



# Maritime Asbestos Materials Post Re-Fit Assessment

Post Re-Fit Survey - Northwest Sandpiper (IMO: 8913150)

Shell Tankers Australia Pty Ltd



Reference: 754-PEREN310903  
27 January 2023

# MARITIME ASBESTOS MATERIALS POST RE-FIT ASSESSMENT

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**Report reference number: 754-PEREN310903**

09 January 2023

## PREPARED FOR

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## QUALITY INFORMATION

### Revision history

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## EXECUTIVE SUMMARY<sup>1</sup>

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Tetra Tech Coffey Pty Ltd conducted an Asbestos Post Re-Fit Survey of the Shell Northwest Sandpiper on the 31<sup>st</sup> of November 2022 while the vessel was docked in Dampier, Western Australia, to assess the materials introduced during refit completed in Singapore earlier this year.

A total of twenty-seven (27) samples of gaskets, insulations and wall penetrations were taken during the assessment. The sampling was targeted to specific systems, thorough review of previous items was not undertaken. **Asbestos was detected in six (6) of the samples collected.** Please refer to the asbestos register in Appendix B for more detail.

Please note that all activities and services provided by Tetra Tech Coffey are subject to the Methodologies and Statement of Limitations contained within this report.

Recommended actions and risk control strategies for reinspected materials are contained within the asbestos register and the recommendations section of this report. Tetra Tech Coffey recommends ongoing inspections of these materials by competent person.

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<sup>1</sup> This executive summary must be read in the context of the full report and the attached limitations.

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## 1. INTRODUCTION

Tetra Tech Coffey Pty Ltd conducted an Asbestos Post Re-Fit Survey of the Shell Northwest Sandpiper on the 31<sup>st</sup> November 2022. The survey was undertaken whilst the vessel was moored in Dampier and was intended to assess the materials introduced during maintenance works in Singapore earlier this year.

An initial survey was completed by Tetra Tech Coffey during the period of the 29<sup>th</sup> November and 1<sup>st</sup> December 2012 and re-surveys conducted in October 2017 and November 2021.

International, Commonwealth, State legislation and industry guidance requires that an asbestos risk assessment inclusive of an asbestos register be developed by workplace owners, controllers of workplaces, employers, and other interested parties, such as contractors, as part of an overall asbestos materials management plan designed to control the risks of exposure to hazardous materials. The asbestos register summarises the findings of the risk assessments, as well as presenting methods of risk reduction that may be utilised as part of the management plan.

The vessel asbestos assessment involved the assessment of the vessel for asbestos-containing materials (ACM) including previously identified ACM, in accordance with the Scope of Works described in this report. A qualitative risk assessment was also completed of visually observed suspect ACM.

Recommended actions and risk control strategies for reinspected materials are contained within the asbestos register and the recommendations section of this report. Tetra Tech Coffey recommends ongoing inspections of these materials by competent persons.

### 1.1 VESSEL INFORMATION

The asbestos materials re-assessment was undertaken whilst the vessel was docked at Dampier, Western Australia.

The Northwest Sandpiper was constructed as a Moss Rosenberg (LNG - NWS-class) LNG Gas Bulk Carrier in 1993 by the Mitsui Engineering & Shipbuilding's at its Chiba Yard Japan. She has a gross tonnage of 101,050 tonnes, a length of 272.00m, a beam of 47.2m and a draught of 11.1m and a cargo capacity of 126,956 cubic metres.

The vessel is owned by International Gas Transportation Company Ltd and flies the Australian flag.

The Northwest Sandpiper has previously been subject to an asbestos survey undertaken by Tetra Tech Coffey. Details of previous surveys can be found in **Appendix C: Asbestos Materials Maintenance Log**.

**Table 1: Vessel Description**

Vessel Description			
<b>Vessel Name:</b>	<b>Northwest Sandpiper</b>		
<b>Location of Survey:</b>	Dampier, WA	<b>Built Year &amp; Location:</b>	1993, Japan
<b>Gross Tonnage:</b>	101,010 tonnes	<b>Length:</b>	272.00 m
<b>Beam:</b>	47.2 m	<b>Draught:</b>	11.4 m

### 1.2 SCOPE OF WORK

The scope of work involved a Tetra Tech Consultant mobilising to the vessel to conduct a re-inspection of areas of the vessel where maintenance works were completed and to assess the materials introduced to ensure they did not contain asbestos.

The assessment was completed to meet the requirements of Australian Maritime Safety Authority, Occupational Health and Safety (Maritime Industry) Act 1993 and Regulations 2003 (Regulation 2.08 and Schedule 2).

## 1.3 SURVEY TEAM

The vessel re-survey was undertaken by Senior WHS Consultant, Edward Rowley of Tetra Tech.

During the vessel visit, a vessel Engineer provided assistance with collation and interpretation of information.

## 1.4 ACCESS RESTRICTIONS

Where No Access or Limited Access areas have been identified it should be presumed that ACM are present in these areas until further investigation can confirm or refute their presence.

No inspection can be guaranteed to locate all asbestos materials in a specific location. The assessment cannot be regarded as absolute, without extensive invasion of structures. Future demolition and or renovation to site structures may expose situations, which were concealed or otherwise impractical to access during this assessment.

### 1.4.1 No Access Areas

Care should be taken when accessing any No Access and Limited Access of these areas, if any suspect materials not included in this register are encountered work should cease immediately, and the suspect material should be professionally assessed

The following areas were not accessed during the survey.

- Working Plant and Electrical Equipment Including Switchboards Cargo Rooms;
- Boiler's and Furnace's;
- Lift Shaft and Doors;
- Locked CO<sub>2</sub> Rooms;
- Double Bottom Passage Way;
- Cargo Spaces and associated Pipework;
- Rescue Boat including Winch Brake System;
- Lifeboat Brake Systems;
- Confined Spaces including Tanks, Ventilation Trunking etc.; and
- Mushroom Vents.

### 1.4.2 Areas with Limited Access

- With Diesel Generator Exhaust Covers;
- Lagged Pipe Work;
- Lighting, Main and Fore Masts; and
- Provision & Stores Crane;

Care should be taken when accessing any of these areas, if any suspect materials not included in this register is encountered work should cease immediately. Suspect material should be professionally assessed.

## 2. METHODOLOGY

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Asbestos material surveys and re-surveys are undertaken considering a risk management approach, in accordance with best practice, relevant statutory regulations and relevant Codes of Practice.

Onboard vessel investigations cannot guarantee to locate the presence of restricted locations such as inline heaters in air conditioning systems. Whilst every effort will be made by the surveyor to locate and sample restricted areas, further access and detailed investigation may be required with the assistance of contractors and/or electricians.

Asbestos materials surveys are restricted to areas that are reasonably accessible during the survey, with respect to the following:

- Without contravention of relevant statutory requirements or codes of practice;
- Without placing the surveyor at undue risk;
- Without dismantlement or damage to installed fixtures and fittings, plant, electrical equipment, machinery; and
- Without other than non-superficial damage to installed fixtures, fittings and structure.

Where the surveyor encountered access restrictions during the survey, these situations are documented in this report.

No survey can be regarded as absolute. Future refurbishments/demolition of the building may reveal materials concealed during the assessment, which were not accessible at the time of the survey.

The survey involved an onboard vessel investigation for the presence of asbestos-containing materials (ACM) only. Based on the available data and the status of the vessel at the time of inspection, where suspect items or situations were identified, visual and/or analytical characterisation (as appropriate) was performed and reported in the Asbestos Register presented in Appendix C.

Photographs were taken of identified ACM and hazardous materials. These are provided in a separate section in this report.

A risk assessment was conducted on the basis of the condition, type and location of the materials at the time of inspection. The risk assessment is documented in the Asbestos Register.

Asbestos-containing materials identified in this report have been assessed on the basis that the materials remain as observed at the time of the assessment.

Asbestos surveys are non-destructive and as such are not intended for use or referral for the purpose of breaking up of vessels, refit, repair or rebuild and modification or structural alterations. In the event of future breaking up, refit, repair or rebuild and modification or structural alterations further investigation, which may entail destructive testing, shall be required.

No inspection can be guaranteed to locate all asbestos on board a vessel. The assessment cannot be regarded as absolute, without extensive invasion of vessels. Future breaking up and or modification to vessels may expose situations, which were concealed or otherwise impractical to access during this assessment.

The Client must not rely upon an inspection or report as indicating that a vessel is “asbestos free”. All that the report can be relied upon to show is that no asbestos was found (or that only such asbestos was found as was reported to be found) in the course of the inspection. The findings of the report must be considered together with the specific scope and limitations of the type of inspection undertaken.

The recommendations, conclusions or assessments of the stability of asbestos materials contained in this report shall not abrogate a person of their responsibility to work in accordance with Regulatory Requirements, Codes of Practice, Guidelines, Material Safety Data Sheets, Work Instructions or reasonable work practices. In accordance with current Guidelines and relevant Regulatory Requirements, we recommend that identified asbestos materials are managed in accordance with an appropriate asbestos materials management plan. The recommended re-inspection period of ACM within the register is based upon the requirements of the relevant Code of Practice.

Changes in condition of asbestos materials or work practices may dictate shorter re-inspection periods based on a revised risk assessment.

## 3. RESULTS

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### 3.1 POST RE-FIT SURVEY RESULTS

A total twenty-seven (27) samples of gaskets, insulation to pipe work, and wall penetration material were taken during the assessment. Asbestos was detected in six (6) of the samples taken.

Two requested sample locations targeting suspected ACM debris were inspected. The sample locations, which were identified by the engineer onboard did not appear to be contaminated with debris. A sample of the cable penetration material in these areas was taken, and, any debris believed to be associated with the cable penetration in these areas should be considered Positive for Asbestos Content and treated accordingly.

Samples taken from the New Ballast Water Treatment system returned results negative for asbestos content.

An updated vessel Asbestos Register can be found in Appendix A.

## 4. RECOMMENDATIONS

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### 4.1 STRUCTURE OF RECOMMENDATION

The recommendations, conclusions or stability of asbestos materials contained in this report shall not abrogate a person of their responsibility to work in accordance with Statutory Requirements, Codes of Practice, Guidelines, Material Safety Data Sheets, Work Instructions or reasonable work practices.

#### 4.1.1 Friable & Non-friable Asbestos

Asbestos containing materials (ACM) are referred to as either friable or non-friable. Friable asbestos is in the form of a powder, or can be crumbled, pulverized or reduced to powder by hand pressure when dry. Friable asbestos includes materials such as sprayed and thermal insulation, pipe lagging and millboard, and can release fibres with only minimal disturbance.

Non-friable asbestos products are ones in which the asbestos fibres are bound within the matrix of the material. Non-friable asbestos is difficult to damage or cause the release of fibres by hand and includes materials such as asbestos cement sheeting, some gaskets types, and adhesives, mastics and putty's. However, non-friable asbestos containing materials that have been subjected to weathering, physical damage, water damage, fire or other conditions may contain exposed fibres which could be released upon disturbance.

#### 4.1.2 Control Measures

Friable ACM exhibits the greatest risk to human health as fibres are released upon minimal disturbance. As such removal and replacement would be the preferred option if such materials were found in accessible areas or air conditioning systems.

Alternatively, removal and replacement may not be the preferred option for bonded ACM in a good and stable condition as the risk associated with removal could be high (as in the case of breaking up and or refurbishment/modification to vessels may expose situations, which were concealed or otherwise impractical to access during this assessment).

The selection of the most appropriate control measure should be determined from risk assessments and detailed knowledge of the workplace and activities. The following general principles may be applied:

If the ACM is friable, in a poor/unstable condition and accessible with risk to health from exposure, immediate access restrictions should be applied and removal is required as soon as practicable using a licensed removalist.



If the ACM is friable and accessible but in a stable condition, removal is preferred. However, if removal is not immediately practicable, then short-term control measures (i.e. restrict access, sealing, enclosure etc.) may be employed until removal can be facilitated.

If the ACM is bonded and in a poor/unstable condition; minimising disturbance and removal or encapsulation may be appropriate controls.

For bonded ACM's in a good and stable condition, on-going maintenance and periodic inspection would be appropriate controls.

Any remaining identified ACM's or presumptions should be appropriately labelled, where possible, and regularly inspected to ensure they are not deteriorating and/or resulting in a potential risk to health.

Prior to any future breaking up and or modification to vessels may expose situations, which were concealed or otherwise impractical to access during this assessment asbestos containing materials likely to be disturbed by those works should be removed in accordance with the Shell Asbestos Management Plan and Guidance along with NOHSC Code of Practice for the Safe Removal of Asbestos 2nd Edition [NOHSC: 2002 (2005)]. Further assessment of risk through airborne fibre monitoring can assist with decisions on the most appropriate, and urgency of, control measures.

Other control measures such as training and communication strategies, control of contractors and administrative procedures must be considered as part of the overall Shell Asbestos Management Plan. Tetra Tech Coffey recommends Type 3/Intrusive surveys be conducted prior to breaking up, refit, repair or rebuild and modification or any structural alterations.

**Should any further suspect Asbestos and/or Hazardous Materials become evident during future refurbishment works. A qualified and experienced hygienist should be contacted immediately so that an OHS consultant can confirm the status of the suspect materials.**

## 4.2 RECOMMENDED CONTROL MEASURES

### 4.2.1 ACM Penetration Packing

Penetration packing materials have been previously identified throughout the vessel and a representative sampling methodology was developed to address the potential extent of Bulkhead and Deckhead penetrations containing suspect ACM. A number of locations identified asbestos as a constituent of the material. Due to the extensive use of penetration packing, the extent of repairs and refurbishments undertaken it is strongly recommended all similar material types be managed as asbestos containing.

Bulkhead, Deckhead and Deck penetrations have been assessed as likely to have Non friable ACM and have varying condition assessments that relate to condition and quality of the penetration seal following refurbishment works.

It is recommended to prevent inadvertent exposure to workers that the packing materials be removed prior to scheduled maintenance, or refurbishment, using appropriate localised control measures in accordance with Shell AMP, relevant legislation, Standards and Guidance Materials.

The following controls recommended for immediate action include, but are not limited to:

- HSE Safety Alert to communicate risk of exposure during routine maintenance and new installation thru penetrations.
- Labelling of penetrations to warn of potential hazard.
- Complete a risk assessment and develop a management plan prior to removal of the ACM.

### 4.2.2 Loose/Stored Gasket Items

During previous surveys loose and stored gasket / packing materials were identified throughout the vessel and a representative sample of these were taken. During this inspection program, no loose or stored gasket or packing materials been identified. Asbestos Register have been updated with findings located in Appendix A.

### 4.2.3 In Situ Asbestos Gaskets

Asbestos gaskets and packing materials have been identified within systems. Due to the sporadic nature of installation it should be assumed that asbestos gaskets may be present throughout the vessel, so care should be taken when accessing any pipework/flanges. Further inspections and consultation with the vessel engineering teams would be required to assess management options regarding the full extent of asbestos gaskets within systems.

It is strongly recommended to consider all similar material types as containing asbestos unless confirmed otherwise through sampling and laboratory analysis. It is therefore recommended to prevent re-use of any of gaskets and packing material and that they are all removed utilising appropriate localised control measures and in accordance with local legislative requirements

These materials require removal utilising appropriate localised control measures and in accordance with local legislative requirements.

All asbestos removal works should be undertaken in a controlled manner to ensure where remedial works take place contamination of the area cannot occur and risk of exposure of personnel to airborne asbestos fibres is minimised. The removal should also include cleaning of the immediate areas where materials have been stored.

In addition to the above, all gaskets and packing material when removed should be appropriately controlled and disposed of regardless of asbestos content. Adherence to this will limit confusion of the asbestos content of loose used gaskets and reduce the potential for used ACM gaskets to be stockpiled or left in locations where easily disturbed.

### 4.2.4 Replacement Gaskets

A rigorous procurement control process is required to ensure no ACMs are introduced into systems or store on the vessel. These control measures should include obtaining detailed material data sheets from the manufacturer, implementing an independent third-party testing regime to analyse representative samples of new material prior to storing or introduction into vessel systems combined with Shell's current management systems and training.

## 4.3 PROCUREMENT PROCEDURE

It is known that Asbestos Containing Materials are still in production and has widespread usage throughout the Asia-Pacific region with distribution to suppliers worldwide and as such the possibility exists that Asbestos Containing Material maybe inadvertently introduced to piping systems during works.

Care should be taken whenever maintenance and replacement works are conducted to ensure that only asbestos free products are procured / installed and are not inadvertently introduced to the vessel via installation of replacement materials or those materials pre-installed to replacement equipment.

It is recommended that prior to any procurement or reinstatement works replacement materials be sampled and tested prior to use.

All asbestos removal works should be undertaken in a controlled manner to ensure where remedial works take place contamination of areas such as bilges and equipment cannot occur and risk of exposure of personnel to airborne asbestos fibres is minimised. The removal should also include cleaning of the immediate areas where materials have been stored.

## 4.4 TRAINING

Information, instruction and training must be provided to workers, contractors and others who may come into contact with hazardous materials (including asbestos) in a workplace, either directly or indirectly.

Depending on the circumstances this hazardous materials awareness training may include:

- The purpose of the training;
- The health risks of hazardous materials;
- The types, uses and likely occurrence of hazardous materials on site, in plant and/or equipment in the workplace;
- The trainee's roles and responsibilities for hazmat management;
- Where the register of hazmat is located and how it can be accessed;
- The timetable for removal of hazmat from the workplace;
- The processes and procedures to be followed to prevent exposure, including exposure from any accidental release of hazmat into the workplace;
- Where applicable, the correct use of maintenance and control measures, protective equipment and work methods to minimise the risks from hazmat, limit the exposure of workers and limit the spread of hazmat outside any work area;
- The National Exposure Standard (NES) and control levels for hazmat; and
- The purpose of any air monitoring or health surveillance that may occur.

Should any further suspect asbestos and/or hazmat become evident during future disturbance/ refurbishment works which have not been addressed in this report, Tetra Tech Coffey should be contacted immediately so that a WHS consultant can confirm the status of the suspect material/s.

**Tetra Tech Coffey is able to assist with all aspects of Risk Management for removal of asbestos and other hazardous materials resulting from these findings.**

## 5. ASBESTOS MATERIALS REGISTER

Identified and tested items are listed in an Asbestos Materials Register in **Appendix A**. The Register is to be read in conjunction with the whole report.

The Asbestos Materials Register is made up of relevant information gathered on site plus Tetra Tech Coffey's assessment of risk and assignment of action ratings. Reference to photographs, where available, is made in the register along with sample identification and analysis results, where applicable. Sample analysis results from previous assessments may be utilised and referenced in the registers.

The register is provided in tabular form and flows from left to right starting with the material description, through additional information, leading to an assessment of risk and recommended action for remedial works. Recommended actions are a guide only.

The client should decide the most appropriate controls based on such factors as risk, detailed knowledge of workplaces and procedures, plans for upgrade or refurbishment etc.

Please refer to the following sections in conjunction with the register.

<b>Section 3</b>	Methodology	Contains important information regarding the survey and report methods
<b>Section 4</b>	Risk Assessments	Explains all terminology and ratings used.
<b>Section 5</b>	Recommendations	Contains information and recommendations applicable to asbestos materials and their management.
<b>Section 8</b>	Photograph	Cross - referenced from register, where available
<b>Appendix A</b>	Asbestos Materials Register	Register containing a list of all asbestos materials identified during the survey
<b>Appendix B</b>	Analytical Reports	Contains results of sample analysis from the survey. See previous reports for referred samples.
<b>Appendix C</b>	Asbestos Materials Maintenance Log	Table provided for client use, if required, to maintain a record of works associated with asbestos materials.
<b>Appendix D</b>	Legislative Requirements	Tabulates legislative requirements state-by-state. (accurate to last periodic update by Tetra Tech Coffey)
<b>Appendix E</b>	Limitations	Limitations regarding scope, methodology

## 6. REFERENCES

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- Department of Industrial Resources (DoIR) *Guidance for Upstream Petroleum on the National Ban on Asbestos* of 31 December 2003.
- National Occupational Health and Safety Commission (NOHSC), *Approved Criteria for Classifying Hazardous Substances*, 1008 - 2002
- Model Code of Practice - *How to Manage and Control Asbestos in the Workplace* (2020)
- Model Code of Practice - *How to Safely Remove Asbestos* (2020)
- National Occupational Health and Safety Commission Code of Practice for the *Management and Control of Asbestos in the Workplace*; [NOHSC: 2018 (2005)].
- National Occupational Health and Safety Commission (NOHSC), *List of Designated Hazardous Substances*, 10005 - 1999
- Occupational Health and Safety (Maritime Industry) Act 1993
- The National Model regulations for the *Control of Workplace Hazardous Substances*; [NOHSC: 1005 (1994)]
- Seafarers Safety, Rehabilitation and Compensation Authority's "Guidance on the Prohibition on the use of Asbestos in Australian Maritime Industry Workplaces (Version 3 March 2004).
- Work Health and Safety Act 2011 and Regulations (Commonwealth, NSW 2017, ACT 2011, NT 2011, QLD 2011, TAS 2012 & SA 2012)
- Occupational Health and Safety Act 2004 and Regulations 2017 (VIC)
- Occupational Health and Safety Act 2020 and Regulations 2022 (WA)
- The National Occupational Health & Safety Commission -NOHSC 1003-2005: *Australian Exposure Standards for Atmospheric Contaminants in the Workplace*.
- Amendment to the Customs (Prohibited Imports) Regulations 1956 - Regulation 4C – Importation of Asbestos – Australian Customs Notice No. 2009/30. – August 200.



## 7. PHOTOGRAPHS



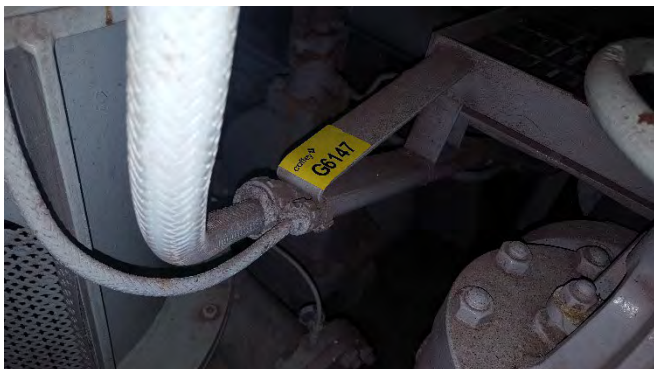
**Photo 1**

G6139  
Tank Top - Engine Room, To Forward VDJ Line Link to No.1 System Valve between 1 & 2 – Gasket (Blue) (UMF)



**Photo 2**

G6143  
Tank Top - Engine Room, Port Condenser Upper Float Transmitter to Flange – Gasket (Chrysotile)



**Photo 3**

G6147  
Tank Top Engine Room, No.2 PP Power Cable Conduit – Putty (Chrysotile)



**Photo 4**

G6150  
Tank Top Engine Room, No.1 & No.2 Main Condensate, Conduit – Putty (Chrysotile)



**Photo 5**

G6151  
Tank Top Engine Room, Auxiliary Circuit, PP Inlet Flange, Lower Walkway – Gasket (UMF)



**Photo 6**

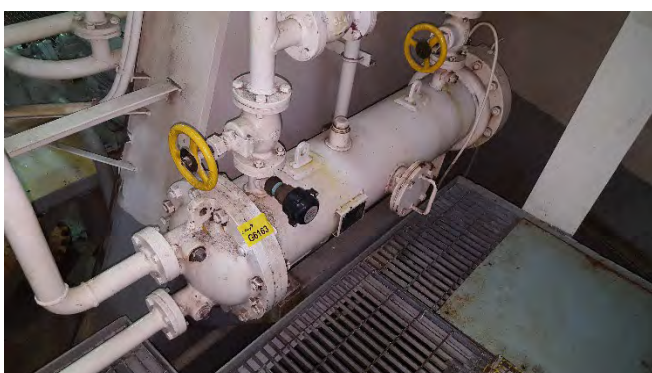
G6152  
Tank Top - Engine Room, Condensate Outlet V/V Flange - Gasket



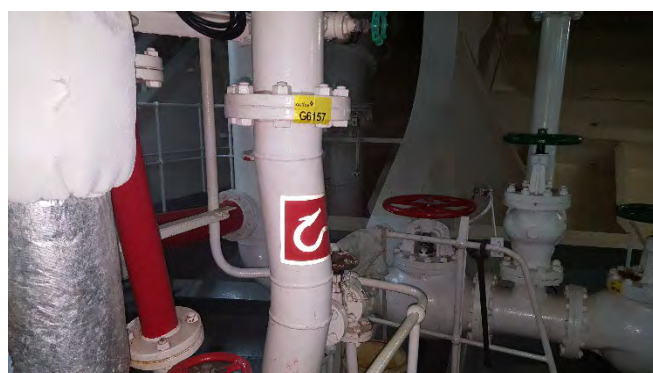
**Photo 7**  
G6164  
Lower Deck - Engine Room, Aft Midship, Sight Glass, Stern Tube to Lube Oil Overflow- Gasket (UMF)



**Photo 8**  
G6160  
Lower Deck Engine Room, FWD Upper Face, Tail shaft Bearing Cover, Upper Face – Gasket (UMF)



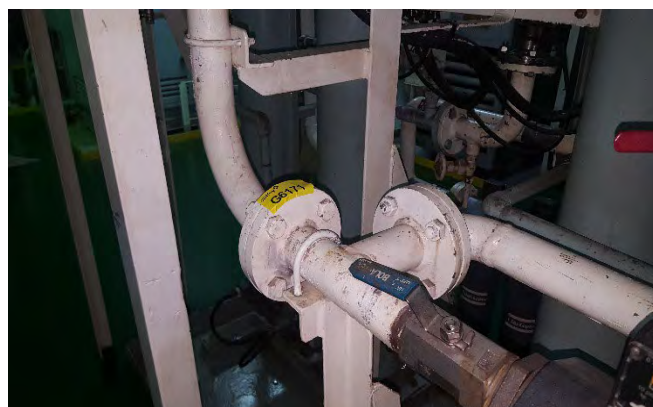
**Photo 9**  
G6163  
Tank Top Engine Room, Starboard, Aft, Stern Tube Lube Oil Cooler, End Cover – Gasket (Chrysotile)



**Photo 10**  
G6157  
Lower Deck - Engine Room, Port, Condensate Line Under Salinity Probe, Flange – Gasket (Chrysotile)



**Photo 11**  
G6170  
4<sup>th</sup> Deck Engine Room, FWD Port, General Service Air Receiver Inlet Valve, Flange – Gasket (UMF)



