Report commissioned by:

Example Individual

Organisation:

Example Organisation

PRE-SALE REPORT

EXAMPLE LPG VESSEL

IMO Number: 123456789

INSPECTED AT EXAMPLE PORT TRINIDAD & TOBAGO
1st - 2nd OCTOBER 2022

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Pre-sale report reference:	0/0000
Report commissioned for:	Example Individual
Organisation:	Example Organisation
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Time & date:	00:00 (UTC) on 01st October 2022

CONTENTS

ADDITIONAL DOCUMENTS

Vessel documents

Vessel photos

INSPECTION SUMMARY

Example Trinidad and Tobago

01 Oct 2022 - 02 Oct 2022

Status: Loading

7.5 Hours Aboard

Majority of documents provided

The Example Vessel is an Example DWT, Example Gross Tonnage, Example flagged, LPG Carrier vessel built to a good standard by Example Shipyard, in People's Republic Of China under Example Class (IACS) supervision and was delivered on the 1st January 2011. The vessel is now Classed with Example Class (IACS).

A Pre-Sale Inspection of the vessel was conducted on the 1st and 2nd October 2022 in Example Port by Idwal under instruction from Example Organisation.

Good cooperation was provided by the ship's crew however, no access was granted to the cargo tanks or ballast tanks. The vessel was alongside, loading at the time of inspection.

The vessel was found to be in good overall condition, but with an Idwal Grade below the average for vessels of a similar age, type and size but with a few notable items found during the inspection. These are reported specifically in the notable items section of this report.

74 IDWAL GRADE

VESSEL PARTICULARS

Ship Name	Example
Previous Name	N/A
IMO Number	123456789
Port of Registry	Example Port
Ship Type	LPG Carrier
Flag	Example Flag
Classification Society	Example Class
Registered Owner	Example Owner
Technical Manager	Example Manager
Shipbuilder	Example Shipyard
Delivery Date	01/01/2011
Dead Weight	Example MT
Gross Tonnage	Example MT
Net Tonnage	Example MT
Length Overall	Example m
Breadth	Example m
Depth	Example m
Summer Draught	Example m
Lightweight	Example MT

The onboard management was found to be good with the Safety Management system found to be well implemented and the vessel generally well maintained. The vessel was found to provide a safe working environment. However, the Port State Control (PSC) history was found to be poor with 16 deficiencies and 1 detentions in the 3 inspections conducted in the past three years.

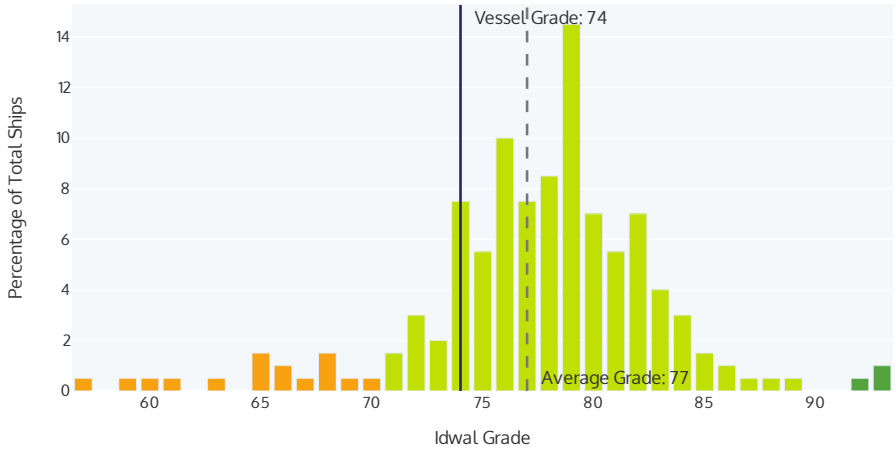
Given the good condition of the vessel it is estimated that the OPEX levels are likely to be as per industry norms for vessels of a similar age, type and size.

The vessel's Attained EEXI was calculated to be between 26.33 and 27.95, which is above the required EEXI of 24.91, and therefore the vessel will require the installation of technologies to reduce the EEXI score.

