídeo+ Lidocaína Creme retal Tb c/30g + 10 aplicadores	2	5	3
Grupo	Região	HOSPITAL_FLU	TUBO CORRUGADO ESTERIL PARA VENTILADOR MECANICO PORTATIL "CIRCUITO".	2	2	0
Grupo	Região	HOSPITAL_FLU	TUBO ENDOTRAQUEAL 7,0MM C/ BALAO	4	4	7
Grupo	Região	HOSPITAL_FLU	TUBO ENDOTRAQUEAL 8,0MM C/ BALAO	4	4	3
Grupo	Região	HOSPITAL_FLU	TUBO ENDOTRAQUEAL 9,0MM C/ BALAO	4	4	0
Grupo	Região	HOSPITAL_FLU	TUBO HOSPITALAR DE SILICONE P/ OXIGENIOTERAPIA 6X10MM	10	10	10
Grupo	Região	HOSPITAL_FLU	TUBO LARINGEO LUMEN DUPLO COM CANAL DE ASPIRACAO GASTRICA Nº 3 USO UNICO	4	4	0
Grupo	Região	HOSPITAL_FLU	TUBO LARINGEO LUMEN DUPLO COM CANAL DE ASPIRACAO GASTRICA Nº 4 USO UNICO	4	4	0
Grupo	Região	HOSPITAL_FLU	TUBO LARINGEO LUMEN DUPLO COM CANAL DE ASPIRACAO GASTRICA Nº 5 USO UNICO	4	4	0
Grupo	Região	HOSPITAL_FLU	UMIDIFICADOR MASTER P/OXIGENIO C/FRASCO 400ML COM MASCARA E EXTENSAO	1	1	1

Quantidade a Repor	Situação	Lotes
4	Insuficiente	
2	Insuficiente	
0	Suficiente	97-54
2	Insuficiente	
0	Suficiente	000
0	Suficiente	24697333
15	Insuficiente	
13	Suficiente	B19J492
2	Insuficiente	000
2	Insuficiente	
5	Baixo	1J9722, 20D58A
2	Suficiente	158271
2	Insuficiente	
0	Suficiente	01017091, 01018012, 0571161101, 571160701
1	Insuficiente	0591161101, 591160701
4	Insuficiente	
0	Baixo	000
4	Insuficiente	
4	Insuficiente	
4	Insuficiente	
0	Baixo	111724

Grupo	Região	Empresa	Medicamento	Quantidade Mínima	Quantidade Máxima	Quantidade em Estoque
Grupo	Região	HOSPITAL_FLU	UMIFICADOR P/OXIGENIO 250ML COM MASCARA E EXTENSAO	12	12	6
Grupo	Região	HOSPITAL_FLU	Valerato de Betametasona creme 30 gr	5	10	11
Grupo	Região	HOSPITAL_FLU	Vaselina solida	5	10	9
Grupo	Região	HOSPITAL_FLU	VENTILADOR MECANICO PORTATIL (RESPIRADOR MECANICO).	1	1	1
Grupo	Região	HOSPITAL_FLU	Xarope Dropropizina+pseudoefedrina+difenidramina+paraceta mol	5	20	0

Quantidade a Repor	Situação	Lotes
6	Insuficiente	112608, 69273001
0	Suficiente	1S1069, 1S1069.
1	Suficiente	1804593, 1806025, 1806061
0	Baixo	64052
20	Insuficiente	

See ABS Rio de Janeiro Letter Ref T2189020 Dated 18-NOV-2021

**MEDICAMENTOS CONTROLADOS
(MEDICINE CONTROL)**

Embarcação (Vessel): FPSO Fluminense

Profissional de saúde (Health professional): Dra Geisa Louzada Badotti

Data (Date): 16/04/2021

Embarque (Embark) 02/04/2021 Desembarque (Disembark) 16/04/2021

Medicação – Descrição (Medicines)	Quantidade (Quantity)	Apresentação (Presentation)	Lote (Lot)	Validade (Expiration date)
Diazepan 10mg	18	comprimido	1V7873	Abr/22
Diazepan 5mg	150	comprimido	1X6651	Ago/22
Diazepan 10mg/2ml	10	ampola	20102220	Out/22
Morfina 10mg/ml	5	ampola	19080496	Ago/21
Tramadol 50mg	37	comprimido	B19J1492	Set/21
Bromazepam 3mg	30	comprimido	B19J0250	Set/21
Paracetamol 500mg + Codeína 30mg	12	comprimido	1E0665	Jun/21
Paracetamol 500mg + Codeína 30mg	12	comprimido	1H7380	Set/21
Midazolam 50mg/10ml	5	ampola	1935636	Set/21
Flumazenil 0,5mg/ml (5ml)	5	ampola	2000309	Jan/22
Morfina 10mg/ml	5	ampola	20100099	Out/22
Naloxona 0,4mg/ml	5	ampola	BA001/20	Set/22
Tramadol 50mg	100	compimido	2114277	Nov/22

Medicações descartadas na quinzena (Medicines discarded on fortnight):

Medicação - Descrição (Medicines)	Quantidade (Quantity)	Apresentação (Presentation)	Lote (Lot)	Validade (Expiration date)
Flumazenil 0,5mg/5ml	5	ampola	1916885	Abr/21
Tramadol 50mg	3	ampola	9064250	Abr/21
Diazepan 10mg/2ml	24	ampola	9075038	Mar/21
Diazepan 10mg/2ml	5	ampola	1911735	Mar/21
Cloridrato de Naloxona 0,4mg/ml	5	ampola	BA002/19	Mar/21

Medicações utilizadas na quinzena (Medicines used on fortnight):

Medicação - Descrição (Medicines)	Quantidade (Quantity)	Apresentação (Presentation)	Lote (Lot)	Validade (Expiration date)
Diazepan 10mg	2	comprimido	1V7873	Abr/22

CONTROLLED MEDICINES USED IN THIS SHIFT WERE WRITTEN IN BLACK BOOK

Profissional de saúde (Health professional)	OIM
Dra Geisa Louzada Badotti	Marius Munro

Surveyor's 'Approved Hazmat Expert' Certificate

See ABS Rio de Janeiro Letter Ref T2189020 Dated 18-NOV-2021

Certificate

Approved HazMat Expert

Reg. No.: 3346262E

This is to certify that

Mr. Frank Fox

has participated the seminar "Approved HazMat Expert" and successfully completed the examination.

The participant is familiar with the knowledge of preparation of an "Inventory of Hazardous Materials" (IHM) with reference to following:

- Hong Kong International Convention for the Safe and Sound Recycling of Ships 2009
- EU Ship Recycling Regulation (EC 1257/2013)

Seminar "Approved HazMat Expert" **Place, Date, Signature:** Hamburg 2009-04-27 to 30, Gerhard Aulbert
 DNV GL Representative

Examination "Approved HazMat Expert" **Place, Date, Signature:** Hamburg 2009-04-30 Gerhard Aulbert
 DNV GL Representative

This certificate is valid until: 2022-04-15

Issued at Hamburg, 2019-04-16

This certificate is subject to a revalidation every three years.

First Revalidation **Place, Date, Signature:** Chenping Huang
 Shanghai 2016-01-11 DNV GL Representative

Second Revalidation **Place, Date, Signature:** Khalid Mahmood
 Hamburg, 2019-04-11 DNV GL Representative

 Gerhard Aulbert