**Photo 12**  
G6171  
4<sup>th</sup> Deck - Engine Room, FWD Port, Atlas Air Filter, Flange – Gasket (UMF)





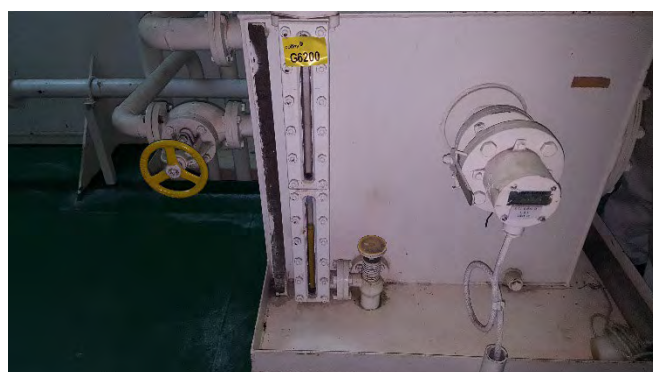
**Photo 13**  
G6173  
4<sup>th</sup> Deck - Engine Room, FWD Port, Control Air Receiver, Pressure Transmitter Conduit – Putty (Chrysotile)



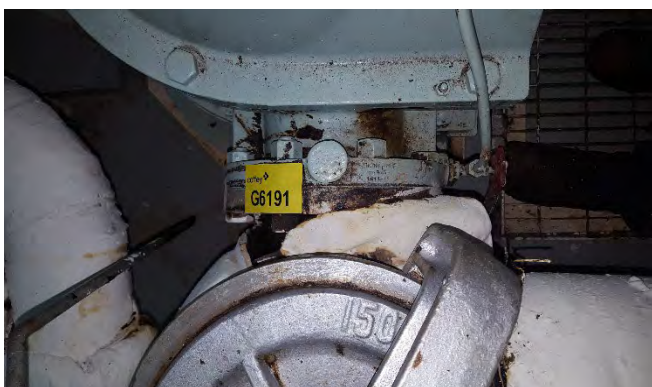
**Photo 14**  
G6196  
4<sup>th</sup> Deck Engine Room, Starboard, FWD, Drain Inspection Tank, Inspection Glass Port – Gasket (UMF)



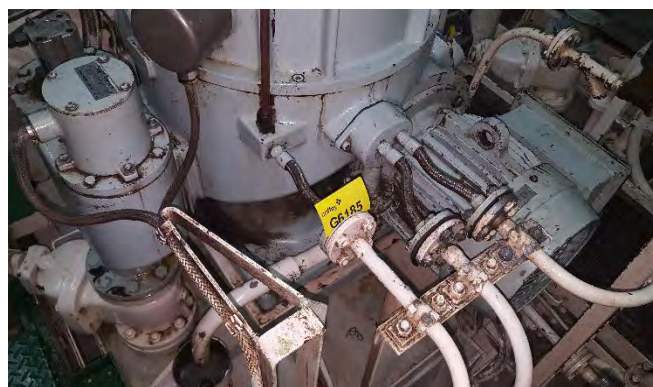
**Photo 15**  
G6199  
4<sup>th</sup> Deck Engine Room, Fourth Deck, Aft, – Gasket (UMF)



**Photo 16**  
G6200  
4<sup>th</sup> Deck - Engine Room, Aft, Filling/Drain Line Aft Peak Tank Flange– Gasket (UMF)



**Photo 17**  
G6191  
4<sup>th</sup> Deck Purifier Room, Heavy Fuel Oil, Transfer Pump, Inlet Flange – Gasket (UMF)



**Photo 18**  
G6185  
4<sup>th</sup> Deck - Purifier Room, Lube Oil Purifier No.2, Seal Water Valve – Gasket (UMF)





**Photo 19**  
G6186  
4<sup>th</sup> Deck - Purifier Room, Lube Oil Purifier No.2, Sludge Dump Valve – Gasket (UMF)



**Photo 20**  
G6187  
4<sup>th</sup> Deck Purifier Room, Under Lube Oil No.1 Purifier Control Cabinet, Conduit – Putty (Chrysotile)



**Photo 21**  
G6175  
4<sup>th</sup> Deck Engine Room. Vacuum Pump No.2, Seal Water Inlet – Gasket (UMF)



**Photo 22**  
T5714  
3<sup>rd</sup> Deck - Workshop Mezzanine, Starboard, Aft, Large Wall Penetration for Conduit – Bulkhead penetration insulation (Off-White in colour) (Chrysotile)



**Photo 23**  
T5715  
3<sup>rd</sup> Deck Workshop Mezzanine, Starboard, Fore, Stored Item – Gasket Loose (Orange Font, Blue Backing Valqua) (UMF)



**Photo 24**  
T5716  
3<sup>rd</sup> Deck - Workshop Mezzanine, Starboard, Fore, Stored Item – Gasket Loose t (Pink, Black Font, Tombo 1100) (Chrysotile)





**Photo 25**  
T5722  
3rd Deck -Workshop Mezzanine, Starboard, Fore, Metal Box with Stored Items (Throughout) – Gasket Material (Pink/Grey) Adhered to Flange (Chrysotile)



**Photo 26**  
T5724  
3rd Deck Workshop Mezzanine, Starboard, Fore, Adjacent Handrail, Stored Items (In Blue Plastic Tub) – Gasket Material Adhered to Flange (UMF)



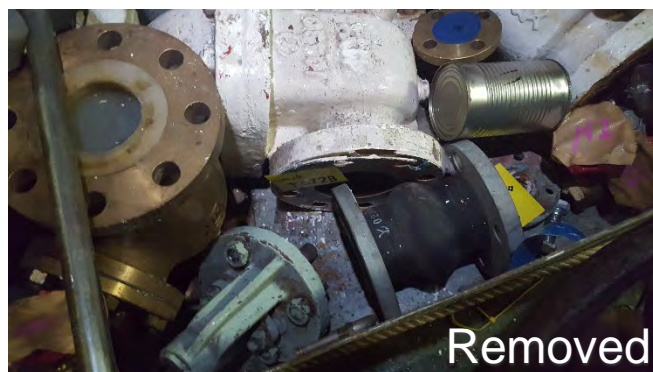
**Photo 27**  
T5725  
3rd Deck Workshop Mezzanine, Starboard, Fore, Adjacent Handrail, Stored Items (In Blue Plastic Tub) – Gasket (UMF)



**Photo 28**  
T5763  
3rd Deck - Workshop Mezzanine, (In Blue Plastic Tub) – Gasket Fragments, Debris and Dust (Chrysotile)



**Photo 29**  
T5727  
3rd Deck Workshop Mezzanine, Starboard, Fore, Adjacent Handrail, Stored Items, Throughout, to Small Flanges (Blue Metal Box) – Gasket Material (Blue, White Flecks, No Brand) Adhered to Valve (UMF)



**Photo 30**  
T5728  
3rd Deck - Workshop Mezzanine, Starboard, Fore, Adjacent Handrail, Stored Items (Light Blue Metal Box) – Gasket (Blue, White Flecks, No Brand) Gasket Adhered to Valve (UMF)





**Photo 31**  
T5764  
3rd Deck - Workshop Mezzanine, Starboard, Fore, Adjacent Handrail, Stored Items (Light Blue Metal Box – Debris (Chrysotile)



**Photo 32**  
G6143  
3rd Deck - Workshop Mezzanine, Port, Aft, Small Penetration for Electrical Conduit – Bulkhead penetration insulation (Off-White in colour) (Chrysotile)



**Photo 33**  
T5737  
3rd Deck Workshop Mezzanine, Starboard, Fore, Diesel Oil Inlet (3 Way Valve) – Gasket (White) (Chrysotile)



**Photo 34**  
Refer to T5737  
3rd Deck Workshop Mezzanine, Starboard, Diesel Oil Inlet Pipework to Fore– Gasket (White) (Chrysotile)



**Photo 35**  
T5744  
3rd Deck Workshop, Structural Column Between Grinder Electrical Box's – Gasket loose 'No Brand' (Black, White Flecks) (Chrysotile)



**Photo 36**  
T5749  
3rd Deck - Workshop, Bulkhead penetration insulation Draws, First Draw (Labelled Off-Cuts) - Gasket 'Pillar Clean Sheet No. 5611' (Orange Font, Beige Back) (Presumed Positive)





**Photo 37**  
Refer to T5749  
3rd Deck - Workshop, Bulkhead penetration insulation  
Draws, Fourth Draw (Labelled Supergraph) – Gasket 'Pillar  
Clean Sheet No. 5611' (Presumed Positive)



**Photo 38**  
T5754  
3rd Deck Workshop, Bulkhead penetration insulation Draws,  
Third Draw (Labelled 1.0 - 1.5mm) – Gasket Fragments,  
Debris and Dust (Chrysotile)



**Photo 39**  
T5751  
3rd Deck Workshop, Bulkhead penetration insulation Draws,  
First Draw (Labelled Off-Cuts)– Gasket (Chrysotile)



**Photo 40**  
T5766  
3rd Deck - Workshop Bulkhead penetration insulation Cabinet,  
Top Shelf Labelled (Steam Bulkhead penetration insulation  
Shelf)– Bulkhead penetration insulation 'Pillar' (Chrysotile)



**Photo 41**  
T5769  
3rd Deck Workshop Bulkhead penetration insulation  
Cabinet, Top Shelf Labelled (Steam Bulkhead penetration  
insulation Shelf) – Bulkhead penetration insulation 'No Brand'  
(Chrysotile)



**Photo 42**  
T5775  
3rd Deck - Workshop, Bulkhead penetration insulation  
Cabinet, Second Shelf Labelled (General Purpose  
Temperature) – Bulkhead penetration insulation 'No Brand'  
(Chrysotile)





**Photo 43**  
T5777  
3rd Deck - Workshop, Bulkhead penetration insulation Cabinet, Second Shelf Labelled (General Purpose Temperature) – Bulkhead penetration insulation 'No Brand' (Chrysotile)



**Photo 44**  
T5792  
3rd Deck Workshop, Welders Bench – Loose Gasket 'Valqua' (Orange Font, Blue Backing) (UMF)



**Photo 45**  
Refer to T5792  
3rd Deck Workshop, Welders Bench – Loose Gasket 'Valqua' (Orange Font, Blue Backing) (UMF)



**Photo 46**  
G6206  
3rd Deck - IGG Room, Burner Outlet Manifold – Gasket (UMF)



**Photo 47**  
G6212  
3rd Deck No.1 Diesel Alternator Room, Left of Inboard Door, Penetration – Bulkhead penetration insulation (Chrysotile)



**Photo 48**  
G6214  
3rd Deck - No.1 Diesel Alternator Room, Charge Air Cooler Bypass Valve – Gasket (UMF)

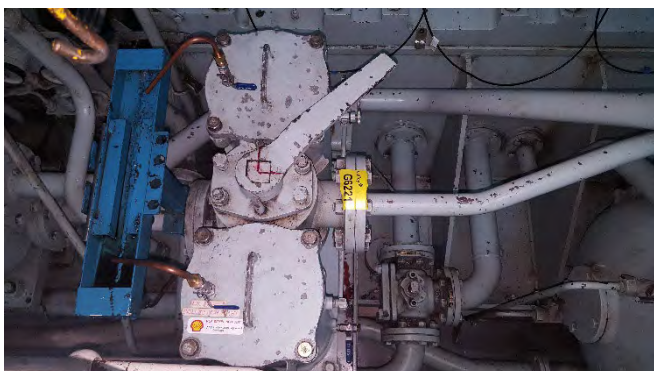




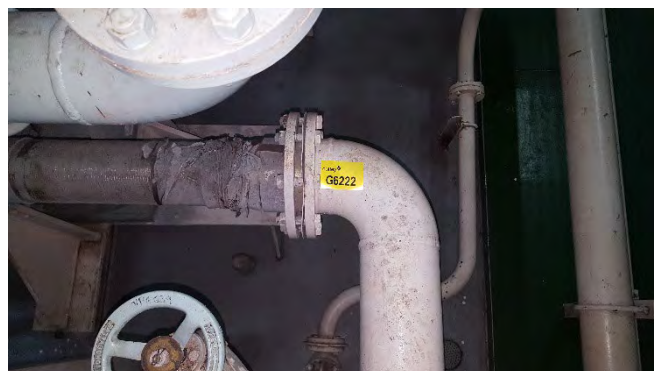
**Photo 49**  
G6215  
3rd Deck - No.1 Diesel Alternator Room , Lube Oil Cover, End Cover FWD – Gasket (UMF)



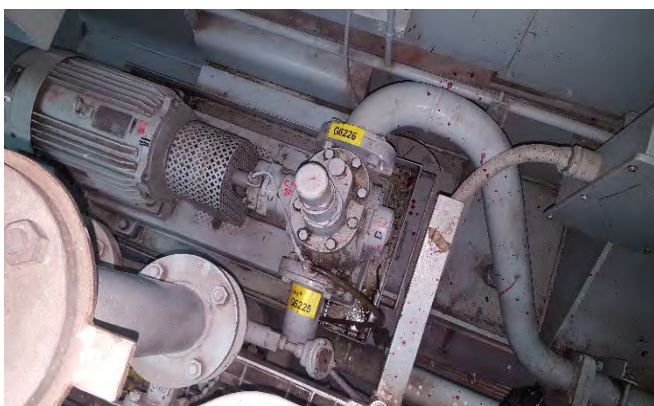
**Photo 50**  
G6217  
3rd Deck No.2 Diesel Alternator Room , Alternator Cabling Starboard Conduit – Putty (Chrysotile)



**Photo 51**  
G6221  
3rd Deck No.2 Diesel Alternator Room , Inlet to Lube Oil Duplex Filter – Gasket (Chrysotile)



**Photo 52**  
G6222  
3rd Deck - No.2 Diesel Alternator Room , Lube Oil Cooler, Cooling Water Inlet Flange– Gasket (UMF)



**Photo 53**  
G6225  
3rd Deck No.2 Diesel Alternator Room , Lube Oil Pump Discharge, Outlet Flange – Gasket (Chrysotile)



**Photo 54**  
G6226  
3rd Deck - No.2 Diesel Alternator Room , Lube Oil Pump Suction, Flange – Gasket (Chrysotile)





**Photo 55**  
G6228  
3rd Deck - Turbo Alternator, Cooling Water Outlet – Gasket Material (Chrysotile)



**Photo 56**  
G6235  
3rd Deck Lift Motor Room, Sealant to Conduit at Deck Level – Putty (Chrysotile)



**Photo 57**  
G6236  
3rd Deck Lift Motor Room, Brake System Friction Material – Lining (Chrysotile)



**Photo 58**  
G6251  
3rd Deck - Engine Room, Starboard No.2 Boiler, No.1 Retractable Soot Blower Power Box Conduit Sealant – Putty (Chrysotile)



**Photo 59**  
G6254  
3rd Deck Engine Room, Port Gas Hood, Gas/Inlet Flange – Gasket (UMF)



**Photo 60**  
G6258  
3rd Deck - Steering Gear, No.1 Hydraulic Motor Conduit Sealant - Putty (Chrysotile)



**Photo 61**  
G6260  
3rd Deck - Steering Gear, Fire Hydrant Line (FWD) Flange – Gasket (UMF)



**Photo 62**  
G6288  
3rd Deck - Engine Room, Turbine, Lube Oil Gravity Tank Over Flow Sight Glass Flange - Gasket (UMF)



**Photo 63**  
G6289  
3rd Deck Engine Room, Turbine, Lube Oil Gravity Tank Level Sight Glass Flange – Gasket (UMF)



**Photo 64**  
G6290  
3rd Deck Engine Room, Turbine, Lube Oil Gravity Tank Level Sight Glass Flange – Gasket (Chrysotile)



**Photo 65**  
Refer to G6289  
3rd Deck Engine Room, Turbo T78, Lube Oil Gravity Tank Level Sight Glass Flange - Gasket (Chrysotile)



**Photo 66**  
Refer to G6290  
3rd Deck - Engine Room, Clean Oil Tank, Lube Oil Gravity Tank Level Sight Glass Flange - Gasket (Chrysotile)





**Photo 67**  
G6291  
3rd Deck - Engine Room, Gardina 30 Oil Tank Sight Glass – Gasket (UMF)



**Photo 68**  
G6292  
3rd Deck Engine Room, Gardina 30 Oil Tank Top Bracket Flange, Sight Glass – Gasket (Chrysotile)



**Photo 69**  
T5751  
No. 1 Switch Board Room, Deck Conduit, Engine Service Transformer - Bulkhead penetration insulation (Chrysotile)



**Photo 70**  
T5809  
2nd Deck - Storage Area, Drawer CC1 (Labelled Spare Spiral Wound Gaskets) Throughout - Gasket Loose Spiral Wound Graphite/Cream Sealing Element, Valqua SHAS 304 (Chrysotile)



**Photo 71**  
T5815  
2nd Deck Storage Area, Drawer CC2 (Labelled Refrigerator Tools and Fittings) Gasket Loose 'YMcO' CR0591-C (Blue) (Chrysotile)



**Photo 72**  
T5819  
2nd Deck - Storage Area, Drawer CB5, (Labelled Cargo Tank Gauges) - Gasket Loose 'No Brand' Black with White Specks (Chrysotile)





**Photo 73**  
T5823  
2nd Deck - Storage Area, Drawer BF1 (Labelled Main Boiler Sootblowers 693.00.00.110) – Bulkhead penetration insulation (Green) with Gasket (Black Font, Blue Backing) (Chrysotile)



**Photo 74**  
T5839  
Storage Area, Drawer AL2, Stern Tube Seals - Gasket Loose t (Pink, Black Font, Tombo 1100) (Chrysotile)



**Photo 75**  
T5841  
2nd Deck Storage Area, Drawer, AF2 – Gasket Loose 'Pillar Clean Sheet No. 5611' (Presumed Positive Sample)



**Photo 76**  
T5842  
2nd Deck - Storage Area, Drawer, AE4 Emergency Generator - Gasket Loose 'Valqua' (Orange Font, Blue Backing) Japanese Symbols (UMF)



**Photo 77**  
T5843  
2nd Deck Storage Area, Drawer, AE5 Diesel Generator – Gasket Loose 'Valqua' (Beige Backing Black Print, 350.01.01.G50) (UMF)



**Photo 78**  
T5850  
2nd Deck - Storage Area, Drawer, Shelf 1 from Fore – Gasket, Adhered to Redundant Winch Wheel, (Blue) (UMF)





**Photo 79**  
 T5853  
 2nd Deck - Storage Area, Drawer, Shelf 1 from Fore 2, Adjacent Storage Column – Gasket (Pink) Adhered to Yellow Redundant Pump (Chrysotile)



**Photo 80**  
 T5856  
 2nd Deck Storage Area 2nd Shelf from Fore - Gasket Loose (Blue) 'No Branding'



**Photo 81**  
 T5859  
 2nd Deck Storage Area, Above BD5 Cabinet – Gasket Loose 'Valqua' Black Font, Beige Background 350.01.01.072 (UMF)



**Photo 82**  
 T5860  
 2nd Deck - Storage Area, Above BD5 Cabinet – Gasket Loose (No Brand) Green with Yellow Specks 350.01.01.073 (UMF)



**Photo 83**  
 T5861  
 2nd Deck Storage Area, Contained for Removal – Gasket Loose 'Valqua 1755' (Orange Font with Black Backing and White Specks) (Chrysotile)



**Photo 84**  
 T5862  
 2nd Deck - Storage Area, Structural Column Adjacent 2nd Shelf from Fore – Gasket to Bonnet of Redundant Valve (Painted Black) (Chrysotile)





**Photo 85**  
T5864  
2nd Deck - Storage Area, Structural Column Adjacent 2nd Shelf from Fore – Gasket to Bonnet of x 2 Valves (Rusting) (Chrysotile)



**Photo 86**  
G6282  
2nd Deck Storage Area, BF2 – Spiral Wound Gasket, Sealing Element (Cream)'Vortex 20x32x63 CT' (Chrysotile)



**Photo 87**  
G6283  
2nd Deck Storage Area, Contained for Removal – Spiral Wound Gasket, Sealing Element (White) 'C-20K-20' (Chrysotile)



**Photo 88**  
G6298  
2nd Deck - No. 2 Switch Board Room, Deckhead Conduit – Bulkhead penetration insulation (Chrysotile)



**Photo 89**  
G6254  
2nd Deck Steam Isolation Valve to Cargo Machinery Room – Lagging (Chrysotile)



**Photo 90**  
G6305  
2nd Deck - Lube Oil Storage Tank Level Sight Glass, Top Bracket – (UMF)





**Photo 91**  
G6306  
2nd Deck - Diesel Generator Lube Oil Tank Sight Level Glass, Horizontal Bracket – Gasket (UMF)



**Photo 92**  
G6309  
2nd Deck - Chemical Locker (Rear of), 2PA Valve (V0PJ234 Flange - Gasket (UMF)



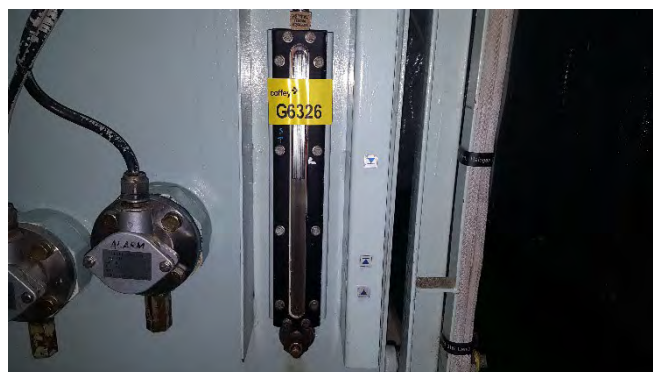
**Photo 93**  
G6311  
2nd Deck Chemical Locker, Boiler, Chemical Dosing Tank, Low Level Switch – Putty (Soft) (Presumed Positive)



**Photo 94**  
G6313  
2nd Deck Nitrogen Space, No. B9 Solenoid Valve Box Deck Conduit – Bulkhead penetration insulation (Chrysotile)



**Photo 95**  
G6269  
Upper Deck Forced Draft Fan Flat, Cooling Water Header Tank Filling Valve - Gasket (UMF)



**Photo 96**  
G6326  
Upper Deck - Hydraulic Pump Unit Room (Ballast) Hydraulic Tank Sight Glass - Gasket (Chrysotile)



**Photo 97**  
G6327  
Upper Deck - Hydraulic Pump Unit Room (Ballast) Hydraulic Tank, Conduit Through Deck – Bulkhead penetration insulation (Presumed Positive) (Chrysotile)



**Photo 98**  
G6333  
Upper Deck - External, Deck Workshop - Gasket Loose 'No Brand' (Blue) (UMF)



**Photo 99**  
G6334  
Upper Deck - External, Deck Workshop - Gasket Loose 'Pillar No. 5611' (Presumed Positive)(Chrysotile)



**Photo 100**  
G6339  
Upper Deck - Helicopter Rescue Equipment Store Penetration, – Bulkhead penetration insulation (Chrysotile)



**Photo 101**  
G6341  
Upper Deck Chippy Store, Port, Overhead Pipework – Gasket (UMF)



**Photo 102**  
G6342  
Upper Deck - Dry Chemical Unit Room, Aft, Outlet Flange From Storage - Gasket (Chrysotile)





**Photo 103**  
G6343  
Upper Deck - Dry Chemical Unit Room, Aft, Outlet Storage, Under Manifold – Gasket (Chrysotile)



**Photo 104**  
G6351  
Upper Deck - Dry Chemical Unit Locker, Under Manifold - Gasket (Chrysotile)



**Photo 105**  
G6353  
Upper Deck Cargo Motor Room, Telephone Booth – Gasket Loose 'Pillar Clean Sheet No. 5611' (Presumed Positive)(Chrysotile)



**Photo 106**  
G6363  
Upper Deck - External, Starboard Aft, Chemical Storage Tank Outlet - (Chrysotile)



**Photo 107**  
G6368  
Upper Deck External, Starboard, Manifold Fresh Water From Shore Connection Inboard Valve Flange – Gasket (UMF)



**Photo 108**  
G6369  
Upper Deck - Forecastle/Bosun Store, Port Bilge Suction Flange- Gasket (UMF)



**Photo 109**  
G6370  
Upper Deck - Storage Area, Drawer, Shelf 1 from Fore 2, Adjacent Storage Column – Gasket (Pink) Adhered to Yellow Redundant Pump (Chrysotile)



**Photo 110**  
G6371  
Upper Deck Forecastle/Bosun Store, No.2 Winch and Windlass Hydraulic Pump Power Cabinet Connection – Putty (Chrysotile)



**Photo 111**  
G6372  
Upper Deck Forecastle/Bosun Store, Fire Pump Exhaust Manifold – Gasket (Chrysotile)



**Photo 112**  
G6375  
Upper Deck Forecastle/Bosun Store, to Storage Oil Tank Save - Gaskets Loose (UMF)



**Photo 113**  
G6377  
Upper Deck Pipe Passage Starboard, IG Pipe Flange (Aft) - Gasket (Chrysotile)



**Photo 114**  
G6378  
Upper Deck - Pipe Passage Starboard, .HFO Bunker Pipe Flange (Aft) – Gasket (UMF)





**Photo 115**  
G6379  
Upper Deck - Pipe Passage Starboard, Pipe Above Bunker Line 'A' - Gasket (UMF)



**Photo 116**  
G6380  
Upper Deck Pipe Passage Starboard, Valve to Sampling Line) - Gasket (UMF)



**Photo 117**  
G6382  
Upper Deck Pipe Passage Starboard, JB M03 Cabinet, Conduit – Putty (Chrysotile)



**Photo 118**  
G6384  
Upper Deck - Pipe Passage Starboard, IGG Pipeline Isolation Valve Bonnet, Adjacent to 65 WBT Manhole – Gasket (Chrysotile)



**Photo 119**  
G6385  
Upper Deck Pipe Passage Starboard, Transducer Adjacent 45 WBT – Gasket (UMF)



**Photo 120**  
G6392  
Upper Deck - Pipe Passage Port, Spectacle Piece Inlet Gas Flange, Frame 65 – Gasket (Chrysotile)



**Photo 121**  
G6400  
Upper Deck - Emergency Generator Room, Sump Vent, Flexible Hose Flange – Gasket (UMF)



**Photo 122**  
G6276  
A Deck - Waste Storage Room, Bulkhead Above Entrance Door - Gasket (Chrysotile)



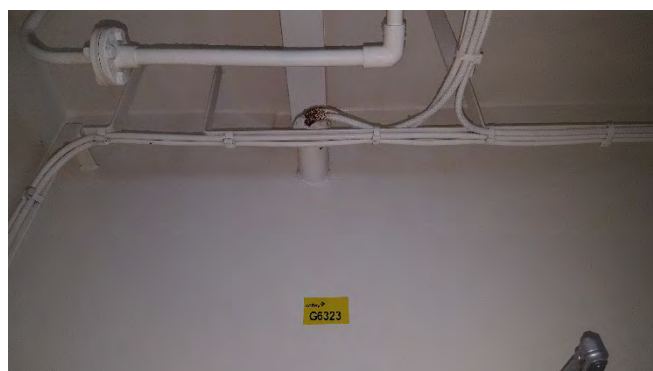
**Photo 123**  
G6277  
A Deck Incinerator Room, Bulkhead Above Entrance Door– Putty (Soft) (Presumed Positive) (Chrysotile)