COMPARE YOUR IDWAL GRADE

This section of the report allows you to compare your ship's grade with similar ships.

Your Idwal Grade vs other LPG Tanker vessels



This graph shows the distribution of Idwal Grades against your ship's sector.

KEY

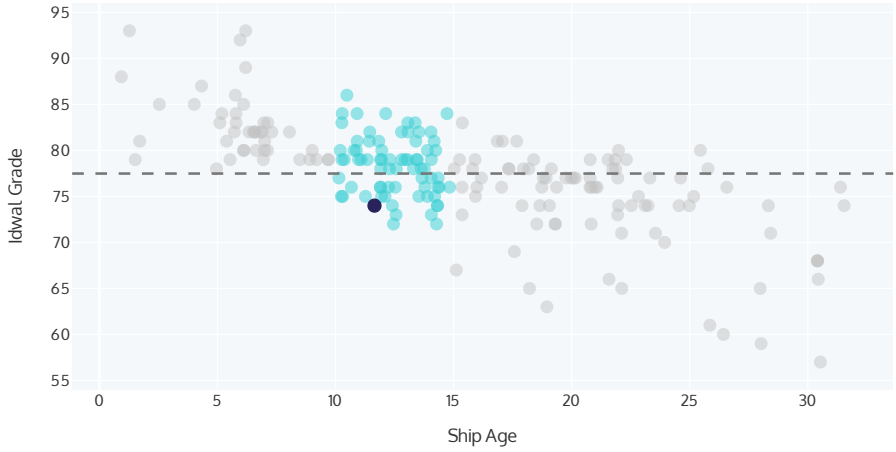
Your Idwal grade

Average Idwal grade

Grade range

> 90 | 71 - 90 | 51-70 | 30 - 50

Your Idwal Grade vs other LPG Tanker vessels, age 10-15 years



This graph shows your ship's Idwal Grade compared against other ships inspected in the same sector, within a similar age range, and how it compares against the average Idwal Grade for the sector.

KEY

Your Idwal grade

Average Idwal grade

All sector ships

Age comparable ships

The ship's grade may appear different when compared with the average of the two graphs. This is as a result of the second graph comparing a smaller and more focused sample of ships.

For a more in-depth analysis of where your vessel compares amongst its peers, please contact your Idwal sales rep.

KEY NOTABLE ITEMS

	Description	Action / Timeline	Estimated Cost [USD]
✖	One of the engine room control room alarm monitoring screens is not functioning. a replacement monitor screen has been ordered.	It is recommended that this is repaired and made fully operational at the earliest opportunity.	$0
−	Port side hose handling crane throttle valve is blocked. Crew onboard reported that the requisite spares have been requisitioned.	It is recommended that this is rectified at the earliest opportunity and ensure that the cargo hose handling crane is fully operational.	$0
−	Isolated spot corrosion concentrated on cargo pipework, cable trays as well as U-bolts.	It is recommended that the affected areas of corrosion are treated and restored at the earliest opportunity.	$0
−	Class Memo states "further to imperfections found in the joint-weld of the manhole rings in the main deck all rings are to be verified at each periodical survey".	For information.	$0
−	Incinerator was reported to not be utilized onboard.	For information.	$0
−	Signs of oil leakage and staining in way of auxiliary engines.	It is recommended that the source of the leakage is identified and repaired at the earliest opportunity.	$1000 - $5000
−	The salt water cooling pump mechanical seals had signs of leakage.	It is recommended that the source of the leakage is identified and repaired at the earliest opportunity.	<$1000
−	The port side bridge wing speed indicator was defective. crew onboard have reportedly requisitioned the requisite spares.	It is recommended that this is repaired and made fully operational at the earliest opportunity.	<$1000
−	Several hull markings were near illegible due to coating breakdown.	It is recommended that the affected areas are re-coated at the earliest opportunity.	<$1000
−	The insulation value alarms could not be activated while tested.	It is recommended that this is further investigated and dealt with at the earliest opportunity.	$1000 - $5000
−	The starboard engine room fire damper does not close properly	It is recommended that this is corrected as soon as operationally permissible.	<$1000