**Photo 124**  
G6279  
A Deck Incinerator Room, Top of Sight Glass (Diesel Tank)– Gasket (Chrysotile)



**Photo 125**  
G6295  
A Deck Incinerator Room, Diesel Oil Tank, Overflow Sight Glass Top Flange - Gasket (UMF)



**Photo 126**  
G6323  
A Deck - Linen Chute Room - Bulkhead penetration insulation (Chrysotile)





**Photo 127**  
**G6325**  
A Deck - Electrical Cable Room, Conduit Through Bulkhead – Bulkhead penetration insulation (Chrysotile)



**Photo 128**  
**T5710**  
B Deck - Sauna, Conduit Penetrations (Throughout) – Bulkhead penetration insulation (Chrysotile)



**Photo 129**  
**G6322**  
B Deck - Electrical Cable Trunk Room, Cables through Bulkhead – Bulkhead penetration insulation (Chrysotile)



**Photo 130**  
**G6396**  
C Deck - External, Port Stairs, Deluge System, Flange Joint-Gasket (UMF)



**Photo 131**  
**G6320**  
E Deck Electrical Cable Trunk Room, Cables Through Bulkhead - Bulkhead penetration insulation (Chrysotile)



**Photo 132**  
**T5867**  
F Deck - No.2 Equipment Room, Aft Wall - Gasket Loose 'Valqua' (UMF)



**Photo 133**  
 T5870  
 F Deck - No.2 Equipment Room, Drawer DE8 – Gasket  
 Loose 'Valqua 930' Electro-Magnetic Mount 921.10.01.G02  
 (Chrysotile)



**Photo 134**  
 T5872  
 F Deck - No.2 Equipment Room, Drawer DB4 - Gasket  
 Loose, Boil Off Valve Bulkhead penetration insulation Gland  
 (Orange) (Chrysotile)



**Photo 135**  
 T5873  
 F Deck No.2 Equipment Room, Bulkhead penetration  
 insulation (Off-White, Soft) (Presumed Positive) (Chrysotile)



**Photo 136**  
 T5874  
 F Deck - No.2 Equipment Room, Bulkhead penetration  
 insulation (White/Hard) (Presumed Positive) (Chrysotile)



**Photo 137**  
 G6412  
 F Deck Flying Passage, Dome No.2, Air Supply Isolation  
 Valve, Adjacent Fire Hydrant No.46 – Gasket (UMF)



**Photo 138**  
 G6317  
 F Deck - Electrical Cable Trunk Room, Starboard, Cables  
 Through Bulk Head - Bulkhead penetration insulation  
 (Presumed Positive) (Chrysotile)





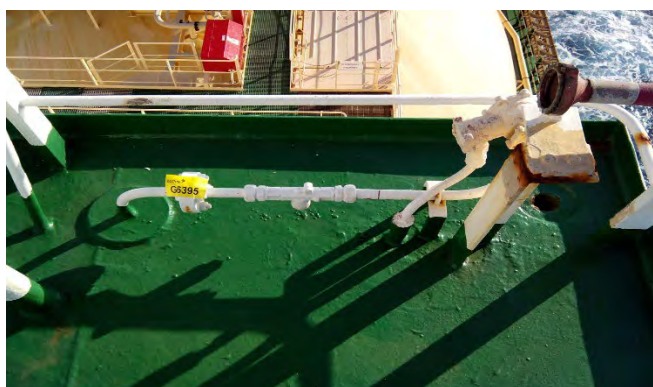
**Photo 139**  
G6318  
F Deck - Electrical Cable Trunk Room, Starboard, Cables Through Bulk Head - Bulkhead penetration insulation (Chrysotile)



**Photo 140**  
G6319  
F Deck Electrical Cable Space, Starboard, Cables Through Bulk Head - Bulkhead penetration insulation (Chrysotile)



**Photo 141**  
G6394  
Nav. Bridge Starboard Bridge Wing – Bulkhead penetration insulation (Presumed Positive) (Chrysotile)



**Photo 142**  
G6395  
Nav. Bridge External, Monkey Island, Air Horn, Starboard Side – Gasket (UMF)



**Photo 143**  
T5845  
2nd Deck Storage Area, Contained for Reassurance, Return to Area Above Cabinets 'BF' & 'BE'– Boiler Lagging 680.01.01.G14 (No Asbestos Detected)



**Photo 144**  
T5846  
2nd Deck Storage Area, Contained for Reassurance, Return to Area Above Cabinets 'BF' & 'BE'– Boiler Lagging 680.01.01.G14 (No Asbestos Detected)

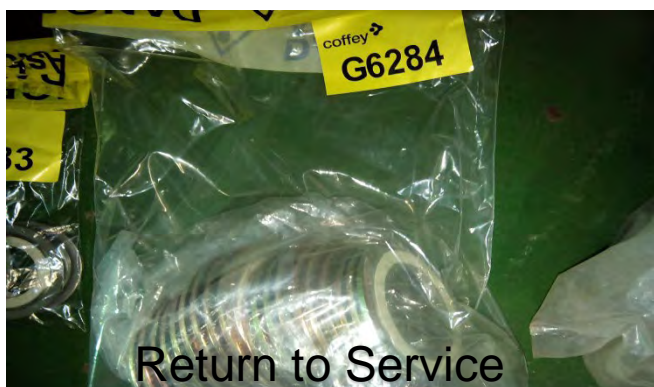




**Photo 145**  
T5847  
2nd Deck, Storage Area, Contained for Reassurance, Return to Area Above Cabinets 'BF' & 'BE'– Boiler Lagging 680.01.01.G14 (No Asbestos Detected)



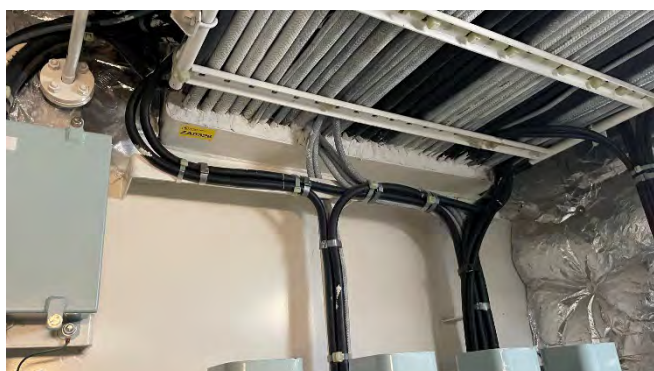
**Photo 146**  
G6424  
2nd Deck Storage Area, Contained for Reassurance Return to Drawer BG3, Gasket, Gasket (Ring) [680.01.01.030 (No Asbestos Detected)



**Photo 147**  
G6284  
2nd Deck, Storage Area, Contained for Reassurance Return to Area BF2 Labelled (Main Boiler Instruments) Spiral Wound Gasket, Sealing Element (White) 'Valqua VN D-20K-40 CT' (No Asbestos Detected)



**Photo 148**  
FD1109  
Lower Deck, Seawater Cooling System Pipework Valves - Gasket (UMF)



**Photo 201**  
ZA9326  
Bulkhead cable penetration putty material G deck electrical cable trunk room – Fwd (Chrysotile)



**Photo 202**  
ZA9325  
Bulkhead cable penetration putty material G deck electrical cable trunk room – Aft (Chrysotile)



**Photo 203**  
ZA9324  
Void spaces in deck head, C deck fwd cross alley way (Chrysotile)



**Photo 204**  
ZA9322  
Bulkhead cable penetration putty material, Upper deck electrical cable trunk room (Chrysotile)



**Photo 205**  
ZA9301  
E/R DG Room 1, Cooling system inlet (Chrysotile)



**Photo 206**  
ZA9300  
Stores - BF1, Soot blower packing - Port 639.10.01.018 (Chrysotile)

## APPENDIX A: ASBESTOS REGISTER

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<b>Surveyor:</b> Edward Rowley	<b>Survey Type:</b> Asbestos Survey Type 2	<b>Date of Survey:</b> 29 Nov - 01 Dec 2022 (last resurvey)
<b>Site Contact:</b> Chief Engineer	<b>Vessel:</b> Northwest Sandpiper IMO:8913150	<b>Review Date:</b> November 2023

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
<b>Tank Top</b>												
ACM	Gasket (Blue)	Engine Room, To Forward VDJ Malast Line Link to No.1 System Valve between 1 & 2	1	G6139	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Engine Room, , Atmos Drains (No.1) Tank Pump		G6140	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, , Atmos Drains (No.1) Tank Pump Valve		G6141	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Drain Tank Drain Valve		G6142	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Port Condenser Upper Float Transmitter to Flange	2	G6143	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Engine Room, Atmos Drains (No.1) Tank Pump Valve, End Cover		G6144	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, (No.2) PP V/V Cover		G6145	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Cond P/P Casing No.2		G6146	0	-	-	-	-	-	Nil	
ACM	Putty	Engine Room, No.2 PP Power Cable Conduit	3	G6147	P1	0	1	1	1	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Engine Room, FWD, Lube Oil Cooler End Cover (Port)		G6148	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, FWD, Lube Oil Cooler End Cover (Port)		G6149	0	-	-	-	-	-	Nil	
ACM	Putty	Engine Room, No.1 & No.2 Main Condensate, Conduit	4	G6150	P1	0	1	1	1	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Engine Room, Auxiliary Circuit, PP Inlet Flange, Lower Walkway	5	G6151	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket	Engine Room, Condensate Outlet V/V Flange	6	G6152	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Flange gaskets on new scoop inlet tube upstream of butterfly valve, Engine room tank top		ZA9312	0	-	-	-	-	-	Nil	Surveyed November 2022
<b>Lower Deck</b>												
ACM	Blue Gasket	Main CCS SW Pump Disc Valve	-	ZA0718	0	-	-	-	-	-	Nil	Surveyed November 2021
ACM	Blue Gasket	Emergency Bilge Suction Valve	-	ZA0719	0	-	-	-	-	-	Nil	Surveyed November 2021
ACM	Black Gasket	Igg Seawater Supply Valve	-	ZA0720	0	-	-	-	-	-	Nil	Surveyed November 2021
ACM	Blue Gasket	B & GS Suction Valve VPJ - 124	-	ZA0721	0	-	-	-	-	-	Nil	Surveyed November 2021
ACM	Gasket	Engine Room, Aft Midship, Sight Glass, Stern Tube to Lube Oil Overflow	7	G6164	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Engine Room, M.E Lube Oil, Non-Return Valve (After Pump)		G6165	0	-	-	-	-	-	Nil	
ACM	Insulation Block (White)	Engine Room, Turbine Tops, Port, Midship, HP Manoeuvring Valve		G6167	0	-	-	-	-	-	Nil	
ACM	Heat Barrier	Engine Room - Main turbine	193	ZA4811	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Midship, Gland Steam Condenser-End Cover (Motor End)		G6168	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Port, Aft, Separated Bilge Oil Tank, Inspection Hatch		G6169	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Port, Aft, Ballast Strip Pump Eductor Casing		G6158	0	-	-	-	-	-	Nil	



Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket	Engine Room, FWD Upper Face, Tail shaft Bearing Cover, Upper Face	8	G6160	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Engine Room, Starboard, Sea chest, Compressed Air Inlet Flange		G6159	0	-	-	-	-	-	Nil	
ACM	Gasket	Deck Air Receiver Inlet Valve	194	ZA4812	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Engine Room, Starboard, Auxiliary Seawater Pump Valve , Outlet Bonnet		G6162	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Starboard, Aft, Stern Tube Lube Oil Cooler, End Cover	9	G6163	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Engine Room, Starboard, Fuel Oil Sludge High Level Transmitter Flange		G6161	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Port, Fire/Bilge/Pump Outlet Valve Bonnet,		G6153	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Port, Fire/Bilge/Pump Outlet Valve Bonnet, Forward Crossover Valve Bonnet		G6154	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Port, Fire Press/ Pump Overboard Connection, Pump Casing Free End		G6155	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Port, Bilge and Generals Service Pump Casing		G6156	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Port, Condensate Line Under Salinity Probe, Flange	10	G6157	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	To flange joints to Ballast Water system pipework valves		FD1108	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket	To flange joints to Seawater Cooling system pipework valves	148	FD1109	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary) Surveyed May 2018
ACM	Gasket	To flange joints to Intermediate Shaft system valves		FD1110	0	-	-	-	-	-	Nil	Surveyed May 2018

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket	To flange joints to LP Turbine system valves		FD1111	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Insulation material	To flange joints to LP Turbine system pipework		FD1112	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket	Ballast VP5046	195	ZA4813	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Carbon Clean	196	ZA4814	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	To flange joints to HP Turbine system valves		FD1113	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Insulation material	To flange joints to HP Turbine system pipework		FD1114	0	-	-	-	-	-	Nil	Surveyed May 2018
<b>4th Deck</b>												
ACM	Black Gasket	#2 HFO Heater		ZA0717	0	-	-	-	-	-	Nil	Surveyed November 2021
ACM	Brown Gasket	#2 Main CCS Cooler SW Valves		ZA0722	0	-	-	-	-	-	Nil	Surveyed November 2021
ACM	Gasket	Engine Room, FWD Port, General Service Air Receiver Inlet Valve, Flange	11	G6170	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Engine Room, FWD Port, Atlas Air Filter, Flange	12	G6171	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Engine Room, FWD Port, Air Dryer Circuit Valve		G6172	0	-	-	-	-	-	Nil	
ACM	Putty	Engine Room, FWD Port, Control Air Receiver, Pressure Transmitter Conduit	13	G6173	P1	0	1	1	1	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Purifier Room, Lube Oil Deaerator, Tank Lid		G6193	0	-	-	-	-	-	Nil	



Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket	Purifier Room, Pipe Flange Adjacent Valve V-PL124		G6194	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Purifier Room, No.2 Lube Oil Heater, Outlet. Flange		G6195	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Starboard, FWD, Drain Inspection Tank, Inspection Glass Port	14	G6196	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Engine Room, Starboard, FWD, Drains Cooler, Port End cover		G6197	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Aft, Stern Tube Lube Oil Header Tank, Lid		G6198	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Fourth Deck, Aft,	15	G6199	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Engine Room, Aft, Filling/Drain Line Aft Peak Tank Flange	16	G6200	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Purifier Room, Diesel Oil Sludge Float Switch		G6189	0	-	-	-	-	-	Nil	
ACM	Packing	Purifier Room, Fuel Outlet Valve, V-PL015		G6190	0	-	-	-	-	-	Nil	
ACM	Gasket	Purifier Room, Heavy Fuel Oil, Transfer Pump, Inlet Flange	17	G6191	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Packing	Purifier Room, Heavy Fuel Oil Transfer Pump, Suction Valve Packing		G6192	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Midship, FWD, Freshwater Generator, Hot Water Header Line Valve		G6184	0	-	-	-	-	-	Nil	
ACM	Gasket	Purifier Room, Lube Oil Purifier No.2, Seal Water Valve	18	G6185	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket	Purifier Room, Lube Oil Purifier No.2, Sludge Dump Valve	19	G6186	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Putty	Purifier Room, Under Lube Oil No.1 Purifier Control Cabinet, Conduit	20	G6187	1	0	1	1	1	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Purifier Room, Temperature Control Valve for Fuel Oil Heat		G6188	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Electric Feed Pump, Distillate Tank Inlet Valve, Flange		G6176	0	-	-	-	-	-	Nil	
ACM	Flange	Engine Room, Electric Feed Pump Deaerator, Inlet Valve		G6177	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Demineralisation Plant Sight Glass		G6181	0	-	-	-	-	-	Nil	
ACM	Packing	Engine Room, Degreaser Crossover Valve		G6182	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Degreaser ADT Level Controller, Flange (Top)		G6183	0	-	-	-	-	-	Nil	
ACM	Packing	Engine Room, Electric Feed Pump Deaerator, Inlet Valve		G6178	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room. Feed Pump No.1, Gland Leak Off Valve		G6179	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room. Feed Pump No.2, Vent Valve Lagging		G6180	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room. Vacuum Pump No.1, End Cover		G6174	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room. Vacuum Pump No.2, Seal Water Inlet	21	G6175	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Sight Glass Gasket	Primary Bilge Tank Fill Level Indicator	-	C4765	1	0	2	0	1	4	A4	Surveyed December 2012 Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket to drain inspect tank sight glass	Fourth Deck - Starboard	-	G2362	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to de-oiler strainer	Fourth Deck - Starboard	-	G2363	0	-	-	-	-	-	Nil	Surveyed December 2013



Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket to control air pipework	Fourth Deck - Starboard	-	G2364	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to main CCS cooler shut off valve (SK250)	Fourth Deck - Starboard	-	G2365	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to cooling unit pipework	Fourth Deck - Starboard	-	G2366	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to fresh water generator pipework	Fourth Deck - Starboard	-	G2367	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to fresh water generator pipework	Fourth Deck - Starboard	-	G2368	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to heat exchanger pipework	Fourth Deck - Purifier Room, Starboard	-	G2369	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to pipework to dirty oil purifier	Fourth Deck - Purifier Room, Starboard	-	G2370	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket	To flange joints to Air Compressor system valves		FD1103	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket	To flange joints to HFO Transfer system valves		FD1104	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Insulation material	To HFO Transfer system pipework		FD1105	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket	To flange joints to Super Heated Steam system valves		FD1106	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket	To Super Heated Steam system pipework		FD1107	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket	To flange joints to Main Feed Pump system pipework valves		FD1115	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Insulation Material	To Main Feed Pump system pipework		FD1116	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket	Flange gaskets on pipework for sea water inlet into #2 main CCS cooler, E/R 4th deck		ZA9318	0	-	-	-	-	-	Nil	Surveyed November 2022
ACM	Gasket	Flange gaskets for service air filters outboard of service air receiver, E/R 4th deck		ZA9317	0	-	-	-	-	-	Nil	Surveyed November 2022
ACM	Gasket	Ballast water treatment system pipework, Strainer, E/R bottom plates and 4th deck		ZA9315	0	-	-	-	-	-	Nil	Surveyed November 2022
ACM	Gasket	Ballast water treatment system pipework, Outlet pipe flange, E/R bottom plates and 4th deck		ZA9314	0	-	-	-	-	-	Nil	Surveyed November 2022
ACM	Gasket	Ballast water treatment system pipework, Strainer, E/R 4th deck Stbd		ZA9304	0	-	-	-	-	-	Nil	Surveyed November 2022
ACM	Gasket	Ballast water treatment system pipework, Ballast Pipework, E/R 4th deck Stbd		ZA9303	0	-	-	-	-	-	Nil	Surveyed November 2022

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Fibrous Insulation Material	Insulation blanket steam chest ahead stop astern maneuvering valve 4th deck and turbine tops		ZA9313	0	-	-	-	-	-	Nil	Surveyed November 2022
3rd Deck												
ACM	Lagging	Behind Boiler		ZA0715	0	-	-	-	-	-	Nil	Surveyed November 2021
ACM	Black Gasket	#1 DG - Door Cover		ZA0716	0	-	-	-	-	-	Nil	Surveyed November 2021
ACM	Gasket Loose (Garlock, Blue Felt on Green Backing)	Workshop Mezzanine, Starboard, Fore, Stored Item		T5714	0	-	-	-	-	-	Nil	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose (Cursive Font, Blue Backing)	Workshop Mezzanine, Starboard, Fore, Stored Item		T5712	0	-	-	-	-	-	Nil	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose (Blue Cursive Font, Blue Backing)	Workshop Mezzanine, Starboard, Fore, Stored Item		T5713	0	-	-	-	-	-	Nil	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose Large	3rd Deck - Engineering workshop Wall	191	ZA4809	0	-	-	-	-	-	Nil	Surveyed March 2022
ACM	Packing (Off-White in colour)	Workshop Mezzanine, Starboard, Aft, Large Wall Penetration for Conduit	22	T5714	1	1	1	1	0	4	A4	Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Packing (Off-White in colour)	Workshop Mezzanine, Loft Debris	180	Similar to T5714	1	2	2	3	2	10	A2	Encapsulation or clean up of the debris associated with the penetration is to be remediated by a suitably Licensed Asbestos Removal Contractor (LARC) Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket Loose	3rd Deck – Engineering workshop	181	Similar to T5766	4	4	4	4	0	4	A4	Item removed by 'Unrestricted Licensed Contractor Thuroona services March 2022
ACM	Packing Material	3rd Deck – Engineering workshop Cabinet	189	ZA4807	4	4	4	4	0	4	A4	Item removed by 'Unrestricted Licensed Contractor Thuroona services March 2022
ACM	Packing Material Large loose	3rd Deck – Engineering workshop Cabinet	190	ZA4808	4	4	4	4	0	4	A4	Item removed by 'Unrestricted Licensed Contractor Thuroona services March 2022
ACM	Gasket Loose (Orange Font, Blue Backing, Valqua)	Workshop Mezzanine, Starboard, Fore, Stored Item	23	T5715	P4	0	2	4	4	5	A3	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)  Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose (Pink, Black Font, Tombo 1100)	Workshop Mezzanine, Starboard, Fore, Stored Item	24	T5716	4	0	2	4	2	6	A3	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose (Cursive Font, Grey Backing)	Workshop Mezzanine, Starboard, Fore, Stored Item		T5717	0	-	-	-	-	-	Niii	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose (No Branding, Grey in Colour)	Workshop Mezzanine, Starboard, Fore, Stored Item		T5718	0	-	-	-	-	-	Niii	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Material 'Tombo NA' (Black Font, Brown Backing) Gasket Adhered to Valve	Workshop Mezzanine, Starboard, Fore, Metal Box with Stored Items		T5719	0	-	-	-	-	-	Niii	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Material (Pink/Grey Material) Gasket Adhered to Valve	Workshop Mezzanine, Starboard, Fore, Metal Box with Stored Items		T5720	0	-	-	-	-	-	Niii	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket (Graphite) Gasket Remnants to Valve	Workshop Mezzanine, Starboard, Fore, Metal Box with Stored Items		T5721	0	-	-	-	-	-	Niii	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd



Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket Material (Pink and Grey in Colour) Remnants Attached to Valve	Workshop Mezzanine, Starboard, Fore, Metal Box with Stored Items (Throughout)	25	T5722	4	0	2	4	2	6	A3	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Fragments, Debris and Dust	Workshop Mezzanine, Starboard, Fore, Metal Box with Stored Items (Throughout)		T5723	0	-	-	-	-	-	Nil	Box Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd
ACM	Gasket Material (Blue, No Brand) Gasket Adhered to Valve	Workshop Mezzanine, Starboard, Fore, Adjacent Handrail, Stored Items	26	T5724	P4	0	2	4	2	6	A3	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)  Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Material (Blue, White Flecks, No Brand) Adhered to Valve	Workshop Mezzanine, Starboard, Fore, Adjacent Handrail, Stored Items (In Blue Plastic Tub)	27	T5725	P4	0	2	4	2	6	A3	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)  Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose (Black Cursive Font, 'Non-Asbestos')	Workshop Mezzanine, Starboard, Fore, Adjacent Handrail, Stored Items, Throughout (In Blue Plastic Tub)		T5726	0	-	-	-	-	-	Nil	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Fragments, Debris and Dust	Workshop Mezzanine, Starboard, Fore, Adjacent Handrail, Stored Items (In Blue Plastic Tub)	28	T5763	4	2	2	3	2	40	A2	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Material (Blue, White Flecks, No Brand) Adhered to Valve	Workshop Mezzanine, Starboard, Fore, Adjacent Handrail, Stored Items, Throughout, to Small Flanges (Light Blue Metal Box)	29	T5727	P4	0	2	4	2	6	A3	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)  Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket (Blue, White Flecks, No Brand) Gasket Adhered to Valve	Workshop Mezzanine, Starboard, Fore, Adjacent Handrail, Stored Items (Light Blue Metal Box)	30	T5728	P4	0	2	4	2	6	A3	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)  Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose (Blue, White Flecks, 'Garlock, Garlock, Garlock')	Workshop Mezzanine, Starboard, Fore, Adjacent Handrail, Stored Items (Light Blue Metal Box)		T5729	0	-	-	-	-	-	Nil	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Debris	Workshop Mezzanine, Starboard, Fore, Adjacent Handrail, Stored Items (Light Blue Metal Box)	31	T5764	4	2	2	3	2	40	A2	Box Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd
ACM	Woven Material	Workshop Mezzanine, Starboard, Fore, Stored in Cardboard Box		T5730	0	-	-	-	-	-	Nil	
ACM	Woven Material	Workshop Mezzanine, Starboard, Fore, Stored in Cardboard Box		T5731	0	-	-	-	-	-	Nil	

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Woven Material (Black)	Workshop Mezzanine, Starboard, Fore, Stored in Cardboard Box		T5732	0	-	-	-	-	-	Nil	
ACM	Gasket (Blue)	Workshop Mezzanine, Starboard, Fore, Pipe Loading to Diesel Oil Tank		T5733	0	-	-	-	-	-	Nil	
ACM	Woven Material (Old Style)	Workshop Mezzanine, Starboard, Fore, Heavy Fuel Oil Sludge Line		T5734	0	-	-	-	-	-	Nil	
ACM	Woven Material (Modern Style)	Workshop Mezzanine, Starboard, Fore, Lube Oil Vent Pipe to Funnel		T5735	0	-	-	-	-	-	Nil	
ACM	Packing (Off-White in colour)	Workshop Mezzanine, Port, Aft, Small Penetration for Electrical Conduit	32	T5736	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel  Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket (White)	Workshop Mezzanine, Starboard, Fore, Diesel Oil Inlet (3 Way Valve)	33	T5737	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket (White)	Workshop Mezzanine, Starboard, Diesel Oil Inlet Pipework to Fore	34	Refer to T5737	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Woven Material (FN Anti-Splashing Tape)	Workshop , Starboard, Fore, Shelf, Stored Item		T5738	0	-	-	-	-	-	Nil	
ACM	Gasket Sheet 'James Walker Centurion BS7531 Grade X (Black Font Beige Backing)	Workshop , Starboard, Fore, Shelf, Stored Item		T5739	0	-	-	-	-	-	Nil	
ACM	Gasket Sheet 'James Walker Centurion BS7531 Grade X (Black Font Beige Backing)	Workshop , Packing Drawers (Throughout)		Refer to T5739	0	-	-	-	-	-	Nil	
ACM	Gasket Sheet 'James Walker Centurion BS7531 Grade X' (Black Font Beige Backing)	Workshop , Boilermakers Table		Refer to T5739	0	-	-	-	-	-	Nil	
ACM	Gasket Sheet 'Klingers C-4400 Made in Australia (Blue Font, Green Backing)	Workshop , Starboard, Fore, Shelf, Stored Item		T5740	0	-	-	-	-	-	Nil	
ACM	Gasket Sheet 'Klingers C-4400 Made in Australia (Blue Font, Green Backing)	Workshop , Packing Drawers (Throughout)		Refer to T5740	0	-	-	-	-	-	Nil	
ACM	Gasket Sheet 'Klingers C-4400 Made in Australia (Blue Font, Green Backing)	Workshop , Boilermakers Table (Throughout)		Refer to T5740	0	-	-	-	-	-	Nil	
ACM	Gasket Sheet 'Garlock 2950 Utility' (Blue Font, Green Background)	Workshop , Starboard, Fore, Shelf, Stored Item		T5741	0	-	-	-	-	-	Nil	
ACM	Gasket Sheet 'Garlock 2950 Utility' (Blue Font, Green Background)	Workshop , Packing Drawers (Throughout)		Refer to T5741	0	-	-	-	-	-	Nil	
ACM	Gasket Loose 'Garlock Blue Gard 3000' Blue Font, Green Backing	Workshop , Boilermakers Table (Throughout)		T5742	0	-	-	-	-	-	Nil	

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket Loose - James Walker 410160' (Black Font, Blue Backing)	Workshop, Starboard, Fore, Shelf, Stored Item		T6743	0	-	-	-	-	-	NH	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket loose - James Walker 410160' (Black Font, Blue Backing)	Workshop, Packing Drawers (Throughout)		Refer to T6743	0	-	-	-	-	-	NH	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket loose - 'No Brand' (Black, White Flecks)	Workshop, Structural Column Between Grinder Electrical Box's	35	T6744	4	0	2	4	2	6	A3	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket loose - 'No Brand' (Graphite)	Workshop, Structural Column Between Grinder Electrical Box's		T6745	0	-	-	-	-	-	NH	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket loose - (Black Cursive Font, Grey Backing)	Workshop, Structural Column Between Grinder Electrical Box's		T6746	0	-	-	-	-	-	NH	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose - 'Black Font, Valqua 6500' (Black Font, Blue and White Backing)	Workshop, Structural Column Between Grinder Electrical Box's		T6747	0	-	-	-	-	-	NH	
ACM	Gasket loose - 'Black Font, Valqua 6502' (Black Font, Black Backing)	Workshop, Packing Draws, First Draw (Labelled Off Cuts)		T6748	0	-	-	-	-	-	NH	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket loose - 'Pillar Clean Sheet No. 5611' (Orange Font, Beige Background)	Workshop, Packing Draws, First Draw (Labelled Off Cuts)	36	T6749	P4	0	2	4	2	6	A3	Owing to 'Pillar Clean Sheet No. 5611' Returning Positive Results for Chrysotile All Items are Presumed Asbestos Containing Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket loose - 'ST4630' (Black Font, Blue Backing)	Workshop, Packing Draws, First Draw (Labelled Off Cuts)		T6750	0	-	-	-	-	-	NH	Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd
ACM	Gasket Fragments, Debris and Dust	Workshop, Packing Draws, First Draw (Labelled Off Cuts)	39	T6751	4	2	2	3	2	40	A2	Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd
ACM	Gasket Loose - 'Sigraflex Economy'	Workshop, Packing Draws, First Draw (Labelled Off Cuts)		T6752	0	-	-	-	-	-	NH	Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd
ACM	Gasket Fragments, Debris and Dust	Workshop, Packing Draws, Second Draw (Labelled 0.6 - 0.8mm)		T6753	0	-	-	-	-	-	NH	Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd
ACM	Gasket Fragments, Debris and Dust	Workshop, Packing Draws, Third Draw (Labelled 1.0 - 1.5mm)	38	T6754	4	2	2	3	2	40	A2	Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd
ACM	Gasket - 'Pillar Clean Sheet No. 5611' (Orange Font, Beige Background)	Workshop, Packing Draws, Fourth Draw (Labelled Supergraph)	37	Refer to T6749	P4	0	2	4	2	6	A3	Owing to 'Pillar Clean Sheet No. 5611' Returning Positive Results for Chrysotile All Items are Presumed Asbestos Containing Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Fragments, Debris and Dust	Workshop, Packing Draws, Fourth Draw (Labelled Supergraph)		T6754	0	-	-	-	-	-	NH	Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd
ACM	Gasket - James Walker Australia Pty Ltd)	Workshop, Packing Draws, Fourth Draw (Labelled Supergraph)		T6755	0	-	-	-	-	-	NH	Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd
ACM	Gasket Fragments, Debris and Dust	Workshop, Packing Draws, Fourth Draw (Labelled Supergraph)		T6756	0	-	-	-	-	-	NH	Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd
ACM	Gasket Fragments, Debris and Dust	Workshop, Packing Draws, Fifth Draw (Labelled Corking, Teflon, Chart Paper)		T6757	0	-	-	-	-	-	NH	Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd



Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket Fragments	Workshop, Packing Draws, Fifth Draw (Labelled Corking, Teflon, Chart Paper)		T5758	0	-	-	-	-	-	Nil	Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd
ACM	Gasket Fragments	Workshop, Packing Draws, Sixth Draw (Open)		Refer to T5758	0	-	-	-	-	-	Nil	Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd
ACM	Gasket Sheet 'Flexitalica AF2100' (Black Cursive Font, Blue Backing)	Workshop, Packing Draws, Sixth Draw (Open)		T5759	0	-	-	-	-	-	Nil	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Sheet 'Garlock 2950 Non-Asbestos Gasketing' (Blue Font, Green/Blue Backing)	Workshop, Packing Draws, Sixth Draw (Open)		T5760	0	-	-	-	-	-	Nil	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Fragments, Debris and Dust	Workshop, Packing Draws, Sixth Draw (Open)		T5761	0	-	-	-	-	-	Nil	Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd
ACM	Gasket Fragments	Workshop, Packing Draws, Top (Throughout)		T5762	0	-	-	-	-	-	Nil	Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd
ACM	Gasket Fragments	Workshop, Packing Draws, Wood Cutting Block (Throughout)		T5765	0	-	-	-	-	-	Nil	Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd
ACM	Packing 'Pillar'	Workshop Packing Cabinet, Top Shelf Labelled (Steam Packing Shelf)	40	T5766	4	0	4	4	4	4	A4	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Packing Fragment	Workshop Packing Cabinet, Top Shelf Labelled (Steam Packing Shelf)		T5767	0	-	-	-	-	-	Nil	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Packing 'Weir Valves and Controls'	Workshop Packing Cabinet, Top Shelf Labelled (Steam Packing Shelf)		T5768	0	-	-	-	-	-	Nil	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Packing 'No Brand'	Workshop Packing Cabinet, Top Shelf Labelled (Steam Packing Shelf)	44	T5769	4	0	4	4	4	4	A4	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Teadit Gaskets	Workshop, Throughout All Areas		T5770	0	-	-	-	-	-	Nil	
ACM	Packing 'Garlock' Unknown Size	Workshop, Packing Cabinet, Top Shelf Labelled (Steam Packing)		T5771	0	-	-	-	-	-	Nil	
ACM	Packing 'Garlock' 6.5 mm	Workshop, Packing Cabinet, Top Shelf Labelled (Steam Packing)		T5772	0	-	-	-	-	-	Nil	
ACM	Packing 'James Walker' 3mm	Workshop, Packing Cabinet, Top Shelf Labelled (Steam Packing)		T5773	0	-	-	-	-	-	Nil	
ACM	Packing (No Brand)	Workshop, Packing Cabinet, Second Shelf Labelled (General Purpose Temperature)		T5774	0	-	-	-	-	-	Nil	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Packing (No Brand)	Workshop, Packing Cabinet, Second Shelf Labelled (General Purpose Temperature)	42	T5775	4	0	4	4	4	4	A4	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Packing (No Brand)	Workshop, Packing Cabinet, Second Shelf Labelled (General Purpose Temperature)		T5776	0	-	-	-	-	-	Nil	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Packing (No Brand)	Workshop, Packing Cabinet, Second Shelf Labelled (General Purpose Temperature)	43	T5777	4	0	4	4	4	4	A4	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Packing 'Flexitalica' 9.5mm	Workshop, Packing Cabinet, Second Shelf Labelled (General Purpose Temperature)		T5778	0	-	-	-	-	-	Nil	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Packing 'Garlock' 3/16"	Workshop, Packing Cabinet, Second Shelf Labelled (General Purpose Temperature)		T5779	0	-	-	-	-	-	Nil	
ACM	Packing 'Garlock' 4.8mm	Workshop, Packing Cabinet, Second Shelf Labelled (General Purpose Temperature)		T5780	0	-	-	-	-	-	Nil	
ACM	Packing 'Walkers, Packings, Seals and Gaskets' 5.0mm	Workshop, Packing Cabinet, Second Shelf Labelled (General Purpose Temperature)		T5781	0	-	-	-	-	-	Nil	
ACM	Packing 'Flourograf' 6.5m	Workshop, Packing Cabinet, Second Shelf Labelled (General Purpose Temperature)		T5782	0	-	-	-	-	-	Nil	
ACM	Packing 'Hornet' 12.5 x 1-1.5"	Workshop, Packing Cabinet, Second Shelf Labelled (General Purpose Temperature)		T5783	0	-	-	-	-	-	Nil	
ACM	Packing Teadit 5.0mm	Workshop, Packing Cabinet, Second Shelf Labelled (General Purpose Temperature)		T5784	0	-	-	-	-	-	Nil	
ACM	Packing Teadit 6.5mm	Workshop, Packing Cabinet, Second Shelf Labelled (General Purpose Temperature)		T5785	0	-	-	-	-	-	Nil	
ACM	Packing Teadit 8.0mm	Workshop, Packing Cabinet, Second Shelf Labelled (General Purpose Temperature)		T5786	0	-	-	-	-	-	Nil	
ACM	Packing 'Klinger K55' 9.5mm	Workshop, Packing Cabinet, Second Shelf Labelled (General Purpose Temperature)		T5787	0	-	-	-	-	-	Nil	
ACM	Debris	Workshop, Packing Cabinet, Second Shelf Labelled (General Purpose Temperature) Toolbox for Packing Pullers (Plastic)		T5788	0	-	-	-	-	-	Nil	
ACM	Debris	Workshop, Packing Cabinet, Second Shelf Labelled (General Purpose Temperature) Toolbox for Packing Pullers (Cardboard)		T5789	0	-	-	-	-	-	Nil	
ACM	Packing 'A.D.S Mechanical Packing' 12.5mm	Workshop, Packing Cabinet, Second Shelf Labelled (General Purpose Temperature)		T5790	0	-	-	-	-	-	Nil	
ACM	Packing 'Palmetto' 3/8"	Workshop, Packing Cabinet, Second Shelf Labelled (General Purpose Temperature)		T5791	0	-	-	-	-	-	Nil	
ACM	Loose Gasket 'Valqua' (Orange Font, Blue Backing)	Workshop, Welders Bench	44	T5792	P4	0	2	4	2	6	A3	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)  Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Loose Gasket 'Valqua' (Orange Font, Blue Backing)- Remnant Gasket	Workshop, Welders Bench	45	Refer to T5792	P4	0	2	4	2	6	A3	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)  Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Fire Blanket	Workshop, Welders Bay, Adjacent Aft Bulkhead		T5793	0	-	-	-	-	-	Nil	

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket Loose (Grey)	Workshop, Welders Bench		T6794	0	-	-	-	-	-	Nil	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket	Engine Room, Midship, Aft, Stern Tube Header Tank, Sight Glass		G6200	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Midship . Aft. Stern Shipper Header Tank, Top of Sight Glass		G6201	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Port, Freshwater Pump, Outlet Valve		G6202	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Port, Water Mist Suppression, System Valve, Flange		G6203	0	-	-	-	-	-	Nil	
ACM	Gasket Material Adhered to Stored Valves	Engine Room, Port, Stored Item in Frame/Stiffness		G6204	0	-	-	-	-	-	Nil	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket	IGG Room, Burner Outlet Manifold		G6205	0	-	-	-	-	-	Nil	
ACM	Gasket	IGG Room, Burner Outlet Manifold	46	G6206	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Insulation Material	IGG Room, Bracket Dryer Vessel No.1, Insulation		G62607	0	-	-	-	-	-	Nil	
ACM	Insulation Material	IGG Room, Bracket Dryer Vessel No.2, Insulation		G6208	0	-	-	-	-	-	Nil	
ACM	Gasket	IGG Room, Steam Line to Steam Heater, Flange		G6209	0	-	-	-	-	-	Nil	
ACM	Gasket	IGG Room, Control Valve 8667 Above Heater Vessel 1 & 1, Flange		G6210	0	-	-	-	-	-	Nil	
ACM	Gasket	No.1 Diesel Alternator Room , Starting Air Control Valve (Top)		G6211	0	-	-	-	-	-	Nil	
ACM	Packing	No.1 Diesel Alternator Room , Left of Inboard Door, Penetration	47	G6212	1	1	1	1	0	4	A4	Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel. Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	No.1 Diesel Alternator Room , Exhaust Manifold (Aft End)		G6213	0	-	-	-	-	-	Nil	
ACM	Gasket	No.1 Diesel Alternator Room , Charge Air Cooler Bypass Valve	48	G6214	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)



Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket	No.1 Diesel Alternator Room , Lube Oil Cover, End Cover FWD	49	G6215	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	No.1 Diesel Alternator Room , Turbocharge Lower Manifold Gas Inlet		G6216	0	-	-	-	-	-	Nil	
ACM	Putty (Grey)	No.2 Diesel Alternator Room , Alternator Cabling Starboard Conduit	50	G6217	1	0	1	1	1	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	No.2 Diesel Alternator Room , Water Cooling End Cover to Alternator (Bracket Starboard)		G6218	0	-	-	-	-	-	Nil	
ACM	Debris (Presumed Packing form Penetrations Above)	No.2 Diesel Alternator Room , Water Cooling End Cover (Tray Below)		G6219	0	-	-	-	-	-	Nil	
ACM	Gasket	No.2 Diesel Alternator Room , lube Oil Drain Line/Alternator FWD Bearing		G6220	0	-	-	-	-	-	Nil	
ACM	Gasket	No.2 Diesel Alternator Room , Inlet to Lube Oil Duplex Filter	51	G6221	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	No.2 Diesel Alternator Room , Lube Oil Cooler, Cooling Water Inlet Flange	52	G6222	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	No.1 Diesel Alternator Room , Electric Lube Oil Pump, Outlet Flange		G6223	0	-	-	-	-	-	Nil	Previously Positive
ACM	Gasket	No.1 Diesel Alternator Room , Electric Lube Oil Pump, Inlet Flange		G6224	0	-	-	-	-	-	Nil	
ACM	Gasket	No.2 Diesel Alternator Room , Lube Oil Pump Discharge, Outlet Flange	53	G6225	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	No.2 Diesel Alternator Room , Lube Oil Pump Suction, Flange	54	G6226	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Turbo Alternator, Lube Oil Cooler, End Cover (Aft)		G6227	0	-	-	-	-	-	Nil	
ACM	Gasket	Turbo Alternator, Cooling Water Outlet	55	G6228	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Turbo Alternator, Lube Oil Cooler/Lube Oil Outlet Flange		G6229	0	-	-	-	-	-	Nil	

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket	Turbo Alternator, Mechanical Lube Oil, Pump Outlet		G6230	0	-	-	-	-	-	Nil	
ACM	Gasket	Turbo Alternator, Electric Lube Oil Pump Outlet		G6231	0	-	-	-	-	-	Nil	
ACM	Gasket	Turbo Alternator, Steam Pressure Gauge Valve		G6232	0	-	-	-	-	-	Nil	
ACM	Gasket	Turbo Alternator,, Hand Pump Discharge Flange		G6233	0	-	-	-	-	-	Nil	
ACM	Gasket	Turbo Alternator, Gland System Steam Pipe Flange		G6234	0	-	-	-	-	-	Nil	
ACM	Putty	Lift Motor Room, Sealant to Conduit at Deck Level	56	G6235	1	0	1	1	1	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Lining	Lift Motor Room, Brake System Friction Material	57	G6236	1	0	1	1	1	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	3rd Deck - Engine Room TA Lube Oil Inlet	192	ZA4810	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket (Woven)	Engine Room, Port Boiler Outboard, Aft Manhole		G6237	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Port Boiler, Inboard, FWD, Inspection Glass Backing Panel, Inboard		G6238	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Starboard Boiler, Inboard, FWD, Inspection Glass Backing Panel,		G6239	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Port Boiler, Inboard, FWD, Inspection Glass		G6240	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Starboard Boiler FWD, Inboard, Inspection Glass		G6241	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Port Boiler, FWD, Inboard Glass Backing Panel		G6242	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Port Boiler, FWD, Inboard, Inspection Glass		G6243	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Starboard Boiler, FWD, Inboard Glass Backing Panel		G6244	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Starboard Boiler, FWD, Inboard, Inspection Glass		G6245	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Starboard Boiler, Valve V-PD 054, Valve to Trace Drain		G6246	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Starboard Boiler, Valve V-PD 054, Valve to Trace Drain		G6247	0	-	-	-	-	-	Nil	

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket	Engine Room, Port Boiler, Air Line to No.1 Retractable Soot Blower		G6248	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Port Boiler, Aft, Outboard, Air Heater Bellows		G6249	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Starboard Boiler, Aft, Inboard, Air Heater, Air box		G6250	0	-	-	-	-	-	Nil	
ACM	Putty	Engine Room, Starboard No.2 Boiler, No.1 Retractable Soot Blower Power Box Conduit Sealant	58	G6251	1	0	1	1	1	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Engine Room, Starboard Boiler, FWD, Securing Plate,		G6252	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Port Boiler, FWD, Securing Plate,		G6253	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Port Gas Hood, Gas/Inlet Flange	59	G6254	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Engine Room, Starboard Gas Inlet Isolation Valve Flange		G6255	0	-	-	-	-	-	Nil	
ACM	Gasket	Steering Gear, hydraulic Oil Transfer Pump Inlet Flange		G6256	0	-	-	-	-	-	Nil	
ACM	Gasket	Steering Gear, Air Fan, Inlet Box Flange		G6257	0	-	-	-	-	-	Nil	
ACM	Putty	Steering Gear, No.1 Hydraulic Motor Conduit Sealant	60	G6258	1	0	1	1	1	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Steering Gear, No.2 Hydraulic Pump -Transfer Discharge		G6259	0	-	-	-	-	-	Nil	
ACM	Gasket	Steering Gear, Fire Hydrant Line (FWD) Flange	61	G6260	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Steering Gear, Foam Water Pump Casing		G6261	0	-	-	-	-	-	Nil	
ACM	Gasket	Steering Gear, System No.2 , Starboard, Tank Sight Glass Cover		G6262	0	-	-	-	-	-	Nil	
ACM	Gasket	Steering Gear, System No.2 , Starboard, Sight Class Top Bracket		G6263	0	-	-	-	-	-	Nil	
ACM	Gasket	Steering Gear, System No.1, Inspection Hatch		G6264	0	-	-	-	-	-	Nil	



Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket	Steering Gear, System No.1 , Port Tank Sight Glass Cover		G6265	0	-	-	-	-	-	Nil	
ACM	Gasket	Steering Gear, System No.1 , Port Flange Sight Glass Top Bracket		G6266	0	-	-	-	-	-	Nil	
ACM	Fibre Cement Sheet	Workshop, Deck head, Ceiling Panels		G6286	0	-	-	-	-	-	Nil	
ACM	Fibre Cement Sheet	Instrument Workshop, Deck head, Ceiling Panels		Refer to G6286	0	-	-	-	-	-	Nil	
ACM	Fibre Cement Sheet	Laboratory, Deck head, Ceiling Panels		Refer to G6286	0	-	-	-	-	-	Nil	
ACM	Fibre Cement Sheet	Workshop, Bulkhead, Wall Cladding		G6287	0	-	-	-	-	-	Nil	
ACM	Fibre Cement Sheet	Instrument Workshop, Bulkhead, Wall Cladding		Refer to G6287	0	-	-	-	-	-	Nil	
ACM	Fibre Cement Sheet	Laboratory, Bulkhead, Wall Cladding		Refer to G6287	0	-	-	-	-	-	Nil	
ACM	Packing debris	Engine Room Diesel Generator Room 1, Shadow Boarding.	182	Presumed	1	2	2	3	2	10	A2	Debris associated with the penetration is to be remediated by a suitably Licensed Asbestos Removal Contractor (LARC), remediation should be planned as soon as reasonably practicable, in the meantime, the area should have access restricted.  Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel.
ACM	Gasket	Engine Room, Turbine, Lube Oil Gravity Tank Over Flow Sight Glass Flange	62	G6288	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Engine Room, Turbine, Lube Oil Gravity Tank Level Sight Glass Flange	63	G6289	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Engine Room, Turbine, Lube Oil Gravity Tank Level Sight Glass Flange	64	G6290	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Engine Room, Turbo T78, Lube Oil Gravity Tank Over Flow Sight Glass Flange		Refer to G6288	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Engine Room, Turbo T78, Lube Oil Gravity Tank Level Sight Glass Flange	65	Refer to G6289	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket	Engine Room, Turbo T78, Lube Oil Gravity Tank Level Sight Glass Flange	66	Refer to G6290	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Engine Room, Clean Oil Tank, Lube Oil Gravity Tank Over Flow Sight Glass Flange		Refer to G6288	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Engine Room, Clean Oil Tank, Lube Oil Gravity Tank Level Sight Glass Flange		Refer to G6289	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Engine Room, Clean Oil Tank, Lube Oil Gravity Tank Level Sight Glass Flange		Refer to G6290	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Engine Room, Gardina 30 Oil Tank Sight Glass	67	G6291	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Engine Room, Gardina 30 Oil Tank Top Bracket Flange, Sight Glass	68	G6292	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Engine Room, Gardina 30 Oil Drain Valve (Bottom of Sight Glass)		G6293	0	-	-	-	-	-	Nil	
ACM	Packing	No. 1 Switch Board Room, Deck Penetration, Engine Service Transformer	69	G6299	1	1	1	1	0	4	A4	Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket to filter outlet pipework	Steering Gear Room - Lower Level	-	G2407	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to sight glass to storage tank	Steering Gear Room - Lower Level	-	G2408	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to sight glass to oil tank	Steering Gear Room - Lower Level	-	G2409	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to storage tank suction pipework	Steering Gear Room - Lower Level	-	G2410	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to no. 1 hydraulic pump pipework	Steering Gear Room - Lower Level	-	G2411	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to fire fighting hydrant shut off valve	Steering Gear Room - Lower Level	-	G2412	0	-	-	-	-	-	Nil	Surveyed December 2013

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket to fire fighting line	Steering Gear Room - Lower Level	-	G2413	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to general service air line	Steering Gear Room - Lower Level	-	G2414	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Packing debris	Third Deck - Purifier Room	183	Presumed	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel  Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket to lube oil purifier pipework	Third Deck - Purifier Room Starboard	-	G2372	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to valve on light oil tank pipework (TK124)	Third Deck - Purifier Room Port Side	-	G2373	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to pump pipework	Third Deck - Purifier Room Port Side	-	G2374	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to bonnet on pump pipework shut off valve	Third Deck - Purifier Room Port Side	-	G2375	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to shut off valve to aux FO W pump	Third Deck - Purifier Room Port Side	-	G2376	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to bonnet to aux FO W pump	Third Deck - Purifier Room Port Side	-	G2377	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to spare water cooler pipework	Third Deck - Purifier Room Port Side	-	G2378	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to fire fighting line pipework	Third Deck - Purifier Room Port Side	-	G2379	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to distilled water outlet pipework	Third Deck - Purifier Room Port Side	-	G2380	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to ion exchanger pipework	Third Deck - Purifier Room Port Side	-	G2381	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to ion exchanger pipework	Third Deck - Purifier Room Port Side	-	G2382	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to bilge overflow pipework	Third Deck - Purifier Room Port Side	-	G2383	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to emergency astern system	Third Deck - Purifier Room Port Side	-	G2384	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Insulation to emergency astern system	Third Deck - Lower Level Port Side	-	G2385	0	-	-	-	-	-	Nil	Surveyed December 2013



Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Insulation to turbo pipework	Third Deck - Lower Level Port Side	-	G2386	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to marine steam turbine access panel	Third Deck - Lower Level Port Side	-	G2387	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Insulation to gland ST spill to flash chamber pipework	Third Deck - Lower Level Port Side	-	G2388	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to shut off valve on fire main pipework	Third Deck - Lower Level Port Side	-	G2389	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to sea chest strainer	Third Deck - Lower Level Starboard	-	G2390	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to sea chest pipework	Third Deck - Lower Level Starboard	-	G2391	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to bilge overboard pipework	Third Deck - Lower Level Starboard	-	G2392	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to bilge overboard line shut off valve	Third Deck - Lower Level Port Side	-	G2393	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to bilge pump pipework	Third Deck - Lower Level Port Side	-	G2394	1	1	2	0	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket to sea chest strainer	Third Deck - Lower Level Port Side	-	G2395	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to sea chest pipework	Third Deck - Lower Level Port Side	-	G2396	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to fuel oil sludge tank access panel	Third Deck - Lower Level Port Side	-	G2397	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to fuel oil sludge pipework	Third Deck - Lower Level Port Side	-	G2398	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to control air pipework	Third Deck - Lower Level Port Side	-	G2399	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to sea water outlet line from main engine	Third Deck - Lower Level Port Side	-	G2400	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to bonnet on lube oil delivery bypass (SK200)	Third Deck - Lower Level Starboard	-	G2401	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to sea water line to main condenser	Third Deck - Lower Level Starboard	-	G2402	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to lube oil purifier pump	Third Deck - Lower Level Starboard	-	G2403	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to shut off valve to stern tube lube oil pump pipework	Third Deck - Lower Level Starboard	-	G2404	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to Alfa Laval separator pipework	Third Deck - Lower Level Starboard	-	G2405	0	-	-	-	-	-	Nil	Surveyed December 2013

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket to Alfa Laval separator pipework	Third Deck - Lower Level Starboard	-	G2406	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to water spray system local application pipework	Third Deck - Port Side	-	G2331	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to water spray system local application pipework	Third Deck - Port Side	-	G2332	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to pump pipework	Third Deck - Port Side	-	G2333	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to pump pipework	Third Deck - Port Side	-	G2334	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to fresh water pressure tank access panel	Third Deck - Port Side	-	G2335	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to fire fighting fresh water tank access panel	Third Deck - Port Side	-	G2336	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to steriliser pipework	Third Deck - Port Side	-	G2337	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to steriliser pipework	Third Deck - Port Side	-	G2338	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to spare valve on shelf adjacent fire fighting fresh water tank	Third Deck - Port Side	-	G2339	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to spare valve on shelf adjacent fire fighting fresh water tank	Third Deck - Port Side	-	G2340	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to hand pump on main generator turbo	Third Deck - Port Side	-	G2341	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to pipework on main generator turbo	Third Deck - Port Side	-	G2342	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to pipework on main generator turbo	Third Deck - Port Side	-	G2343	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket on lube oil cooler	Third Deck - Port Side	-	G2344	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket to general service air line	Third Deck - No. 1 Diesel Generator Room, Port Side	-	G2345	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to spare valve	Third Deck - No. 1 Diesel Generator Room, Port Side	-	G2346	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to pipework to water line to diesel generator	Third Deck - No. 1 Diesel Generator Room, Port Side	-	G2347	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to cooling bypass line pipework	Third Deck - No. 1 Diesel Generator Room, Port Side	-	G2348	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to flow meter pipework	Third Deck - No. 2 Diesel Generator Room, Starboard	-	G2349	0	-	-	-	-	-	Nil	Surveyed December 2013

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket to pump pipework	Third Deck - No. 2 Diesel Generator Room, Starboard	-	G2350	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket to fresh water filter pipework	Third Deck - No. 2 Diesel Generator Room, Starboard	-	G2351	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to spare valve	Third Deck - Engineering Workshop, Starboard	-	G2352	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Panelling to bulkhead and deckhead	Third Deck - Engineering Workshop, Starboard	-	G2353	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to steam line shut off valve	Third Deck - Engineering Workshop, Starboard	-	G2354	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Spare gland packing in spares store workshop area	Third Deck - Engineering Workshop, Starboard	-	G2355	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	<del>Spare gland packing in spares store workshop area</del>	<del>Third Deck - Engineering Workshop, Starboard</del>	-	<del>G2356</del>	4	2	2	2	0	7	A2	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Lt
ACM	Spare gland packing in spares store workshop area	Third Deck - Engineering Workshop, Starboard	-	G2357	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gland packing from cargo valve in spares store workshop area	Third Deck - Engineering Workshop, Starboard	-	G2358	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Panelling to bulkhead and deckhead	Third Deck - Engineering Workshop, Starboard	-	G2359	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to lube oil daily tank sight glass	Third Deck - Engineering Workshop, Starboard	-	G2360	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to lube oil daily tank	Third Deck - Engineering Workshop, Starboard	-	G2361	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket	To flange joints to Inert Gas Heater system pipework valves		FD1090	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Insulation Material	To Inert Gas Heater system pipework		FD1091	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket material	Spare Blue Garlock 2950 gaskets stored in workshop		FD1092	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket material	Spare Blue Garlock 3000 gaskets stored in workshop		FD1093	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket material	Spare Blue ST1630 gaskets stored in workshop		FD1094	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket material	Spare Green Klingersil 4400 gaskets stored in workshop		FD1095	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket material	Spare Green Teadit gaskets stored in workshop		FD1096	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket material	Spare Blue Teadit gaskets stored in workshop		FD1097	0	-	-	-	-	-	Nil	Surveyed May 2018



Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket material	SpareBlack Chieftan BS7531 gaskets stored in workshop		FD1098	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket	To flange joints to Main Superheated Steam system pipework valves		FD1099	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Insulation Material	To MainSuperheated Steam system pipework		FD1100	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket	To flange joints to Generator Turbine system pipework valves		FD1101	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Insulation Material	To Generator Turbine system pipework		FD1102	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Fibrous Insulation Material	6 MPa steam pipe aft of boilers, 3rd deck		ZA9309	0	-	-	-	-	-	Nil	Surveyed November 2022
ACM	Fibrous Insulation Material	#1 DG exhaust manifold, fwd near turbo charger Insulation blanket for bellows 3rd deck, #1 DG room		ZA9319	0	-	-	-	-	-	Nil	Surveyed November 2022
ACM	Gasket	Workshop Spare Gaskets - Tombo 1995		ZA9308	0	-	-	-	-	-	Nil	Surveyed November 2022
ACM	Gasket	Workshop Spare Gaskets - Teadit 1005		ZA9307	0	-	-	-	-	-	Nil	Surveyed November 2022
ACM	Gasket	Workshop Spare Gaskets - Teadit 1006		ZA9306	0	-	-	-	-	-	Nil	Surveyed November 2022
ACM	Gasket	Workshop Spare Gaskets - James Walker Sentinel		ZA9305	0	-	-	-	-	-	Nil	Surveyed November 2022
ACM	Gasket	E/R DG Room 1, Debris from Bulkhead cable penetration		ZA9302	0	-	-	-	-	-	Nil	Surveyed November 2022
ACM	Gasket	E/R DG Room 1, Cooling system inlet	205	ZA9301	1	1	1	1	1	5	A4	Program for Planned Removal, Manage & Re-inspect Periodically

**2nd Deck**

ACM	Green Gasket	#2 Main Aircon Compressor	-	ZA0710	0	-	-	-	-	-	Nil	Surveyed November 2021
ACM	Gasket-Loose 'Valqua' (Beige Backing Black Print 360.04-	Storage Area, Drawer, AE5 Diesel Generator	77	T5843	4	0	2	4	4	6	A3	Item removed by 'Unrestricted Licensed Contractor Thuroona services March 2022

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket Klinger FRIO 3xA	Storage Area, Shelves LD Compressor	197	ZA4845	P4	0	2	4	4	5	A3	Item removed by 'Unrestricted Licensed Contractor Thuroona services March 2022
ACM	Gasket 520.11.01.004	Storage Area, Shelves Gland Steam Exhaust Fan	198	Presumed	P4	0	2	4	4	5	A3	Item removed by 'Unrestricted Licensed Contractor Thuroona services March 2022
ACM	Gasket Green Valve 1500	Storage Area, Drawer, ZSAHP3	199	ZA4846	P4	0	2	4	4	5	A3	Item removed by 'Unrestricted Licensed Contractor Thuroona services March 2022
ACM	Gasket Loose Blue Valve	Storage Area, Drawer, ZSAHP3	200	ZA4847	P4	0	2	4	4	5	A3	Item removed by 'Unrestricted Licensed Contractor Thuroona services March 2022
ACM	Green Gasket	#2 Auxiliary Aircon Compressor	-	ZA0711	0	-	-	-	-	r	Nil	Surveyed November 2021
ACM	Black Gasket	Soot Blower Glad Following Packing #1 Boiler 7 Rotary	-	ZA0712	0	-	-	-	-	-	Nil	Surveyed November 2021
ACM	Gasket with Blue Backing	Vent Valve Flange	-	ZA0713	0	-	-	-	-	-	Nil	Surveyed November 2021
ACM	Cable Penetration Lagging	Bulkhead Penetration, Starboard Forward	-	ZA0723	0	-	-	-	-	-	Nil	Surveyed November 2021
ACM	Gasket Loose (Ring, Small, No Brand)	Storage Area, Drawer CC1 (Labelled Spare Spiral Wound Gaskets)		T5795	0	-	-	-	-	-	Nil	Storage Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose (Ring, Large, No Brand)	Storage Area, Drawer CC1 (Labelled Spare Spiral Wound Gaskets) Throughout		T5796	0	-	-	-	-	-	Nil	Storage Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose (Ring, Medium, No Brand)	Storage Area, Drawer CC1 (Labelled Spare Spiral Wound Gaskets) Throughout		T5797	0	-	-	-	-	-	Nil	Storage Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose Spiral Wound (Small, Cream Colouring, No Brand)	Storage Area, Drawer CC1 (Labelled Spare Spiral Wound Gaskets) Throughout		T5798	0	-	-	-	-	-	Nil	Storage Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket Loose Spiral Wound (Medium, Cream Sealing Element, Valqua) 20x32x63 CT	Storage Area, Drawer CC1 (Labelled Spare Spiral Wound Gaskets) Throughout		T5799	0	-	-	-	-	-	Nil	Storage Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose Spiral Wound (Medium, Brass Outer Ring, White Sealing Element, Valqua D-20K-40 CT)	Storage Area, Drawer CC1 (Labelled Spare Spiral Wound Gaskets) Throughout		T5800	0	-	-	-	-	-	Nil	Storage Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose Spiral Wound (Blue Sealing Element, Vortex 834-NA, 20K-100Ax3.2)	Storage Area, Drawer CC1 (Labelled Spare Spiral Wound Gaskets) Throughout		T5801	0	-	-	-	-	-	Nil	Storage Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose Spiral Wound Graphite Sealing Element (Labelled 5240 on Plastic Bag to Gasket)	Storage Area, Drawer CC1 (Labelled Spare Spiral Wound Gaskets) Throughout		T5802	0	-	-	-	-	-	Nil	Storage Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose Spiral Wound Graphite Sealing Element (Large) Pillar Brand 16/20K - 100A 304	Storage Area, Drawer CC1 (Labelled Spare Spiral Wound Gaskets) Throughout		T5803	0	-	-	-	-	-	Nil	Storage Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose Spiral Wound Graphite Sealing Element (Large) Pillar Brand JIP/ANSI 900/1500LB/ - 2" 305	Storage Area, Drawer CC1 (Labelled Spare Spiral Wound Gaskets) Throughout		T5804	0	-	-	-	-	-	Nil	Storage Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose Spiral Wound Cream Sealing Element (No Brand)	Storage Area, Drawer CC1 (Labelled Spare Spiral Wound Gaskets) Throughout		T5805	0	-	-	-	-	-	Nil	Storage Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose Spiral Wound Graphite Sealing Element, Pillar Brand (900 L5 - 15)	Storage Area, Drawer CC1 (Labelled Spare Spiral Wound Gaskets) Throughout		T5806	0	-	-	-	-	-	Nil	Storage Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose Spiral Wound Blue Sealing Element, Vortex 1834-NA 20K-80Ax3.2	Storage Area, Drawer CC1 (Labelled Spare Spiral Wound Gaskets) Throughout		T5807	0	-	-	-	-	-	Nil	Storage Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose Spiral Wound Graphite Sealing Element, Pillar Brand JIP/ANSI 1500LB	Storage Area, Drawer CC1 (Labelled Spare Spiral Wound Gaskets) Throughout		T5808	0	-	-	-	-	-	Nil	Storage Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose Spiral Wound Graphite/Cream Sealing Element, Valqua SHAS 304	Storage Area, Drawer CC1 (Labelled Spare Spiral Wound Gaskets) Throughout	70	T5809	4	3	3	4	2	40	A2	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose Spiral Wound Graphite Sealing Element, Pillar Brand (900-4" 30)	Storage Area, Drawer CC1 (Labelled Spare Spiral Wound Gaskets) Throughout		T5810	0	-	-	-	-	-	Nil	Storage Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose Spiral Wound Graphite Sealing Element, Pillar Brand (900/1500LB 1.0-1.5"-4")	Storage Area, Drawer CC1 (Labelled Spare Spiral Wound Gaskets) Throughout		T5811	0	-	-	-	-	-	Nil	Storage Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose Spiral Wound Graphite Sealing Element, Pillar Brand (10K-200A 304)	Storage Area, Drawer CC1 (Labelled Spare Spiral Wound Gaskets) Throughout		T5812	0	-	-	-	-	-	Nil	Storage Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose Spiral Wound Graphite Sealing Element, Pillar Brand (150LB-3/4" SUS304))	Storage Area, Drawer CC1 (Labelled Spare Spiral Wound Gaskets) Throughout		T5813	0	-	-	-	-	-	Nil	Storage Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose, 'Victor Reins' AFM 34 DIN 28091-2FA1-0 (Cream)	Storage Area, Drawer CD5 (Labelled Main and AUX AC Fan Units 088)		T5814	0	-	-	-	-	-	Nil	Storage Drawer Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose 'YMCc' CR0694-C (Blue)	Storage Area, Drawer CC2 (Labelled Refrigerator Tools and Fittings)	74	T5815	4	0	2	4	2	6	A3	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)  Item removed from service by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd
ACM	Gasket Loose 'Klinger Made in Australia C-4400 (Black Font, Dark Green Backing)	Storage Area, Drawer CC2 (Labelled Refrigerator Tools and Fittings)		T5816	0	-	-	-	-	-	Nil	



Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket Loose 'Sentinel' (Black Font, Beige Backing) Small	Storage Area, Drawer CB5, (Labelled Cargo Tank Gauges)		T5817	0	-	-	-	-	-	Nil	
ACM	Gasket Loose 'Sentinel' (Black Font, Beige Backing) Large	Storage Area, Drawer CB5, (Labelled Cargo Tank Gauges)		T5818	0	-	-	-	-	-	Nil	
ACM	Gasket Loose 'No Brand' Black with White Specks	Storage Area, Drawer CB5, (Labelled Cargo Tank Gauges)	72	T5819	4	0	2	4	2	6	A3	Item removed from service by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd
ACM	Gasket Loose, Inspection Cover 01.18.98.00-NCZ	Storage Area, Drawer CB5, (Labelled Cargo Tank Gauges)		T5820	0	-	-	-	-	-	Nil	
ACM	Brake Lining 215.10.01.005	Storage Area, Drawer CB5, (Labelled Cargo Tank Gauges) Hose Handling Crane		T5821	0	-	-	-	-	-	Nil	
ACM	Packing (Ring) 32-34xD25 (03.30.23.00.007) 771-31883	Storage Area, Drawer BF1 (Labelled Main Boiler Sootblowers)		T5822	0	-	-	-	-	-	Nil	
ACM	Packing (Green) with Gasket (Black Font, Blue Backing)	Storage Area, Drawer BF1 (Labelled Main Boiler Sootblowers)	73	T5823	4	0	2	4	4	5	A3	Item removed from service and disposed of into the Asbestos Waste Bin. An additional sample has been taken of the corresponding Port site component, which remains onboard.
ACM	Packing (Green) with Gasket (Green Font, Beige Backing) (No Brand)	Storage Area, Drawer BF1 (Labelled Main Boiler Sootblowers)		T5824	0	-	-	-	-	-	Nil	
ACM	Packing (Seat) D45-D30 672.10.01.045	Storage Area, Drawer BG5 (Labelled Main Blower Monitor Emergency D/G Start Comp)		T5825	0	-	-	-	-	-	Nil	
ACM	Packing (Gland) 18xD22 03.30.21.00.037	Storage Area, Drawer BG5 (Labelled Main Blower Monitor Emergency D/G Start Comp)		T5826	0	-	-	-	-	-	Nil	
ACM	Packing (Gland) 54x[ 03.30.21.00-35 Part No. 22 25A-B45	Storage Area, Drawer BG5 (Labelled Main Blower Monitor Emergency D/G Start Comp)		T5827	0	-	-	-	-	-	Nil	
ACM	Packing (Gland) 23xD26 03.30.21.00.022	Storage Area, Drawer BG5 (Labelled Main Blower Monitor Emergency D/G Start Comp)		T5828	0	-	-	-	-	-	Nil	
ACM	Packing (Gland) 'Valqua' 11xD14 03.30.21.00.023	Storage Area, Drawer BG5 (Labelled Main Blower Monitor Emergency D/G Start Comp)		T5829	0	-	-	-	-	-	Nil	
ACM	Loose Gaskets	Workshop Store, Drawer 2SA H Shelves Between Rows C & D	477	Presumed	4	0	2	4	4	5	A3	Item removed by 'Unrestricted Licensed Contractor Thuroona services March 2022
ACM	Loose Gaskets	Workshop Store - Temp Prob 2SA Shelves - 856.11.02, Gasket	478	ZA4800	4	0	2	4	4	5	A3	Item removed by 'Unrestricted Licensed Contractor Thuroona services March 2022
ACM	Sheeting	Workshop Store Between Rows C and D	477	ZA4804	4	0	2	4	4	5	A3	Item removed by 'Unrestricted Licensed Contractor Thuroona services March 2022
ACM	Gasket Loose (Ring) Main Boiler Water Level Gauge 42/33/45	Storage Area, Drawer BG4 (Labelled Main Boiler Mountings, Incinerator)		T5830	0	-	-	-	-	-	Nil	
ACM	Packing (Gland) 22xD22	Storage Area, Drawer BG4 (Labelled Main Boiler Mountings, Incinerator)		T5831	0	-	-	-	-	-	Nil	Removed (x1 Piece) removed from service by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd
ACM	Packing (Gland) Pillar 003.302.100.011	Storage Area, Drawer BG4 (Labelled Main Boiler Mountings, Incinerator)		T5832	0	-	-	-	-	-	Nil	

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Packing (Gland) Pillar 033022100 005	Storage Area, Drawer BG4 (Labelled Main Boiler Mountings, Incinerator)		T5833	0	-	-	-	-	-	Nil	
ACM	Packing (Gland) Pillar, 692.10.01 NC1	Storage Area, Drawer BG4 (Labelled Main Boiler Mountings, Incinerator)		T5834	0	-	-	-	-	-	Nil	
ACM	Packing (Gland) Pillar 692.10.01.041	Storage Area, Drawer BG4 (Labelled Main Boiler Mountings, Incinerator)		T5835	0	-	-	-	-	-	Nil	
ACM	Packing (Gland) Pillar 692.10.01.069	Storage Area, Drawer BG4 (Labelled Main Boiler Mountings, Incinerator)		T5836	0	-	-	-	-	-	Nil	Item removed from service by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd
ACM	Gasket (Ring) Metal	Storage Area, Drawer BL1		T5837	0	-	-	-	-	-	Nil	Item removed from service by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd
ACM	Gasket (Ring) Metal	Storage Area, Drawer BL1		T5838	0	-	-	-	-	-	Nil	Item removed from service by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd
ACM	Gasket Loose, 'Tombe 1000' (Black Font, Blue Backing)	Storage Area, Drawer AL2, Stern Tube Seals	74	T5839	4	0	2	4	4	5	A3	Item removed from service by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd
ACM	Gasket Loose (Orange Font, Beige Backing) Presumed 'Pillar Clean Sheet No. 5641'	Storage Area, Drawer, AF2 Aux Feed Pumps	75	T5841	P4	0	2	4	2	6	A3	Missing Sample (No Laboratory Results Sample Presumed Positive). Item removed from service by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd
ACM	Gasket Loose 'Valqua' (Orange Font, Blue Backing) Japanese Symbols	Storage Area, Drawer, AE4 Emergency Generator	76	T5842	P4	0	2	4	4	5	A3	Item removed from service by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary
ACM	Gasket Loose 'Valqua' (Beige Backing Black Print 350.01.	Storage Area, Drawer, AE5 Diesel Generator	77	T5843	P1	0	2	1	1	5	A3	Redundant spare gaskets to be removed and disposed of as asbestos waste. Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Brake Lining	Storage Area, Above Cabinets 'BB' & 'BA'		T5844	0	-	-	-	-	-	Nil	
ACM	Boiler Lagging 680.01.01.G14	Storage Area, Contained for Reassurance, Return to Area Above Cabinets 'BF' & 'BE'	143	T5845	0	-	-	-	-	-	Nil	Laboratory Testing Returned Negative Results. Item to be returned to service.
ACM	Boiler Lagging 680.01.01.G14	Storage Area, Contained for Reassurance, Return to Area Above Cabinets 'BF' & 'BE'	144	T5846	0	-	-	-	-	-	Nil	Laboratory Testing Returned Negative Results. Item to be returned to service.
ACM	Boiler Lagging 680.01.01.G14	Storage Area, Contained for Reassurance, Return to Area Above Cabinets 'BF' & 'BE'	145	T5847	0	-	-	-	-	-	Nil	Laboratory Testing Returned Negative Results. Item to be returned to service.
ACM	Debris from Boiler Lagging 680.01.01.G14	Storage Area, Above Cabinets 'BF' & 'BE'		T5848	0	-	-	-	-	-	Nil	Shelf Environmentally Cleaned by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd as a Precaution

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket Loose Spiral Wound Graphite/Cream Sealing Element	Storage Area, Above Cabinets 'BF' & 'BE'		T5849	0	-	-	-	-	-	Nil	
ACM	Gasket, Adhered to Redundant Winch Wheel, (Blue)	Storage Area, Drawer, Shelf 1 from Fore	78	T5850	P1	0	2	1	2	6	A3	Item to be removed by suitably licensed asbestos removal contractor. Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket, Adhered to Redundant Winch Wheel, (Blue)	Storage Area, Drawer, Adjacent Forward Bulkhead		T5851	0	-	-	-	-	-	Nil	
ACM	Gasket (Grey) Adhered to Flange Joint	Storage Area, Drawer, Shelf 1 from Fore		T5852	0	-	-	-	-	-	Nil	
ACM	Gasket (Pink) Adhered to Yellow Redundant Pump	Storage Area, Drawer, Shelf 1 from Fore 2, Adjacent Storage Column	79	T5853	4	0	2	4	4	5	A3	Item has been removed of into the ACM Bulker Bag for disposal. Tetra Tech confirmed that this item was not present during visit 11/2022.
ACM	Gasket to Large Grey Valve	Storage Area, Drawer, Shelf From Fore 2, Adjacent Storage Column		T5854	0	-	-	-	-	-	Nil	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Brake Lining	Storage Area, Drawer, Shelf 2 From Starboard, Aft		T5855	0	-	-	-	-	-	Nil	
ACM	Gasket Loose (Blue) 'No Branding'	Storage Area 2nd Shelf from Fore	80	T5856	P4	0	2	4	2	6	A3	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Lagging (Black)	Storage Area 4th Shelf from Fore		T5857	0	-	-	-	-	-	Nil	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose (No Brand) Grey with Yellow Specks 350.01.01.072	Storage Area, Above BD5 Cabinet		T5858	0	-	-	-	-	-	Nil	
ACM	Gasket Loose 'Valqua' Black Font, Beige Background 350.01.01.072	Storage Area, Above BD5 Cabinet	81	T5859	P4	0	2	4	4	5	A3	No Evidence that this item remains on board. Presumed to have been disposed into the ACM Bulker bag. Reccomend that replacement gaskets are sampled upon re-stocking. Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)



Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket Loose (No Brand) Green with Yellow Specks 350.01.01.073	Storage Area, Above BD5 Cabinet	82	T5860	P4	0	2	4	4	5	A3	No Evidence that this item remains on board. Presumed to have been disposed into the ACM Bulker bag. Recommend that replacement gaskets are sampled upon re-stocking.  Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket Loose 'Valqua 1755' (Orange Font with Black Backing and White Specks)	Storage Area, Above BH Cabinet	83	T5864	4	0	2	4	4	5	A3	Item to be removed by suitably Licensed Asbestos Removal Contractor (LARC) No Evidence that this item remains on board. Presumed to have been disposed into the ACM Bulker bag.
ACM	Gasket to Bonnet of Redundant Valve (Painted Black)	Storage Area, Structural Column Adjacent 2nd Shelf from Fore	84	T5862	4	0	2	4	4	5	A3	Item to be removed by suitably Licensed Asbestos Removal Contractor (LARC) No Evidence that this item remains on board. Presumed to have been disposed into the ACM Bulker bag.
ACM	Gasket to 3 Way Redundant Valve (Painted Grey)	Storage Area, Structural Column Adjacent 2nd Shelf from Fore		T5863	0	-	-	-	-	-	Nil	
ACM	Gasket to Bonnet of x 2 Valves (Rusting)	Storage Area, Structural Column Adjacent 2nd Shelf from Fore	85	T5864	4	0	2	4	4	5	A3	Item to be removed by suitably licensed asbestos removal contractor.  No Evidence that this item remains on board. Presumed to have been disposed into the ACM Bulker bag.
ACM	Gasket to Flange of 3 Way Valve (Painted White)	Storage Area, Structural Column Adjacent 2nd Shelf from Fore		T5865	0	-	-	-	-	-	Nil	
ACM	Spiral Wound Gasket, Sealing Element (Cream) 'Vortex 20x32x63-CT'	Storage Area, CC1 Drawer Labelled (Spare Parts Spiral Wound Gaskets)		G6280	0	-	-	-	-	-	Nil	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Lt
ACM	Spiral Wound Gasket, Sealing Element (Cream) 'Vortex 20x32x63-CT'	Storage Area, BF2		G6284	0	-	-	-	-	-	Nil	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Lt
ACM	Spiral Wound Gasket, Sealing Element (Cream) 'Vortex 20x32x63-CT'	Storage Area, BF2	86	G6282	4	3	3	4	2	40	A2	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Spiral Wound Gasket, Sealing Element (White) 'C-20K-20'	Storage Area, BF2	87	G6283	1	3	3	1	2	10	A2	x1 Piece Remove, x 7 Gaskets Isolated. Items to be removed by suitably competent personnel
ACM	Spiral Wound Gasket, Sealing Element (White) 'Valqua VN D-20K-40 CT'	Storage Area, Contained for Reassurance Return to Area BF2 Labelled (Main Boiler Instruments)	147	G6284	0	-	-	-	-	-	Nil	(x1) Piece Removed, x 19 Isolated. Laboratory result confirmed No Asbestos Detected (NAD). Items may be returned to service
ACM	Spiral Wound Gasket, Sealing Element (Cream) '206.5x215x9x263.6x352.6' (Bag Labelled 033101100-G4 BK2)	Storage Area, BK2		G6285	0	-	-	-	-	-	Nil	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Lt

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Packing	No. 2 Switch Board Room, Deckhead Conduit Adjacent to Book Shelf	88	G6298	1	2	2	3	2	10	A2	Debris associated with the penetration is to be remediated by a suitably Licensed Asbestos Removal Contractor (LARC) Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Fibre Cement Sheet	Monitor Room Wall Cladding (Throughout)		G6300	0	-	-	-	-	-	Nil	
ACM	Fibre Cement Sheet	Monitor Room Wall Cladding (Throughout)		G6301	0	-	-	-	-	-	Nil	
ACM	Gasket	Aux Lube Oil, Purifier Tank, Inspection Cover		G6302	0	-	-	-	-	-	Nil	
ACM	Lagging	Steam Isolation Valve to Cargo Machinery Room	89	ZA4802	1	-	-	-	-	-	Nil	Resampled during March 2022 inspection and returned a negative lab result
ACM	Gasket	Aux Lube Oil, Purifier, Renovating Tank, Inspection Cover		G6304	0	-	-	-	-	-	Nil	
ACM	Gasket	Lube Oil Storage Tank Level Sight Glass, Top Bracket	90	G6305	P1	0	2	1	1	5	A3	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Diesel Generator Lube Oil Tank Sight Level Glass, Horizontal Bracket	91	G6306	P1	0	2	1	1	5	A3	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Diesel Generator, Purifier Lube Oil Tank Sight Glass		G6307	0	-	-	-	-	-	Nil	
ACM	Gasket	Diesel Generator, Lube Oil Renovating Tank, High Level Float Switch		G6308	0	-	-	-	-	-	Nil	
ACM	Gasket	Chemical Locker (Rear of), 2PA Valve (V0PJ234 Flange	92	G6309	P1	0	2	1	1	5	A3	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket	Chemical Locker, No.2 Hot Domestic Water Heater Tank , End Cover		G6310	0	-	-	-	-	-	Nil	
ACM	Putty (Soft)	Chemical Locker, Boiler, Chemical Dosing Tank, Low Level Switch	93	G6311	P1	0	1	1	1	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommend to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Chemical Locker, No.2 Domestic Hot water Heater Pump Junction Box		G6312	0	-	-	-	-	-	Nil	
ACM	Packing	Nitrogen Space, No. B9 Solenoid Valve Box Deck Conduit	94	G6313	P1	1	1	1	0	4	A4	Owing to Live Electrical Systems Sampling is Limited, all Penetrations are Presumed to Be Asbestos Containing Due to Positives Samples Throughout the Vessel.  Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel  Manage and remain in situ. Inspect periodically for damage. This item is recommend to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	No.1 Package A/C Unit		G6314	0	-	-	-	-	-	Nil	
ACM	Friction Material	Poop Deck, FWD Starboard Winch Brake Ban (DM8)		G6418	0	-	-	-	-	-	Nil	
ACM	Friction Material	Poop Deck, Aft Starboard Winch Brake Band (DM10)		G6419	0	-	-	-	-	-	Nil	
ACM	Friction Material	Poop Deck, Emergency Tow Reel, Brake Band		G6420	0	-	-	-	-	-	Nil	
ACM	Friction Material	Poop Deck, Aft Port Winch, Brake Band (DM9)		G6421	0	-	-	-	-	-	Nil	
ACM	Friction Material	Poop Deck, FWD Port Winch, Brake Band (DM7)		G6422	0	-	-	-	-	-	Nil	
ACM	Gasket	Storage Area, Drawer BG3,		G6423	0	-	-	-	-	-	Nil	
ACM	Gasket, Gasket (Ring) 97x87x81x71x4.5T, [03.30.00.00.030], 680.01.01.030	Storage Area, Contained for Reassurance Return to Drawer BG3,	146	G6424	0	-	-	-	-	-	Nil	Laboratory Testing Returned Negative Results. Item to be returned to service.
ACM	Gasket to condensing treatment plant pipework	Second Deck - Port Side	-	G2304	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Insulation to hot water pipework	Second Deck - Port Side	-	G2305	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Loose gasket material in oil drum storage area	Second Deck - Port Side	-	G2306	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to pipework to clarifier no. 2	Second Deck - Port Side	-	G2307	0	-	-	-	-	-	Nil	Surveyed December 2013



Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket to pipework to clarifier no. 2	Second Deck - Port Side	-	G2308	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Insulation to pipework to clarifier no. 2	Second Deck - Port Side	-	G2309	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to fuel oil additive tank	Second Deck - Port Side	-	G2310	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Spare gasket to fuel oil additive tank	Second Deck - Port Side	-	G2311	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to heavy oil shut off valve drain plug	Second Deck - Port Side	-	G2312	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to light oil storage tank shut off valve	Second Deck - Port Side	-	G2313	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to indoor exchanger cool water shut of valve	Second Deck - Port Side	-	G2314	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to fire fighting line pipework	Second Deck - Port Side	-	G2315	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to fire fighting line pipework	Second Deck - Port Side	-	G2316	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to fire fighting line shut off valve	Second Deck - Starboard	-	G2317	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to bonnet on spare valve large oval valve	Second Deck - Storage Area, Starboard	-	G2319	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to gland packing on spare valve	Second Deck - Storage Area, Starboard	-	G2320	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Loose gasket in Rack FA1	Second Deck - Storage Area, Starboard	-	G2321	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to spare valve adjacent to rack FA1	Second Deck - Storage Area, Starboard	-	G2322	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to vent duct exhaust fan pipework	Second Deck - Starboard	-	G2323	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to shut off valve to general service air pipework	Second Deck - Boiler Front Starboard	-	G2324	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Insulation to pipework to boiler	Second Deck - Boiler Front Starboard	-	G2325	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Insulation to burner igniter exciter to port no. 1	Second Deck - Boiler Front Starboard	-	G2326	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to front plate of burner no. 2	Second Deck - Boiler Front Starboard	-	G2327	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to control air pipework	Second Deck - Boiler Front Starboard	-	G2328	0	-	-	-	-	-	Nil	Surveyed December 2013

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket to no. 1 boiler gas hood pipework	Second Deck - Boiler Front Port Side	-	G2329	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Textile wrap to front of port no. 1	Second Deck - Boiler Front Port Side	-	G2330	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket	To flange joints to #1 and #2 Boiler system pipework valves		FD1084	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Insulation Material	To #1 and #2 Boiler system pipework		FD1085	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Mastic Sealant	Engine Room 2nd Deck No1 Power Air, Mastic	176	ZA4799	0	-	-	-	-	-	Nil	Surveyed March 2022
ACM	Debris	Void Above Main Switch Board Room	179	Presumed	1	2	2	3	2	10	A2	Debris associated is to be remediated by a suitably Licensed Asbestos Removal Contractor (LARC) Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Insulation Material	To Soot Blower system pipework		FD1086	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket material	Spare Graphite coiled gaskets used during docking		FD1087	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket material	Spare Klinger SLS150 gaskets used during docking		FD1088	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket material	Spare CVS9000R gaskets used during docking		FD1089	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket	To flange joints to Main Feed/Isolators system pipework valves		FD1117	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Insulation Material	To Main Feed/Isolators system pipework		FD1118	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Fibrous Insulation Material	Miyawkai steam traps boiler top Boiler tops, E/R 2nd deck		ZA9321	0	-	-	-	-	-	Nil	Surveyed November 2022
ACM	Fibrous Insulation Material	Boiler drum valves, Boiler tops aft, 2nd deck, steam drum		ZA9320	0	-	-	-	-	-	Nil	Surveyed November 2022
ACM	Gasket	Stores - BF1, Soot blower packing - Port 639.10.01.018	206	ZA9300	1	1	1	1	1	5	A2	Restrict Access, Manage and Remove Utilising Appropriate Control Measures
ACM	Gasket	Stores - GA3, Loose gland packings		ZA9299	0	-	-	-	-	-	Nil	Surveyed November 2022

**Upper Deck**

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Packing	Upper Deck - Electrical Distribution Room - Penetration	167	Similar to G6327	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel  Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Green Gasket	Port Side Lifeboat - Deluge Pipe Flange	-	ZA0707	0	-	-	-	-	-	Nil	Surveyed November 2021
ACM	Green Gasket	Starboard Side Lifeboat - Deluge Pipe Flange	-	ZA0709	0	-	-	-	-	-	Nil	Surveyed November 2021
ACM	Green Gasket	AFT Mooring Hydraulic Tank	-	ZA0708	0	-	-	-	-	-	Nil	Surveyed November 2021
ACM	Gasket	Forced Draft Fan Flat, Cooling Water Header Tank Low Level Float Switch		G6267	0	-	-	-	-	-	Nil	
ACM	Debris	Forced Draft Fan Flat, Deaerator Drain Valve Packing		G6268	0	-	-	-	-	-	Nil	
ACM	Gasket	Forced Draft Fan Flat, Cooling Water Header Tank Filling Valve	95	G6269	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket (Woven)	Forced Draft Fan Flat, Starboard Boiler, Economiser Inspection Hatch		G6270	0	-	-	-	-	-	Nil	
ACM	Gasket	Fan Flat, Fan Trunking Inspection Cover Gasket		G6271	0	-	-	-	-	-	Nil	
ACM	Gasket	Fan Flat, V-PF001 Feed Water to Feed Valve Pump		G6272	0	-	-	-	-	-	Nil	
ACM	Gasket	Forced Draft Fan Flat, Deaerator Overflow Relief Valve Gaskets Brackets on Top of Deaerator		G6273	0	-	-	-	-	-	Nil	
ACM	Gasket	Hydraulic Pump Unit Room (Ballast) Hydraulic Tank Sight Glass	96	G6326	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)



Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Packing	Hydraulic Pump Unit Room (Ballast) Hydraulic Tank, Conduit Through Deck	97	G6327	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel  Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Hydraulic Pump Unit Room (Cargo) Hydraulic Tank Sight Glass		Refer to G6326	0	-	-	-	-	-	Nil	
ACM	Packing	Hydraulic Pump Unit Room (Cargo) Hydraulic Tank, Conduit Through Deck		Refer to G6327	P1	1	1	1	0	4	A4	Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel.  Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Packing	No.2 Cargo Switch Room, Conduit Through Deck, Below Gas Alarm Meter		Refer to G6327	P1	1	1	1	0	4	A4	Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel.  Manage and remain in situ. Inspect periodically for damage. This item is recommend to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Packing	No 1 and 2 Cargo Switch Room, Conduit	173	Presumed	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel  Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Packing	Air Handling Room, Conduit Walls and Ceiling	174	Presumed	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel  Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket	Upper Deck, Engine Room – CCS F.W EXP. TK,	475	ZA4798	4	4	4	4	0	4	A4	Item removed by 'Unrestricted Licensed Contractor Thuroona services March 2022
ACM	Gasket Loose 'Garlock 3Q05, Style 2950, Thick 1/16' (Blue Font, Blue Backing)	No.2 Cargo Switch Room, Under Storage Bench		G6329	0	-	-	-	-	-	Nil	
ACM	Gasket Loose 'Garlock 2950' (Blue Font, Blue Backing)	External, Deck Workshop		G6330	0	-	-	-	-	-	Nil	
ACM	Gasket Loose 'Garlock 2950' (Black Font, Green Backing)	External, Deck Workshop		G6331	0	-	-	-	-	-	Nil	
ACM	Gasket Loose 'Klinger C-4430 Made in Australia' (Black Font, White Backing)	External, Deck Workshop		G6332	0	-	-	-	-	-	Nil	
ACM	Gasket Loose 'No Brand' (Blue)	External, Deck Workshop	98	G6333	P4	0	2	4	4	5	A3	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)  Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose (Orange Font, Beige Backing) 'Pillar Clean Sheet No. 5611' (Orange Font, Beige Backing)	External, Deck Workshop	99	G6334	P4	0	2	4	2	6	A3	Owing to 'Pillar Clean Sheet No. 5611' Returning Positive Results for Chrysotile All Items are Presumed Asbestos Containing  Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket Loose 'No Brand' (Green)	External, Deck Workshop		G6335	0	-	-	-	-	-	Nil	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket (Woven Rope)	External, Deck Workshop, Ceiling Cavity, Between A/C track Flange Joints		G6336	0	-	-	-	-	-	Nil	
ACM	Gasket	C2H2 Bottle Room (Aft) Supply to ER Pipework Flange		G6337	0	-	-	-	-	-	Nil	
ACM	Gasket	C02 Bottle Room Supply to ER Pipework Flange		G6338	0	-	-	-	-	-	Nil	
ACM	Gasket	C02 Room, Midship Starboard, Discharge Receiver Flange for Air Horn		G6403	0	-	-	-	-	-	Nil	
ACM	Woven Material	Lifeboat, Starboard, Engine Bay Exhaust Insulation		G6404	0	-	-	-	-	-	Nil	
ACM	Gasket	External. Starboard. Adjacent Freshwater Shore Connection		G6405	0	-	-	-	-	-	Nil	

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket	External, Starboard, Internal Shore Connection, Bonnet		G6406	0	-	-	-	-	-	Nil	
ACM	Gasket	External, Starboard, Internal Shore Connection, Bonnet		G6407	0	-	-	-	-	-	Nil	
ACM	Packing	Helicopter Rescue Equipment Store Penetration for Conduit, High Level	100	G6339	1	1	1	1	2	6	A3	Recommended actions are to enclose, encapsulate and seal. Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel. Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	External, Port, Level Transmitter Under Life Boat		G6340	0	-	-	-	-	-	Nil	
ACM	Gasket	Chippy Store, Port, Overhead Pipework	101	G6341	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Packing	Chippy Store, Port, Penetration	184	Presumed	1	1	1	1	2	6	A3	Recommended actions are to enclose, encapsulate and seal. Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel. Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Dry Chemical Unit Room, Aft, Outlet Flange From Storage	102	G6342	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Dry Chemical Unit Room, Aft, Outlet Flange From Storage, Under Manifold	103	G6343	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Friction Material	External, Port Forward, Winch Brake System, Brake Band		G6344	0	-	-	-	-	-	Nil	
ACM	Friction Material	External, Forward Port Winch/Windlass, Brake Band		G6345	0	-	-	-	-	-	Nil	
ACM	Friction Material	External, Forward Port Windlass, Brake Band		G6346	0	-	-	-	-	-	Nil	

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Friction Material	External, Forward Centre Winch, Brake Band		G6347	0	-	-	-	-	-	Nil	
ACM	Friction Material	External, Forward Starboard Winch/Windlass, Brake Band		G6348	0	-	-	-	-	-	Nil	
ACM	Friction Material	External, Forward Starboard, Windlass, Brake Band		G6349	0	-	-	-	-	-	Nil	
ACM	Friction Material	External, Forward Starboard, Winch, Brake Band		G6350	0	-	-	-	-	-	Nil	
ACM	Gasket	Dry Chemical Unit Locker, Under Manifold	104	G6351	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Cargo Motor Room, No.1 Auxiliary Fresh Water Pump Casing		G6352	0	-	-	-	-	-	Nil	
ACM	Gasket Loose (Orange Fent, Beige Backing) -Pillar Clean Sheet No. 5611' (Orange Fent, Beige Backing)	Cargo Motor Room, Telephone Booth	405	G6353	4	0	2	4	4	5	A3	Owing to 'Pillar Clean Sheet No. 5611' Returning Positive Results for Chrysotile All Items are Presumed Asbestos Containing  Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gasket	Cargo Motor Room, Ventilation Tank line		G6354	0	-	-	-	-	-	Nil	
ACM	Gasket	Cargo Motor Room, Auxiliary Fresh Water Header Tank, Low Level Switch		G6355	0	-	-	-	-	-	Nil	
ACM	Gasket	Cargo Machinery Room, Drain Cooler End Cover		G6356	0	-	-	-	-	-	Nil	
ACM	Gasket	Cargo Machinery Room, Gas Vent Drain Tank/Vent		G6357	0	-	-	-	-	-	Nil	
ACM	Gasket	Cargo Machinery Room, Lo Bilge Tank Lower Level Gas Vent		G6358	0	-	-	-	-	-	Nil	
ACM	Gasket	Cargo Machinery Room, Upper Deck, Gas Compressor Lube Oil Storage Tank, Gauge Glass		G6359	0	-	-	-	-	-	Nil	
ACM	Gasket	Cargo Machinery Room, Upper Deck, Ventilation Trunking, Adjacent to Vaporiser		G6360	0	-	-	-	-	-	Nil	
ACM	Gasket	External, Starboard Diesel Service Oil Tank Service Sounding Pipe Flange		G6361	0	-	-	-	-	-	Nil	
ACM	Gasket	External, Starboard Diesel Service Oil Vent Flange		G6362	0	-	-	-	-	-	Nil	
ACM	Gasket	External, Starboard Aft, Chemical Storage Tank Outlet	106	G6363	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	External, Starboard Aft, Gangway Airline		G6364	0	-	-	-	-	-	Nil	



Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket	External, Starboard Aft, No.3 Void Space Vent		G6365	0	-	-	-	-	-	Nil	
ACM	Gasket	External, Starboard, Cargo Manifold Water Spray		G6366	0	-	-	-	-	-	Nil	
ACM	Gasket	External, Starboard, Cargo Manifold Water Spray		G6367	0	-	-	-	-	-	Nil	
ACM	Gasket	External, Starboard, Manifold Fresh Water From Shore Connection Inboard Valve Flange	107	G6368	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Fo'c'sle/Bosons Store, Port Bilge Suction Flange	108	G6369	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Fo'c'sle/Bosons Store, Bilge Eductor Valve Flange (Bosons Store)	109	G6370	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Putty	Fo'c'sle/Bosons Store, No.2 Winch and Windlass Hydraulic Pump Power Cabinet Connection	110	G6371	1	0	1	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. Any planned upgrade/renovation or demolition of this item should addressed by suitably qualified licensed asbestos removalist contractor (LARC)
ACM	Gasket	Fo'c'sle/Bosons Store, Fire Pump Exhaust Manifold	111	G6372	P1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. Any planned upgrade/renovation or demolition of this item should addressed by suitably qualified licensed asbestos removalist contractor (LARC)
ACM	Insulation Material	Fo'c'sle/Bosons Store, Fire Pump Exhaust Pipework Adjacent No.1 Mooring Winch Hydraulic Pump		G6373	0	-	-	-	-	-	Nil	
ACM	Gasket	Fo'c'sle/Bosons Store, No.1 Mooring Winch Hydraulic Pump Outlet		G6374	0	-	-	-	-	-	Nil	
ACM	Gaskets Loose	Fo'c'sle/Bosons Store, to Storage Oil Tank Save	112	G6375	P1	0	2	4	4	6	A3	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)  Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd
ACM	Gaskets	Fo'c'sle/Bosons Store, Storage Oil Tank Site Glass Drain Flange		G6376	0	-	-	-	-	-	Nil	
ACM	Gasket	Pipe Passage Starboard, IG Pipe Flange (Aft)	113	G6377	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket	Pipe Passage Starboard, .HFO Bunker Pipe Flange (Aft)	114	G6378	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Pipe Passage Starboard, Pipe Above Bunker Line 'A'	115	G6379	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Pipe Passage Starboard, Valve to Sampling Line	116	G6380	P1	1	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket (Klinger)	Pipe Passage Starboard, Steam line Flange		G6381	0	-	-	-	-	-	Nil	
ACM	Putty	Pipe Passage Starboard, JB M03 Cabinet, Conduit	117	G6382	1	0	1	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Pipe Passage Starboard, IGG Isolation Valve at 65 WBT Manhole		G6383	0	-	-	-	-	-	Nil	
ACM	Gasket	Pipe Passage Starboard, IGG Pipeline Isolation Valve Bonnet, Adjacent to 65 WBT Manhole	118	G6384	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Pipe Passage Starboard, Transducer Adjacent 45 WBT	119	G6385	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Pipe Passage Port, FWD, Non-Return Valve Bonnet		G6386	0	-	-	-	-	-	Nil	
ACM	Gasket	Pipe Passage Port, Air Line Manifold Flange, Adjacent No.80 FWD Fire Hydrant		G6387	0	-	-	-	-	-	Nil	
ACM	Gasket	Pipe Passage Port, No.79 Fire Hydrant Valve Bonnet		G6388	0	-	-	-	-	-	Nil	
ACM	Gasket	Pipe Passage Port, 2nd Pipe Below Expansion Flange		G6389	0	-	-	-	-	-	Nil	
ACM	Gasket	Pipe Passage Port, IGG Non-Return Valve Bonnet (V1497)		G6390	0	-	-	-	-	-	Nil	
ACM	Gasket	Pipe Passage Port, IGG Non-Return Valve Bonnet (V1498)		G6391	0	-	-	-	-	-	Nil	

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket	Pipe Passage Port, Spectacle Piece Inlet Gas Flange, Frame 65	120	G6392	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. Any planned upgrade/renovation or demolition of this item should be addressed by suitably qualified licensed asbestos removalist contractor (LARC)
ACM	Gasket	Fire Control Centre, SW Strainer Drain Valve Blank		G6397	0	-	-	-	-	-	Nil	
ACM	Gasket	Fire Control Centre, Water Spray to No.1 Tank Dome Valve Bonnet		G6398	0	-	-	-	-	-	Nil	
ACM	Gasket	Emergency Generator Room, Turbo Charger Exhaust Outlet Flange		G6399	0	-	-	-	-	-	Nil	
ACM	Gasket	Emergency Generator Room, Sump Vent, Flexible Hose Flange	121	G6400	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket Loose 'Cavalla 155 Non Asbestos General Service' (Black Font, Grey Backing)	Fire Control Centre		G6401	0	-	-	-	-	-	Nil	
ACM	Gasket	Port Manifold, D.O Bunker Line		G6414	0	-	-	-	-	-	Nil	
ACM	Gasket	Port Manifold, Vent Valve, Purple Blank		G6415	0	-	-	-	-	-	Nil	
ACM	Gasket	Starboard Manifold, Drain Valve D.O. Bunker Line		G6416	0	-	-	-	-	-	Nil	
ACM	Gasket—Tembo 4000	Starboard Manifold	485	ZA4803	P4	0	2	4	4	5	A3	Item removed by 'Unrestricted Licensed Contractor Thuroona services March 2022. This gasket may remain to other areas further investigation would be required
ACM	Blue Gasket	Starboard Manifold	486	ZA4804	P4	0	2	4	4	5	A3	Item removed by 'Unrestricted Licensed Contractor Thuroona services March 2022. This gasket may remain to other areas further investigation would be required
ACM	Brown Gasket	Starboard Manifold	187	ZA4805	0	-	-	-	-	-	Nil	Surveyed March 2022

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Blue Gasket	Starboard Manifold	187	ZA4806	0	-	-	-	-	-	Nil	Surveyed March 2022
ACM	Gasket	Starboard Manifold, No.4 Loading/Discharge Flange		G6417	0	-	-	-	-	-	Nil	
ACM	Gasket to lube oil sump tank vent	Main Deck - External Starboard	-	G2261	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to lube oil sump tank vent	Main Deck - External Starboard	-	G2262	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to no. 2 drill water tank	Main Deck - External Starboard	-	G2263	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to lifeboat davit winch	Main Deck - External Starboard	-	G2264	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to bilge shore connection pipework	Main Deck - External Starboard	-	G2265	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to shore connection shut off valve	Main Deck - External Starboard	-	G2266	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to shore connection shut off valve drain plug	Main Deck - External Starboard	-	G2267	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to double bottom void tank vent	Main Deck - External Starboard	-	G2268	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to dirty oil storage tank vent	Main Deck - External Starboard	-	G2269	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to fuel oil overflow tank vent	Main Deck - External Starboard	-	G2270	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to lifeboat davit winch	Main Deck - External Starboard	-	G2271	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to dirty oil service tank vent top plate	Main Deck - External Starboard	-	G2272	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to fuel oil tank vent top plate	Main Deck - External Starboard	-	G2273	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to fire fighting system shut off valve	Main Deck - External Starboard	-	G2274	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to onshore connection	Main Deck - External Starboard	-	G2275	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to no. 6 water ballast tank pipework	Main Deck - External Starboard	-	G2276	0	-	-	-	-	-	Nil	Surveyed December 2013



Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket to large oval flange of fire main to upper deck	Main Deck - External Starboard	-	G2277	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to bilge E duct drive shut off valve	Main Deck - External Starboard	-	G2278	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to bonnet on fire main to upper deck	Main Deck - External Starboard	-	G2279	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to large oval flange of fire main shut off valve to upper deck	Main Deck - External Starboard	-	G2280	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to shore connection	Main Deck - External Starboard	-	G2281	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to fresh water shore connection	Main Deck - External Starboard	-	G2282	4	4	2	0	0	4	A5	Surveyed December 2013 Re-sampled in 2017 returned negative result
ACM	Gasket to large oval flange of fire main shut off valve to upper deck	Main Deck - External Starboard	-	G2283	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to bilge E duct drive shut off valve	Main Deck - External Starboard	-	G2284	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to bilge E duct drive pipework	Main Deck - External Starboard	-	G2285	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Brake lining to mooring winch	Main Deck - External Starboard	-	G2286	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Brake lining to anchor winch	Main Deck - External Starboard	-	G2287	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to fire fighting line shut off valve	Main Deck - External Port Side	-	G2288	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to expansion fore deck machinery pipework	Main Deck - External Port Side	-	G2289	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to oval flange on shore connection shut off valve	Main Deck - External Port Side	-	G2290	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to life boat davit motor	Main Deck - External Port Side	-	G2291	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to lube oil shore connection	Main Deck - External Port Side	-	G2292	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to oval flange of shore connection shut off	Main Deck - External Port Side	-	G2293	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket on rope ladder pipework	Main Deck - External Port Side	-	G2294	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to butterfly valve on inerting pipework	Main Deck - External Port Side	-	G2295	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to butterfly valve on inerting pipework	Main Deck - External Port Side	-	G2296	0	-	-	-	-	-	Nil	Surveyed December 2013

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket to air line pipework	Main Deck - External Port Side	-	G2297	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to water spray shut off valve	Main Deck - External Port Side	-	G2298	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to bonnet on butterfly valve for inerting line	Main Deck - External Port Side	-	G2299	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to pipework to water ballast tank vent	Main Deck - External Port Side	-	G2300	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Brake lining to mooring winch	Main Deck - External Port Side	-	G2301	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to fire fighting line pipework	Main Deck - External Port Side	-	G2302	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket on mooring winch hydraulic system	Main Deck - External Port Side	-	G2303	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Brake linings to mooring winches	Forecastle Deck - External Starboard	-	G2252	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to water ballast tank vent	Forecastle Deck - External Starboard	-	G2253	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Brake lining to hydraulic pipework to mooring winch	Forecastle Deck - External Starboard	-	G2254	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Brake lining to mooring winch	Forecastle Deck - External Starboard	-	G2255	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Brake lining to tugger	Forecastle Deck - Mid Ship	-	G2256	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to vent	Forecastle Deck - Aft Peak Tank	-	G2257	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to hydraulic system	Forecastle Deck - External Port Side	-	G2258	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to vent	Forecastle Deck - Aft Peak Water Ballast Tank Port Side	-	G2259	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to fresh water tank vent	Forecastle Deck - External Port Side	-	G2260	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket (Pillar 26U3EEE-JPN - Steel/graphite)	To flange joints to E3A/E3B LNG Vapouriser system pipework valves - Upper Cargo Machinery Room		FD1067	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket (KSB BW600 - Copper) coiled	To flange joints to E3A/E3B LNG Vapouriser system pipework valves - Upper Cargo Machinery Room		FD1068	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket	To flange joints to Heat Exchanger/Cooling system pipework valves - Lower Cargo Machinery Room		FD1069	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Brake Pad Lining	To Forward anchor winches - Port & Stbd		FD1070	0	-	-	-	-	-	Nil	Surveyed May 2018

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket	To flange joints to Port Anchor Winches pipework valves		FD1071	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket	To flange joints to Stbd Anchor Winches pipework valves		FD1072	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket	To flange joints to Air Winch system pipework throughout Upper Deck		FD1073	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket	To flange joints to Upper Deck WBT air vents - Stbd Side		FD1074	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket	To flange joints to Seawater Spray system pipework - Stbd side		FD1075	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket	To flange joints to Seawater Spray system pipework - Port side		FD1076	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket	To flange joints to Upper Deck WBT air vents - Port Side		FD1077	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Gasket	To flange joints to VL400, VL300, VL200 & VL100 system pipework valves		FD1078	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Packing (Hard)	Upper Deck - Cable Trunk Cable Penetration	165	Similar to G6339	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Packing (Hard)	Upper Deck - Cable Trunk Cable Penetration Floor	166	ZA4797	0	-	-	-	-	-	Nil	Surveyed March 2022
ACM	Packing (Hard)	Upper Deck B/A Compressor Room - Cable Trunk Cable Penetration Floor	166	Similar to ZA4797	0	-	-	-	-	-	Nil	Surveyed March 2022

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Packing (Hard)	Upper Deck B/A Compressor Room - Cable Trunk Cable Penetration Walls	169	Similar to G6339	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel  Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Packing (Hard)	Upper Deck FCC - Cable Trunk Cable Penetration Walls	170	Similar to G6339	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel  Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Packing (Hard)	Upper Deck - Emergency Switch Room	171	Similar to G6339	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel  Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Packing (Hard)	Upper Deck - Generator Room	172	Similar to G6339	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel  Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Mastic Sealant	To flange joints to Monitor Probes system pipework on Tank Top Platforms		FD1079	0	-	-	-	-	-	Nil	Surveyed May 2018
ACM	Bulkhead cable penetration putty material	Void spaces in deck head, upper deck fwd cross alley way	-	ZA9323	0	-	-	-	-	-	Nil	Surveyed November 2022
ACM	Bulkhead cable penetration putty material	Bulkhead cable penetration putty material, Upper deck electrical cable trunk room	204	ZA9322	1	2	1	2	1	7	A3	Program for Planned Removal, Manage & Re-inspect Periodically
ACM	Gasket	Flange gaskets on spectacle piece for dry air from IGG plant to DBPP, Port UDPP aft	-	ZA9311	0	-	-	-	-	-	Nil	Surveyed November 2022
ACM	Gasket	No. 7 WBT vent pipe port, new vent piping, take flange gasket Port UDPP aft	-	ZA9310	0	-	-	-	-	-	Nil	Surveyed November 2022
<b>A Deck</b>												



Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Insulation	Smokers Room above ceiling tiles		ZA0705	0	-	-	-	-	-	Nil	Surveyed November 2021
ACM	Gasket	Forced Draft Fan Flat, F.D Fan Trunking (Starboard)		G6274	0	-	-	-	-	-	Nil	
ACM	Gasket	Engine Room, Incinerator Fan Outlet Flange		G6275	0	-	-	-	-	-	Nil	
ACM	Packing (Hard)	Waste Storage Room, Bulkhead Above Entrance Door	122	G6276	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Packing (Soft/Hard)	Incinerator Room, Bulkhead Above Entrance Door	123	G6277	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Insulation (Fore Door Core) Labelled (LR Shinko 11-A-60 Shinko CO Ltd	Incinerator Room, Fire Door to Waste Incinerator Room		G6278	0	-	-	-	-	-	Nil	
ACM	Gasket	Incinerator Room, Top of Sight Glass (Diesel Tank)	124	G6279	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Incinerator Room, Waste Oil Tank, Low Level Float Switch		G6294	1	0	2	1	0	4	A4	Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Incinerator Room, Diesel Oil Tank, Overflow Sight Glass Top Flange	125	G6295	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Incinerator Room, Diesel Oil Tank, Manhole Plate		G6296	0	-	-	-	-	-	Nil	
ACM	Gasket	Incinerator Room, Waste Oil Tank, Drain Valve		G6297	0	-	-	-	-	-	Nil	

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Packing	Linen Chute Room	126	G6323	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel  Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Fan Flat, Incinerator Flue Flange		G6324	0	-	-	-	-	-	Nil	
ACM	Packing	Electrical Cable Room, Conduit Through Bulkhead	127	G6325	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel  Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Packing	A Deck - Cable Trunk, Conduit Through Bulkhead	162	Similar to G6325	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel  Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Packing	A Deck - Vent Space, Conduit	164	Similar to G6325	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel  Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Insulation to bulkhead	A Deck - Provisions Store	-	G2250	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Panelling to behind clean linen locker chiller area	A Deck - Starboard	-	G2415	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Insulation to cover of lifeboat engine	A Deck - Starboard	-	G2417	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Insulation residues to cover of lifeboat engine	A Deck - Starboard	-	G2418	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to shut off valve on fire fighting line	A Deck - External Starboard	-	G2251	0	-	-	-	-	-	Nil	Surveyed December 2013

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Internal Insulation	To Incinerator in Incinerator Room	-	FD1083	0	-	-	-	-	-	Nil	Surveyed May 2018
<b>B Deck</b>												
ACM	Millboard Fragments, Dust and Debris from incomplete removal of Insulation	Sauna, Throughout Perimeter to Deck		T5707	0	-	-	-	-	-	Nil	Sauna Environmentally Cleaned by 'Unrestricted Licensed Contractor Thuroona services March 2022
ACM	Cement Debris Fragments	Sauna, Throughout	163	ZA4796	0	-	-	-	-	-	Nil	
ACM	Gasket (White Background with Black Cursive Writing)	Pool Room, Starboard, Aft , Valve to Pool Inlet (Vertical Position)		T5708	0	-	-	-	-	-	Nil	
ACM	Gasket (Green)	Pool Room, Starboard, Aft , Valve to Pool Inlet (Horizontal Position)		T5709	0	-	-	-	-	-	Nil	
ACM	Packing (Off-White in colour)	Sauna, Conduit Penetrations (Throughout)	128	T5710	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Packing	Electrical Cable Trunk Room, Cables through Bulkhead	129	G6322	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Packing	B Deck - Vent Space Cable Penetrations	161	Similar to G6322	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Flange Gasket	Casing - Narrow Bore Water Pipe On Gantry	-	C4597	0	-	-	-	-	-	Nil	Surveyed December 2012
ACM	Flange Gasket	Casing - PS Boiler Exhaust Stack	-	C4598	0	-	-	-	-	-	Nil	Surveyed December 2012
ACM	Gasket to fire fighting line	B Deck - External Port Side	-	G2246	0	-	-	-	-	-	Nil	Surveyed December 2013

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket to air line	B Deck - External Port Side	-	G2247	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Brown vinyl floor covering	B Deck - Corridor adjacent Changing Room C	-	G2248	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to shut off valve for swimming pool	B Deck - Starboard	-	G2249	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Insulation to Sauna	B Deck - Sauna	4	G2446	2	2	2	3	4	40	A2	Surveyed December 2013 Re-sampled in 2017 returning a negative result (Sample No. T5707) Material Removed. Clearance Certificate Requires Sourcing
ACM	Gasket	To flange joints to Pool Seawater Supply pipework valves		FD1078	0	-	-	-	-	-	Nil	Surveyed May 2018
<b>C Deck</b>												
ACM	Gasket	External, Port Stairs, Deluge System, Flange Joint	130	G6396	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Packing	C Deck - Electrical Cable Trunk Room, Cables Through Bulkhead	159	Presumed	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Packing	C Deck - Vent Space Cable Penetrations	160	Presumed	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Brown vinyl floor covering	Mid Ship Stairwell	-	G2244	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to vent	External Starboard	-	G2245	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Insulation	To Air Conditioning Ducting in Cable Trunk Compartment	-	FD1081	0	-	-	-	-	-	Nil	Surveyed December 2013



Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Bulkhead cable penetration putty material	Void spaces in deck head, C deck fwd cross alley way	203	ZA9324	1	2	1	2	1	7	A3	Program for Planned Removal, Manage & Re-inspect Periodically
<b>D Deck</b>												
ACM	Gasket to fire fighting line	D Deck - External Starboard	-	G2243	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Packing	D Deck - Electrical Cable Trunk Room, Cables Through Bulkhead	157	Presumed	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel  Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Packing	D Deck - Vent Space Cable Penetrations	158	Presumed	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel  Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Insulation	To Air Conditioning Ducting in Cable Trunk Compartment	-	Refer FD1081	0	-	-	-	-	-	Nil	Surveyed December 2013
<b>E Deck</b>												
ACM	Packing	Electrical Cable Trunk Room, Cables Through Bulkhead	131	G6320	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel  Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Packing	E Deck - Vent Space Cable Penetrations	156	Similar to G6320	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel  Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Ventilation Trunk, Domestic Hot water Isolation Valve Flange		G6321	0	-	-	-	-	-	Nil	

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket to pipework	E Deck - Ventilation Trunk Room, Starboard	-	G2241	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to fire fighting line	E Deck - External Starboard	-	G2242	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Insulation	To Air Conditioning Ducting in Cable Trunk Compartment	-	Refer FD1081	0	-	-	-	-	-	Nil	Surveyed December 2013
<b>F Deck</b>												
ACM	Gasket Spiral Bound 'Pillar' White Sealing Element	No.2 Equipment Room		T5866	0	-	-	-	-	-	Nil	
ACM	Gasket Loose 'Valqua'	No.2 Equipment Room, Aft Wall	132	T5867	P4	0	2	4	4	5	A3	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd' Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket Loose 'Tombo NA 1995'	No.2 Equipment Room, Aft Wall	-	T5868	0	-	-	-	-	-	Nil	
ACM	Gasket Loose 'Tombo NA'	No.2 Equipment Room, Aft Wall	-	T5869	0	-	-	-	-	-	Nil	
ACM	Gasket Loose 'Valqua 930 - Electro-Magnetic Mount 921.10.01.G02	No.2 Equipment Room, Drawer DE8	133	T5870	4	0	2	4	4	5	A3	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd'
ACM	Gasket Loose 'Valqua' (Orange Font, Blue Backing)	No.2 Equipment Room, Drawer DD9	-	T5871	P4	0	2	4	4	5	A3	Item removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd' Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket Loose, Boil Off Valve Packing Gland (Orange) x5 Pieces	No.2 Equipment Room, Drawer DB4	134	T5872	1	0	2	1	1	5	A3	Remaining gland packing to be removed from service by 'Unrestricted Licensed Contractor PCB Holding Pty Ltd' Removed (x1 Piece) removed from service by 'Unrestricted Licensed Contractor PCB Holdings Pty Ltd Organise Removal and Replacement of (x4 Pieces) Still in Drawer DB4

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Packing (Off-White, Soft)	No.2 Equipment Room, Starboard Wall, Conduit Penetration	135	T5873	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel  Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Packing (White, Hard)	No.2 Equipment Room, Starboard Wall, Conduit Penetration	136	T5874	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel  Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Packing (White, Hard)	No.1 Equipment Room, Conduit Penetration	155	Similar to T5874	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel  Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	Flying Passage, Dome No.4, Starboard, Aft, Deluge Flange		G6408	0	-	-	-	-	-	Nil	
ACM	Gasket	Flying Passage, Dome No. 4, FWD Port, Blanked of Flange		G6409	0	-	-	-	-	-	Nil	
ACM	Gasket	Flying Passage, Dome No.3, Motorised Valve, VS350		G6410	0	-	-	-	-	-	Nil	
ACM	Gasket	Flying Passage, Dome No.2, FWD Port, Blanked Off Flange		G6411	0	-	-	-	-	-	Nil	
ACM	Gasket	Flying Passage, Dome No.2, Air Supply Isolation Valve, Adjacent Fire Hydrant No.46		G6412	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket	Flying Passage, Dome No.1, Hold Escape Blank		G6313	0	-	-	-	-	-	Nil	

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Packing	Electrical Cable Trunk Room, Starboard fwd, Cables Through Bulk Head	138		1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Packing	Electrical Cable Trunk Room, Starboard, Cables Through Bulk Head	139	G6318	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Packing	Electrical Cable Space, Starboard, Cables Through Bulk Head	140	G6319	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Packing	F Deck - Vent Space	154	Similar to G6318	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Woven textile door seal	F Deck - Electrical Cable Trunk Room, Starboard	-	G2235	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Composite material in cable penetration	F Deck - No. 2 Equipment Room, Port Side	-	G2236	0	-	-	-	-	-	Nil	Surveyed December 2013



Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Spiral wound gasket	F Deck - Corridor Port Side	-	G2237	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to fire fighting line	F Deck - External Starboard	-	G2238	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to fire fighting hydrant (valve no. DK 65)	F Deck - External Port Side	-	G2239	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to exhaust stack	F Deck - Funnel Room	-	G2240	0	-	-	-	-	-	Nil	Surveyed December 2013
<b>G Deck</b>												
ACM	Gasket Loose 'Garlock Blue-Gard'	Cryo' Workshop'		T5875	0	-	-	-	-	-	Nil	
ACM	Gasket (Blue Text, Made in USA) Green Backing	Workshop 'Cryo's', On Rack		G6315	0	-	-	-	-	-	Nil	
ACM	Fibre Cement (Perforated)	Radio Room, Deck Head		G6316	0	-	-	-	-	-	Nil	
ACM	Blue vinyl floor covering	G Deck - Corridor Port Side	-	G2230	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Gasket to fire damper	G Deck - Wheel House Room, Starboard	-	G2231	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Loose gasket	G Deck - Wheel House Room, Starboard	-	G2232	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Composite material in cable penetration	G Deck Vent Trunk	153	Presumed	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel  Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Composite material in cable penetration	G Deck Radio Room Under Desk	151	ZA4795	0	-	-	-	-	-	Nil	Surveyed February 2022
ACM	Composite material in cable penetration	G Deck Cable Space Workshop	152	Presumed	1	1	1	1	0	4	A4	Item encapsulated from service by 'Unrestricted Licensed Contractor Thuroona services March 2022 Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel  Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Insulation to fire damper duct	G Deck - Wheel House Room, Starboard	-	G2233	0	-	-	-	-	-	Nil	Surveyed December 2013

Hazard	Material Description	Location	Photograph No.	Sample Number	Asbestos Fibre Type	Surface Treatment	Product Type	Condition	Likelihood of Disturbance	Risk Score	Action Rating	Comments/Recommendations
ACM	Gasket to fire fighting hydrant	G Deck - External Starboard	-	G2234	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Bulkhead cable penetration putty material	Bulkhead cable penetration putty material G deck electrical cable trunk room - Fwd	201	ZA9326	1	2	1	2	1	7	A3	Program for Planned Removal, Manage & Re-inspect Periodically
ACM	Bulkhead cable penetration putty material	Bulkhead cable penetration putty material G deck electrical cable trunk room - Aft	202	ZA9325	1	2	1	2	1	7	A3	Program for Planned Removal, Manage & Re-inspect Periodically
<b>Nav. Bridge</b>												
ACM	Fibre Cement Sheet	Port Backing to Heater		G6393	0	-	-	-	-	-	Nil	
ACM	Fibre Cement Sheet	Starboard Backing to Heater		Refer to G6393	0	-	-	-	-	-	Nil	
ACM	Packing	Starboard Bridge Wing	141	G6394	P1	1	1	1	2	6	A3	Recommended actions are to enclose, encapsulate and seal. Care is to be taken during re-fit owing to the materials becoming friable during maintenance, refurbishment or breaking up of the vessel. Manage and remain in situ. Inspect periodically for damage. This item is recommended to be removed by a Licensed Asbestos Removalist Contractor (LARC)
ACM	Gasket	External, Monkey Island, Air Horn, Starboard Side	142	G6395	P1	0	2	1	0	4	A4	Unknown Mineral Fibres (UMF) Detected by PLM Including Note: The fibres detected may not be Asbestos fibres. confirm the identities, another independent analytical technique may be necessary)
ACM	Gasket to fire fighting hydrant	Bridge Deck - External Starboard Side	-	G2227	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Composite material in cable penetration	Bridge Deck - External Starboard Side	-	G2228	0	-	-	-	-	-	Nil	Surveyed December 2013
ACM	Composite material in cable penetration White	Bridge Deck - Electrical Cupboard	149	ZA4793	0	-	-	-	-	-	Nil	Surveyed February 2022
ACM	Composite material in cable penetration Pink	Bridge Deck - Electrical Cupboard	150	ZA4794	0	-	-	-	-	-	Nil	Surveyed February 2022
ACM	Gasket to compressed air pipework	Bridge Deck - External Port Side	-	G2229	0	-	-	-	-	-	Nil	Surveyed December 2013
<b>CMR</b>												
ACM	Green Gasket	Auxillary CCS under floor plate	0	-	-	-	-	-	-	-	Nil	Surveyed November 2021

## APPENDIX B: LABORATORY ANALYSIS CERTIFICATE

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**Tetra Tech Coffey Pty Ltd**  
**Bishops See Level 1, 235 St Georges Terrace**  
**Perth**  
**WA 6000**



**NATA Accredited**  
**Accreditation Number 2377**  
**Site Number 2370**

Accredited for compliance with ISO/IEC 17025—Testing  
 NATA is a signatory to the ILAC Mutual Recognition  
 Arrangement for the mutual recognition of the  
 equivalence of testing, medical testing, calibration,  
 inspection, proficiency testing scheme providers and  
 reference materials producers reports and certificates.

**Attention:** Edward Rowley  
**Report** 947652-AID  
**Project Name**  
**Project ID** 754-PEREN310903  
**Received Date** Dec 06, 2022  
**Date Reported** Dec 13, 2022

### Methodology:

Asbestos Fibre  
 Identification

Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques.

*NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*

Unknown Mineral  
 Fibres

Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity.

*NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*

Subsampling Soil  
 Samples

The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed.

*NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*

Bonded asbestos-  
 containing material  
 (ACM)

The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination. The resultant material is then further examined in accordance with AS 4964 - 2004.

*NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*

Limit of Reporting

The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w).

The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk).

*NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos". This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*



**Project Name**
**Project ID**

754-PEREN310903

**Date Sampled**

Nov 30, 2022 to Dec 01, 2022

**Report**

947652-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
ZA9326 Bulkhead cable penetration putty material G deck electrical cable trunk room - Fwd	22-De0011961	Nov 30, 2022	Approximate Sample 1g / 10x10x5mm Sample consisted of: a) Grey mastic fragments b) White paint fragments	Chrysotile asbestos detected (a).
ZA9325 Bulkhead cable penetration putty material G deck electrical cable trunk room - Aft	22-De0011962	Nov 30, 2022	Approximate Sample 1g / 15x10x10mm Sample consisted of: a) Grey mastic fragments b) White paint fragments	Chrysotile asbestos detected (a). Synthetic mineral fibre detected.
ZA9324 Void spaces in deck head, C deck fwd cross alley way	22-De0011963	Nov 30, 2022	Approximate Sample 1g / 10x10x5mm Sample consisted of: a) Grey mastic fragments b) White paint fragments	Chrysotile asbestos detected (a). Organic fibre detected.
ZA9323 Void spaces in deck head, upper deck fwd cross alley way	22-De0011964	Nov 30, 2022	Approximate Sample 1g / 40x20x5mm Sample consisted of: a) Grey fibrous fragments b) White paint fragments	No asbestos detected. Synthetic mineral fibre detected. No trace asbestos detected.
ZA9322 Bulkhead cable penetration putty material, Upper deck electrical cable trunk room	22-De0011965	Nov 30, 2022	Approximate Sample 2g / 30x20x10mm Sample consisted of: a) Grey mastic fragments b) White paint fragments	Chrysotile asbestos detected (a).
ZA9311 Flange gaskets on spectacle piece for dry air from IGG plant to DBPP, Port UDPP aft	22-De0011966	Nov 30, 2022	Approximate Sample 1g / 10x5x5mm Sample consisted of: Blue gasket	No asbestos detected. Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
ZA9310 No. 7 WBT vent pipe port, new vent piping, take flange gasket Port UDPP aft	22-De0011967	Nov 30, 2022	Approximate Sample 1g / 20x10x5mm Sample consisted of: Beige mastic	No asbestos detected. Organic fibre detected. No trace asbestos detected.
ZA9321 Miyawkai steam traps boiler top Boiler tops, E/R 2nd deck	22-De0011968	Nov 30, 2022	Approximate Sample 1g / 20x10x5mm Sample consisted of: a) White vitreous fibers b) Binding matrix	No asbestos detected. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.
ZA9320 Boiler drum valves, Boiler tops aft, 2nd deck, steam drum	22-De0011969	Nov 30, 2022	Approximate Sample 1g / 5x5x5mm Sample consisted of: a) Vitreous fibrous fibers b) Binding matrix	No asbestos detected. Synthetic mineral fibre detected. No trace asbestos detected.
ZA9309 6 MPa steam pipe aft of boilers, 3rd deck	22-De0011970	Nov 30, 2022	Approximate Sample 1g / 20x10x5mm Sample consisted of: Loose vitreous fibers	No asbestos detected. Synthetic mineral fibre detected. No trace asbestos detected.
ZA9319 #1 DG exhaust manifold, fwd near turbo charger Insulation blanket for bellows 3rd deck, #1 DG room	22-De0011971	Nov 30, 2022	Approximate Sample 1g / 20x20x1mm Sample consisted of: Loose vitreous fibers	No asbestos detected. Synthetic mineral fibre detected. No trace asbestos detected.
ZA9318 Flange gaskets on pipework for sea water inlet into #2 main CCS cooler, E/R 4th deck	22-De0011972	Nov 30, 2022	Approximate Sample 1g / 40x15x10mm Sample consisted of: Green gasket	No asbestos detected. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.
ZA9317 Flange gaskets for service air filters outboard of service air receiver, E/R 4th deck	22-De0011973	Nov 30, 2022	Approximate Sample 1g / 20x10x5mm Sample consisted of: Blue gasket	No asbestos detected. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.
ZA9315 Ballast water treatment system pipework, Strainer, E/R bottom plates and 4th deck	22-De0011974	Dec 01, 2022	Approximate Sample 1g / 20x10x5mm Sample consisted of: Beige gasket	No asbestos detected. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.
ZA9314 Ballast water treatment system pipework, Outlet pipe flange, E/R bottom plates and 4th deck	22-De0011975	Dec 01, 2022	Approximate Sample 1g / 5x5x5mm Sample consisted of: Blue gasket	No asbestos detected. Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
ZA9304 Ballast water treatment system pipework, Strainer, E/R 4th deck Stbd	22-De0011976	Dec 01, 2022	Approximate Sample 1g / 10x10x5mm Sample consisted of: Grey gasket	No asbestos detected. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.
ZA9303 Ballast water treatment system pipework, Ballast Pipework, E/R 4th deck Stbd	22-De0011977	Dec 01, 2022	Approximate Sample 1g / 15x10x10mm Sample consisted of: Blue gasket	No asbestos detected. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.
ZA9313 Insulation blanket steam chest ahead stop astern maneuvering valve 4th deck and turbine tops	22-De0011978	Dec 01, 2022	Approximate Sample 1g / 50x30x10mm Sample consisted of: a) White matted fibrous insulation b) White loose fiber bundles	No asbestos detected. Synthetic mineral fibre detected. No trace asbestos detected.
ZA9312 Flange gaskets on new scoop inlet tube upstream of butterfly valve, Engine room tank top	22-De0011979	Dec 01, 2022	Approximate Sample 1g / 15x10x5mm Sample consisted of: Blue gasket	No asbestos detected. Organic fibre detected. No trace asbestos detected.
ZA9308 Workshop Spare Gaskets - Tombo 1995	22-De0011980	Dec 01, 2022	Approximate Sample 1g / 15x10x5mm Sample consisted of: Beige gasket	No asbestos detected. Organic fibre detected. No trace asbestos detected.
ZA9307 Workshop Spare Gaskets - Teadit 1005	22-De0011981	Dec 01, 2022	Approximate Sample 1g / 10x5x5mm Sample consisted of: Blue gasket	No asbestos detected. Organic fibre detected. No trace asbestos detected.
ZA9306 Workshop Spare Gaskets - Teadit 1006	22-De0011982	Dec 01, 2022	Approximate Sample 1g / 20x10x5mm Sample consisted of: White gasket	No asbestos detected. Organic fibre detected. No trace asbestos detected.
ZA9305 Workshop Spare Gaskets - James Walker Sentinel	22-De0011983	Dec 01, 2022	Approximate Sample 1g / 40x30x5mm Sample consisted of: Beige gasket	No asbestos detected. Organic fibre detected. No trace asbestos detected.
ZA9302 E/R DG Room 1, Debris from Bulkhead cable penetration	22-De0011984	Dec 01, 2022	Approximate Sample 4g / 40x20x10mm Sample consisted of: White plaster	No asbestos detected. Organic fibre detected. No trace asbestos detected.
ZA9301 E/R DG Room 1, Cooling system inlet	22-De0011985	Dec 01, 2022	Approximate Sample 1g / 10x10x5mm Sample consisted of: Blue gasket	Chrysotile asbestos detected. Organic fibre detected.
ZA9300 Stores - BF1, Soot blower parking - Port 639.10.01.018	22-De0011986	Dec 01, 2022	Approximate Sample 25g / 80x80x15mm Sample consisted of: a) Black rubbery gasket with white coating b) Blue gasket	Chrysotile asbestos detected. Organic fibre detected. Synthetic mineral fibre detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
<a href="#">ZA9299</a> Stores - GA3, Loose gland packings	22-De0011987	<a href="#">Dec 01, 2022</a>	Approximate Sample 35g / 200x20x20mm Sample consisted of: Black fibrous woven gasket	No asbestos detected. Synthetic mineral fibre detected. No trace asbestos detected.



**Sample History**

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

<b>Description</b>	<b>Testing Site</b>	<b>Extracted</b>	<b>Holding Time</b>
Asbestos - LTM-ASB-8020	Welshpool	Dec 06, 2022	Indefinite

**Company Name:** Tetra Tech Coffey Pty Ltd  
**Address:** Bishops See Level 1, 235 St Georges Terrace  
 Perth  
 WA 6000

**Project Name:**  
**Project ID:** 754-PEREN310903

**Order No.:**  
**Report #:** 947652  
**Phone:** 08 9355 7100  
**Fax:** 08 9470 8601

**Received:** Dec 6, 2022 11:00 AM  
**Due:** Dec 12, 2022  
**Priority:** 4 Day  
**Contact Name:** Edward Rowley

**Eurofins Analytical Services Manager : Wafa Hanna**

Sample Detail						Asbestos Absence /Presence
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
Perth Laboratory - NATA # 2377 Site # 2370						X
External Laboratory						
1	ZA9326	Nov 30, 2022		Building Materials	L22-De0011961	X
2	ZA9325	Nov 30, 2022		Building Materials	L22-De0011962	X
3	ZA9324	Nov 30, 2022		Building Materials	L22-De0011963	X
4	ZA9323	Nov 30, 2022		Building Materials	L22-De0011964	X
5	ZA9322	Nov 30, 2022		Building Materials	L22-De0011965	X
6	ZA9311	Nov 30, 2022		Building Materials	L22-De0011966	X
7	ZA9310	Nov 30, 2022		Building Materials	L22-De0011967	X
8	ZA9321	Nov 30, 2022		Building Materials	L22-De0011968	X

**Company Name:** Tetra Tech Coffey Pty Ltd  
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 Perth  
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**Project ID:** 754-PEREN310903

**Eurofins Analytical Services Manager : Wafa Hanna**

Sample Detail						Asbestos Absence / Presence
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>						X
9	ZA9320	Nov 30, 2022		Building Materials	L22-De0011969	X
10	ZA9309	Nov 30, 2022		Building Materials	L22-De0011970	X
11	ZA9319	Nov 30, 2022		Building Materials	L22-De0011971	X
12	ZA9318	Nov 30, 2022		Building Materials	L22-De0011972	X
13	ZA9317	Nov 30, 2022		Building Materials	L22-De0011973	X
14	ZA9315	Dec 01, 2022		Building Materials	L22-De0011974	X
15	ZA9314	Dec 01, 2022		Building Materials	L22-De0011975	X
16	ZA9304	Dec 01, 2022		Building Materials	L22-De0011976	X
17	ZA9303	Dec 01, 2022		Building Materials	L22-De0011977	X
18	ZA9313	Dec 01, 2022		Building	L22-De0011978	X

**Company Name:** Tetra Tech Coffey Pty Ltd  
**Address:** Bishops See Level 1, 235 St Georges Terrace  
 Perth  
 WA 6000

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**Contact Name:** Edward Rowley

**Eurofins Analytical Services Manager : Wafa Hanna**

Sample Detail						Asbestos Absence / Presence
Perth Laboratory - NATA # 2377 Site # 2370						
18	ZA9313	Dec 01, 2022		Building Materials	L22-De0011978	
19	ZA9312	Dec 01, 2022		Building Materials	L22-De0011979	X
20	ZA9308	Dec 01, 2022		Building Materials	L22-De0011980	X
21	ZA9307	Dec 01, 2022		Building Materials	L22-De0011981	X
22	ZA9306	Dec 01, 2022		Building Materials	L22-De0011982	X
23	ZA9305	Dec 01, 2022		Building Materials	L22-De0011983	X
24	ZA9302	Dec 01, 2022		Building Materials	L22-De0011984	X
25	ZA9301	Dec 01, 2022		Building Materials	L22-De0011985	X
26	ZA9300	Dec 01, 2022		Building Materials	L22-De0011986	X
27	ZA9299	Dec 01, 2022		Building	L22-De0011987	X





**Eurofins ARL Pty Ltd**

ABN: 91 05 0159 898

**Perth**  
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 WA 6106  
 Tel: +61 8 6253 4444  
 NATA# 2377 Site# 2370

**Eurofins Environment Testing Australia Pty Ltd**

ABN: 50 005 085 521

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 Grovedale  
 VIC 3216  
 Tel: +61 3 8564 5000  
 NATA# 1261 Site# 1254

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 Girraween  
 NSW 2145  
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 NATA# 1261 Site# 18217

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 Murarrie  
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 NATA# 1261 Site# 20794

**Newcastle**  
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 NATA# 1261 Site# 25079

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 43 Detroit Drive  
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 Christchurch 7675  
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 IANZ# 1290

web: www.eurofins.com.au  
 email: EnviroSales@eurofins.com

<b>Company Name:</b>	Tetra Tech Coffey Pty Ltd	<b>Order No.:</b>		<b>Received:</b>	Dec 6, 2022 11:00 AM
<b>Address:</b>	Bishops See Level 1, 235 St Georges Terrace Perth WA 6000	<b>Report #:</b>	947652	<b>Due:</b>	Dec 12, 2022
<b>Project Name:</b>		<b>Phone:</b>	08 9355 7100	<b>Priority:</b>	4 Day
<b>Project ID:</b>	754-PEREN310903	<b>Fax:</b>	08 9470 8601	<b>Contact Name:</b>	Edward Rowley
<b>Eurofins Analytical Services Manager : Wafa Hanna</b>					

<b>Sample Detail</b>	Asbestos Absence /Presence
<b>Perth Laboratory - NATA # 2377 Site # 2370</b>	X
Materials	
<b>Test Counts</b>	27

## Internal Quality Control Review and Glossary General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with the colour **blue** indicates data provided by customer that may have an impact on the results.
5. Information identified on this report with the colour **orange** indicates sections of the report not covered by the laboratory's scope of NATA accreditation.
6. This report replaces any interim results previously issued.

## Holding Times

Please refer to the most recent version of the 'Sample Preservation and Container Guide' for holding times (QS3001).

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported. Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

## Units

% w/w:	Percentage weight-for-weight basis, e.g. of asbestos in asbestos-containing finds in soil samples ( <b>% w/w</b> )
F/fld	Airborne fibre filter loading as Fibres ( <b>N</b> ) per Fields counted ( <b>n</b> )
F/mL	Airborne fibre reported concentration as Fibres per millilitre of air drawn over the sampler membrane ( <b>C</b> )
g, kg	Mass, e.g. of whole sample ( <b>M</b> ) or asbestos-containing find within the sample ( <b>m</b> )
g/kg	Concentration in grams per kilogram
L, mL	Volume, e.g. of air as measured in AFM ( <b>V = r x t</b> )
L/min	Airborne fibre sampling Flowrate as litres per minute of air drawn over the sampler membrane ( <b>r</b> )
min	Time ( <b>t</b> ), e.g. of air sample collection period

## Calculations

Airborne Fibre Concentration:  $C = \left(\frac{A}{a}\right) \times \left(\frac{N}{n}\right) \times \left(\frac{1}{V}\right) \times \left(\frac{1}{r}\right) = K \times \left(\frac{N}{n}\right) \times \left(\frac{1}{Vr}\right)$

Asbestos Content (as asbestos):  $\% w/w = \frac{(m \times PA)}{M}$

Weighted Average (of asbestos):  $\%_{WA} = \frac{\sum (m \times PA)_x}{x}$

## Terms

<b>%asbestos</b>	Estimated percentage of asbestos in a given matrix. May be derived from knowledge or experience of the material, informed by HSG264 <i>Appendix 2</i> , else assumed to be 15% in accordance with WA DOH <i>Appendix 2 (PA)</i> .
<b>ACM</b>	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded (non-friable) condition. For the purposes of the NEPM and WA DOH, ACM corresponds to material larger than 7 mm x 7 mm.
<b>AF</b>	Asbestos Fines. Asbestos contamination within a soil sample, as defined by WA DOH. Includes loose fibre bundles and small pieces of friable and non-friable material such as asbestos cement fragments mixed with soil. Considered under the NEPM as equivalent to "non-bonded / friable".
<b>AFM</b>	Airborne Fibre Monitoring, e.g. by the MFM.
<b>Amosite</b>	Amosite Asbestos Detected. Amosite may also refer to Fibrous Grunerite or Brown Asbestos. Identified in accordance with AS 4964-2004.
<b>AS</b>	Australian Standard.
<b>Asbestos Content (as asbestos)</b>	Total % w/w asbestos content in asbestos-containing finds in a soil sample ( <b>% w/w</b> ).
<b>Chrysotile</b>	Chrysotile Asbestos Detected. Chrysotile may also refer to Fibrous Serpentine or White Asbestos. Identified in accordance with AS 4964-2004.
<b>COC</b>	Chain of Custody.
<b>Crocidolite</b>	Crocidolite Asbestos Detected. Crocidolite may also refer to Fibrous Riebeckite or Blue Asbestos. Identified in accordance with AS 4964-2004.
<b>Dry</b>	Sample is dried by heating prior to analysis.
<b>DS</b>	Dispersion Staining. Technique required for Unequivocal Identification of asbestos fibres by PLM.
<b>FA</b>	Fibrous Asbestos. Asbestos containing material that is wholly or in part friable, including materials with higher asbestos content with a propensity to become friable with handling, and any material that was previously non-friable and in a severely degraded condition. For the purposes of the NEPM and WA DOH, FA generally corresponds to material larger than 7 mm x 7 mm, although FA may be more difficult to visibly distinguish and may be assessed as AF.
<b>Fibre Count</b>	Total of all fibres (whether asbestos or not) meeting the counting criteria set out in the NOHSC:3003
<b>Fibre ID</b>	Fibre Identification. Unequivocal identification of asbestos fibres according to AS 4964-2004. Includes Chrysotile, Amosite (Grunerite) or Crocidolite asbestos.
<b>Friable</b>	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory's remit to assess degree of friability.
<b>HSG248</b>	UK HSE HSG248, <i>Asbestos: The Analysts Guide</i> , 2nd Edition (2021).
<b>HSG264</b>	UK HSE HSG264, <i>Asbestos: The Survey Guide</i> (2012).
<b>ISO (also ISO/IEC)</b>	International Organization for Standardization / International Electrotechnical Commission.
<b>K Factor</b>	Microscope constant ( <b>K</b> ) as derived from the effective filter area of the given AFM membrane used for collecting the sample ( <b>A</b> ) and the projected eyepiece graticule area of the specific microscope used for the analysis ( <b>a</b> ).
<b>LOR</b>	Limit of Reporting.
<b>MFM (also NOHSC:3003)</b>	Membrane Filter Method. As described by the Australian Government National Occupational Health and Safety Commission, <i>Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres</i> , 2nd Edition [NOHSC:3003(2005)].
<b>NEPM (also ASC NEPM)</b>	National Environment Protection (Assessment of Site Contamination) Measure, (2013, as amended).
<b>Organic</b>	Organic Fibres Detected. Organic may refer to Natural or Man-Made Polymeric Fibres. Identified in accordance with AS 4964-2004.
<b>PCM</b>	Phase Contrast Microscopy. As used for Fibre Counting according to the MFM.
<b>PLM</b>	Polarised Light Microscopy. As used for Fibre Identification and Trace Analysis according to AS 4964-2004.
<b>SMF</b>	Synthetic Mineral Fibre Detected. SMF may also refer to Man Made Vitreous Fibres. Identified in accordance with AS 4964-2004.
<b>SRA</b>	Sample Receipt Advice.
<b>Trace Analysis</b>	Analytical procedure used to detect the presence of respirable fibres (particularly asbestos) in a given sample matrix.
<b>UK HSE HSG</b>	United Kingdom, Health and Safety Executive, Health and Safety Guidance, publication.
<b>UMF</b>	Unidentified Mineral Fibre Detected. Fibrous minerals that are detected but have not been unequivocally identified by PLM with DS according the AS 4964-2004. May include (but not limited to) Actinolite, Anthophyllite or Tremolite asbestos.
<b>WA DOH</b>	Reference document for the NEPM. Government of Western Australia, <i>Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia</i> (updated 2021), including Appendix Four: <i>Laboratory analysis</i>
<b>Weighted Average</b>	Combined average % w/w asbestos content of all asbestos-containing finds in the given aliquot or total soil sample ( <b>%<sub>WA</sub></b> ).

**Comments**

**Sample Integrity**

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	N/A
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	N/A
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

**Asbestos Counter/Identifier:**

Rhys Thomas                      Senior Analyst-Asbestos

**Authorised by:**

Reagan Neal                      Senior Analyst-Asbestos



**Kim Rodgers**  
**Business Unit Manager**

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

\* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

## APPENDIX C: RISK ASSESSMENT & GLOSSARY

Tetra Tech Coffey adopts the following risk assessment algorithm in order to assess the risks associated with individual asbestos-containing materials identified:

### ASBESTOS REGISTER SECTION

#### Friable

Variable	Score	Description
Friability	Y	Asbestos cement debris, or material which when dry may become crumbled, pulverised or reduced to powder by hand pressure.
	N	Bonded i.e. non-friable material

#### Materials Assessment

Variables	Scores	Examples of Score Descriptions
Asbestos Type	0	No asbestos
	1	Chrysotile only
	2	Amphibole asbestos (excluding crocidolite)
	3	Crocidolite
Product Type	0	No asbestos detected
	1	Bonded asbestos in good condition
	2	Friable asbestos in good condition or cement in poor condition
	3	Friable asbestos in poor condition
Extent of Damage	0	No visible damage
	1	Minor scratches or mark, broken edges
	2	Significant breakage, many small areas of damage to friable material
	3	High damage, visible debris
Surface Treatment	0	Bonded Asbestos including encapsulated asbestos cement
	1	Enclosed laggings, sprays and boards or bare cement
	2	Bare board or encapsulated lagging/spray or cement debris
	3	Unsealed lagging/spray

**Location Assessment**

Variables	Scores	Examples of Score Descriptions
<b>Occupant Activity</b>	0	Rare disturbance, e.g. little used store room
	1	Low disturbance, e.g. Office type activity
	2	Periodic disturbance, e.g. industrial or vehicular activity which may contact ACMs
	3	High levels of disturbance e.g. fire door with AIB sheet in constant use
<b>Likelihood of Disturbance</b>	0	Usually inaccessible or unlikely to be disturbed
	1	Minimal likelihood for disturbance
	2	Likely disturbance
	3	Frequent disturbance
<b>Human Exposure Potential</b>	0	Infrequent
	1	Monthly
	2	Weekly
	3	Daily
<b>Maintenance Activity</b>	0	Minor disturbance (e.g. possibility of contact when gaining access)
	1	Low Disturbance (e.g. changing light bulbs in AIB ceiling).
	2	Medium disturbance (e.g. lifting one or two ceiling tiles to access a valve)
	3	High level of disturbance (e.g. moving a number of AIB ceiling tiles to replace a valve or for re-cabling)

**Risk Score**

The asbestos-containing material risk score is a quantitative assessment determined by the sum of the scores based on the Materials and Location Assessments, i.e. Risk score = Material Score + Location Score (out of as possible 24).

Should no asbestos be detected then the register will indicate a risk score of 0.

Variable	Scores	Examples of Score Descriptions
<b>Risk Score</b>	2 - 4	Very Low Risk - Action Score A5
	5 - 7	Low Risk – A4
	8 - 11	Medium Risk – Action Score A3
	12 - 15	High Risk – Action Score A2
	16 - 24	Very High Risk – Action Score A1



### Action Ratings

A1	Action 1	<b>Restrict Access, Manage and Remove Under Fully Controlled Conditions</b>
		<p>As a guide, the material conforms to one, or more, of the following:</p> <ul style="list-style-type: none"> <li>• Friable or poorly bonded to substrate, located in accessible areas</li> <li>• Severely damaged/water damaged, or unstable</li> <li>• Further damage or deterioration likely</li> <li>• Friable asbestos material located in air conditioning ducting</li> <li>• Asbestos debris in reasonably accessible areas</li> </ul>
A2	Action 2	<b>Restrict Access, Manage and Remove Utilising Appropriate Control Measures</b>
		<p>As a guide, the material conforms to one, or more, of the following:</p> <ul style="list-style-type: none"> <li>• Damaged material (including debris)</li> <li>• In a reasonably accessible area</li> <li>• Possibility of disturbance through contact</li> <li>• Stored asbestos material in reasonably accessible areas</li> </ul>
A3	Action 3	<b>Program for Planned Removal, Manage &amp; Re-inspect Periodically</b>
		<p>As a guide, the material conforms to one, or more, of the following:</p> <ul style="list-style-type: none"> <li>• Further disturbance or damage unlikely other than during maintenance or service</li> <li>• Readily visible for further assessment</li> <li>• Asbestos debris in rarely accessed areas</li> <li>• Possibility of deterioration caused by weathering</li> <li>• Poorly bonded to substrate with bonding un-achievable</li> </ul>
A4	Action 4	<b>Enclose, Encapsulate or Seal, Manage &amp; Re-inspect Periodically</b>
		<p>As a guide, the material conforms to one, or more, of the following:</p> <ul style="list-style-type: none"> <li>• Damaged material in reasonably accessible area</li> <li>• Bonded asbestos products located in accessible areas</li> <li>• Friable material or poorly bonded to substrate with bonding achievable</li> <li>• Possibility of fibre release through non aggressive disturbance or contact</li> <li>• Possibility of deterioration caused by weathering and bonding possible</li> </ul>
A5	Action 5	<b>Manage &amp; Re-inspect Periodically</b>
		<p>As a guide, the material conforms to one, or more, of the following:</p> <ul style="list-style-type: none"> <li>• Firmly bonded to substrate and readily visible for inspection</li> <li>• Inaccessible and / or fully contained</li> <li>• Stable and damage unlikely</li> </ul>

### Action Required

The Tetra Tech consultant surveying the vessel may conduct remedial actions (including restricted access to stored materials) where suspect materials are identified until laboratory testing can be completed. Where negative results for samples are returned the items/materials may return to circulation.

R	Return to Service	<b>Restricted Access to Items for Reassurance</b>
		Return to Service, No Asbestos Detected

## APPENDIX D: ASBESTOS MATERIALS MAINTENANCE LOG

### ASBESTOS MATERIALS MAINTENANCE LOG

The following log should be maintained by the responsible person. It should contain information relating to the ongoing maintenance or control measures associated with Asbestos Materials including; removal, remedial works, repairs, inspection, monitoring and clearance details etc.

<b>ASBESTOS MATERIALS MAINTENANCE LOG</b>				
<b>Site:</b>	Northwest Sandpiper (IMO: #8913150)			
<b>Date</b>	<b>Scope / Location</b>	<b>Carried out by</b>	<b>Result/Comments</b>	<b>Entered by</b>
29/11/2012 – 1/12/2012	Initial Hazardous Materials Survey	Raymond Payne of Coffey Environments	Register produced and delivered	RP of Coffey Environments
9-30/10/2017	Asbestos Re-Survey	Coffey	Updated register produced and delivered	Coffey
13-18/03/2018	Airborne Fibre Monitoring and Clearance	Kathryn Longden of Coffey	Clearance Certificate produced and delivered	KL of Coffey
9-10/05/2018	Asbestos Re-Survey	Coffey	Updated register produced and delivered	Coffey
9/11/2018	Post Re-Fit Asbestos Re-Survey	Coffey	Updated register produced and delivered	Coffey
3/11/2021	Post Re-Fit Asbestos Re-Survey	Kurtis Kavanagh of Coffey	Updated register produced and delivered	KK of Coffey
31/11/2022	Post Re-Fit Asbestos Re-Survey	Edward Rowley of Tetra Tech Coffey	Updated register produced and delivered	ER of Tetra Tech Coffey

## APPENDIX E: LEGISLATIVE REQUIREMENTS

### LEGISLATIVE REQUIREMENTS

The assessment, and preparation of this report have been undertaken in accordance with the requirements of State/Territories legislation and standards outlined below.

#### State/Territories relevant legislation

States & Territories	Acts	Legislation
<b>Western Australia (WA)</b>	Workplace Health and Safety Act. 2020. WA	Workplace Health and Safety (General) Regulations. 2022. WA

#### States/Territories code of practices & compliance codes

States & Territories	Codes of Practices & Compliance Codes	
<b>Western Australia (WA)</b>	Work Health and Safety Commission. 2022. “Code of Practice: How to Manage and Control Asbestos in the Workplace”. Western Australia	Work Health and Safety Commission. 2022. “Code of Practice: How to Safely Remove Asbestos”. Western Australia

Each section is to be read in conjunction with the whole of this report, including the appendices.

**Introduction:**

New (Harmonised) work health and safety laws commenced in the Commonwealth, New South Wales, Queensland, the Australian Capital Territory and the Northern Territory on 1 January 2012 and in Tasmania and South Australia on 1 January 2013.

For links to these legislations and the most current information on the progress of legislative change for the other states, please access Safe Work Australia at:

[Legislation | Safe Work Australia](#)

**Further Useful Resources**

Safe Work Australia publishes a range of guidance material to provide information on the model work health and safety laws and to assist compliance. This information can be accessed from:

[Resources and publications | Safe Work Australia](#)

**For More Information Contact:**

Tetra Tech Coffey – Work Health and Safety Section:

Email: [WHS\\_Support@tetrattech.com](mailto:WHS_Support@tetrattech.com) Web: [tetrattechcoffey.com/](http://tetrattechcoffey.com/)

## LEGISLATIVE REQUIREMENTS — ASBESTOS

This document has been produced for information only and is under regular review due to frequent changes in legislation and guidance. It contains information relating to the column headings only and not, for instance, in relation to asbestos removal. It is the duty of employers, premise owners and controllers of premises etc to ensure they are familiar with the latest applicable state legislation and guidance.

STATE Primary Asbestos Legislation	Asbestos Survey Requirements	Asbestos Resurvey Requirements	Reporting Requirements	Management and Labelling/Signage Requirements	Other Requirements
<p><b>WESTERN AUSTRALIA</b></p> <p>Workplace Health and Safety Act. 2020.</p> <p>Workplace Health and Safety (General) Regulations. 2022</p> <p>Health (Asbestos) Regulations 1992</p>	<p>Employer, main contractor, self-employed person or person having control of the workplace to ensure that presence and location of asbestos at the workplace is identified. The process of identification and assessment of risks arising from asbestos hazards are to be conducted in accordance with the Code of Practice for the Management and Control of Asbestos in Workplaces [NOHSC: 2018 (2005)].</p>	<p>Annual review of register and management plan under NOHSC: 2018(2005). A visual inspection of ACM should be undertaken as part of any review.</p>	<p>Under NOHSC:2018(2005):</p> <p>Maintain a register on the premises which includes date of assessment, location &amp; types of asbestos, analysis, risk assessments, control measures, and details of competent person who undertook the assessment.</p> <p>Details of presumptions made and likely asbestos in inaccessible areas to be included.</p>	<p>Under NOHSC:2018(2005):</p> <p>Warning signs &amp; labels to be used in conjunction with the workplace register to warn people of the presence of ACM.</p> <p>Competent person to determine number and position of labels.</p> <p>Areas containing ACM to be signposted.</p>	<p>Regulation states that controller of premises must ensure that risk assessment and controls to be in accordance with Occupational Safety and Health Acts 2020 and Health (Asbestos) Regulations 1992.</p> <p>Current policy reflects observance of the most recent publication in relation to working with asbestos i.e. Occupational Safety and Health Act 2020 and Health (Asbestos) Regulations 1992.</p>



## APPENDIX F: METHODOLOGY

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### METHODOLOGY

Asbestos surveys are undertaken considering a risk management approach, in accordance with relevant statutory regulations and relevant Codes of Practice. A risk assessment was conducted based on a number of factors associated with ACM identified during the survey and prioritised through Risk and Action Classifications.

The assessment involved the onsite investigation for the presence of ACM. Information was collected from the site owners/occupiers/tenants where available on relevant issues pertaining to the site. Based on the available data and the status at the time of inspection, where items were identified, visual and/or analytical characterisation (where required) was performed and reported in **Appendix A: Asbestos Register**.

The assessment was conducted on the basis of the condition, type and location of the materials at the time of inspection. The scope of this investigation did not allow intrusive sampling techniques to be undertaken in all locations, and consequently the register may have limitations as a reference document for the purposes of renovation or demolition.

Only 'typical' suspected material occurrences are inspected and sampled. Sampling is undertaken on a representative basis, for example, the inspection of one fire door of the same type within the same area is undertaken (i.e. not every 'matching' fire door is examined), unless specifically instructed. Sample collection was performed in a non-destructive and non-invasive manner by competent persons. Presumptions, based on knowledge and experience, that inaccessible areas contain asbestos materials may also be made and stated within the register.

Samples collected are representative of the material sampled, individually identified, transported, analysed and reported in accordance with relevant Statutory Regulations, Codes of Practice and Tetra Tech Coffey's Work Instructions. Laboratories undertaking analysis are appropriately NATA certified for the analysis conducted.

The presence of asbestos in bulk samples is determined by Polarised Light Microscopy (PLM) with dispersion staining techniques. Where asbestos was found to exist, a risk assessment was conducted on each item and a priority rating applied. This was conducted in accordance with the protocols described in **Section 4: Risk Assessment**.

The asbestos register is made up of relevant information gathered on site plus Tetra Tech Coffey's assessment of risk and assignment of action ratings. Reference to photographs, where available, is made in the register along with sample identification and analysis results, where applicable. Sample analysis results from previous assessments may be utilised and referenced in this register.

## APPENDIX G: STATEMENT OF LIMITATIONS

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## STATEMENT OF LIMITATIONS

This report and the associated services performed by Tetra Tech Coffey are in accordance with the scope of services set out in the contract between Tetra Tech Coffey and the Client. The scope of services was defined by the requests of the Client, by the time and budgetary constraints imposed by the Client, and by the availability of access to the site.

Tetra Tech Coffey derived the data in this report primarily from visual inspections, examination of available records, interviews with individuals with information about the site, and if requested, limited sample collection and analysis made on the dates indicated. In preparing this report, Tetra Tech Coffey has relied upon, and presumed accurate, certain information provided by government authorities, the Client and others identified herein. The report has been prepared on the basis that while Tetra Tech Coffey believes all the information in it is deemed reliable and accurate at the time of preparing the report, it does not warrant its accuracy or completeness and to the full extent allowed by law excludes liability in contract, tort or otherwise, for any loss or damage sustained by the Client arising from or in connection with the supply or use of the whole or any part of the information in the report through any cause whatsoever.

Limitations also apply to analytical methods used in the identification of substances (or parameters). These limitations may be due to non-homogenous material being sampled (i.e. the sample to be analysed may not be representative), low concentrations, the presence of 'masking' agents and the restrictions of the approved analytical technique. As such, non-statistically significant sampling results can only be interpreted as 'indicative' and not used for quantitative assessments.

The data, findings, observations, conclusions and recommendations in the report are based solely upon the state of the site at the time of the investigation. The passage of time, manifestation of latent conditions or impacts of future events (e.g. changes in legislation, scientific knowledge, land uses, etc.) may render the report inaccurate. In those circumstances, Tetra Tech Coffey shall not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on, the contents of the report.

This report has been prepared on behalf of and for the exclusive use of the Client and is subject to and issued in connection with the provisions of the agreement between Tetra Tech Coffey and the Client. Tetra Tech Coffey accepts no liability or responsibility whatsoever and expressly disclaims any responsibility for or in respect of any use of or reliance upon this report by any third party or parties.

It is the responsibility of the Client to accept if the Client so chooses any recommendations contained within and implement them in an appropriate, suitable and timely manner.

## Asbestos Survey

Asbestos Surveys are non-destructive and as such are not intended for use or referral for the purpose of breaking up of vessels, refit, repair or rebuild and modification or structural alterations. In the event of future breaking up, refit, repair or rebuild and modification or structural alterations further investigation, which may entail destructive testing, shall be required.

No inspection can be guaranteed to locate all asbestos on board a vessel. The assessment cannot be regarded as absolute, without extensive invasion of vessels. Future breaking up and or modification to vessels may expose situations, which were concealed or otherwise impractical to access during this assessment.

Tetra Tech Coffey assessors take samples at any situations known, or suspected, to contain Asbestos. Where the analysis determines that No Asbestos is Detected (NAD) the samples are listed in the report to provide information for future assessments.

Representative sampling is defined as one like sample per consistent material type, situation or item. In these instances, only one test sample will be collected for analytical confirmation and the results expressed as consistent and typical of the site.

Due to the very low concentration of asbestos fibres and the non-homogenous matrix of vinyl floor tiles, false negative results may be obtained. Therefore, the accuracy of all results cannot be guaranteed.

Notably, with some asbestos containing bulk material it can be very difficult, or impossible to detect the presence of asbestos using the polarised light microscopy analytical method, even after ashing or disintegration of samples. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or attributed to the fact that, very fine fibres have been distributed individually throughout the materials.

The analysis of many asbestos products used as a component of insulation materials, may be compromised in instances where the material has been heat affected, as heat may alter the morphology of the fibrous material.

The Client must not rely on an inspection or report as indicating that a site is “asbestos free”. All that the report can be relied upon to show is that no asbestos was found (or that only such asbestos was found as was reported to be found) in the course of the inspection. The findings of the report must be considered together with the specific scope and limitations of the type of inspection undertaken.