⊖	Starboard aft winch had a small oil leakage in way of control lever unit.	It is recommended that this is rectified at the earliest opportunity.	**<$1000**
⊖	Internal door frames of sanitary spaces had localized corrosion.	It is recommended that the affected areas are treated and restored at the earliest opportunity.	**<$1000**
⊖	Repair patch identified on pipework below the floor plates in the engine room.	It is recommended that this is permanently repaired at the earliest opportunity.	**$1000 - $5000**
✓	The vessel holds a Class approved Inventory of Hazardous Material (IHM)	An IHM is required for entry into EU ports.	**$0**
✓	The vessel is fitted with an Environmentally Acceptable Lubricant (EAL) in the stern tube and is therefore Vessel General Permit (VGP) compliant in this regard.	Positive.	**$0**
✓	The vessel is reportedly fitted with free to access unlimited use Wi-Fi system	Positive.	**$0**
✓	A USCG approved BWTS is installed	Positive.	**$0**

Please note, all costs are estimations only, based on industry averages, and may vary depending on locations and scopes of work. These costs are provided to assist the reader to consider the potential Capex or Opex impact of the related Notable Item and should not be used for budgeting purposes without further internal assessment of their accuracy.

DECARBONISATION SUMMARY

The vessel was delivered to the market before the EEDI requirements, and therefore has no EEDI score assigned. Based on information provided by the vessel during the inspection, the Attained EEXI score was calculated to be between 26.33 and 27.95. The EEXI has been calculated based on SFCapp as the SFOC for the Main engine at 75% load and Aux. Eng. at 50% load were not provided. This Attained EEXI score is above the required EEXI of 24.91, and therefore the vessel will require the installation of technologies to reduce the EEXI score. For more information about technologies to reduce a vessel's EEXI, the creation of the EEXI technical file or operational measures to reduce a vessel's Attained CII, please contact your Idwal sales representative.

EEXI

Required EEXI

24.91

$gCO_2/t.nm$

Attained EEDI/EEXI

26.33 - 27.95

$gCO_2/t.nm$

Vessel does not meet the EEDI/EEXI requirement and requires additional retrofitting of technologies

GRADING DATA

The Idwal Grade® is an industry recognised measure of asset integrity. Using proprietary algorithms, the Idwal Grade is programmatically calculated from over 500 individual data points, captured during a rigorous and standardised inspection process. Our data-driven methodology ensures that our reports are consistent, accurate and free from bias.

SUB GRADES

The methodology used to calculate the Idwal Grade® is also applied to the grading of the different vessel areas and categories. Two key areas are the overall vessel condition and vessel management:

Condition	74	Management	73

The following are grades representing individual areas of interest of the vessel:

Design and Construction	80	Hull	80
Mooring Decks	70	Weather Decks and Fittings	80
Ballast Tanks and Systems	80	Accommodation	80
Bridge and Navigation Equipment	70	Engine Room and Machinery	60
Fire Fighting Equipment and Systems	70	Lifesaving Appliances	80
Safe Working Environment	80	Pollution Control	80
Onboard Management	80	Vessel Capabilities and Cargo Systems	70
Forthcoming Regulatory Compliance	60	Crew Welfare	80
Crew Performance	80	Safety Management	80
Planned Maintenance System (PMS)	80	Classification and Certification	90
PSC Performance	40		

DESIGN AND CONSTRUCTION

80

The construction and design was found to be good overall, with the vessel built to IACS standards and Rules in People's Republic Of China by Example Shipyard with the keel laid on 01/01/2009. The vessel is a LPG Carrier, with two tanks, driven by a fixed pitch, direct drive propeller. The Main Engine is a NOx Tier I, MAN B&W and the vessel has 3 Auxiliary Engines, and no shaft generator. It is not on the Enhanced Survey Program or Extended Dry Docking schedule and does not hold a Class notation for in Water Surveys. The UTM report showed only minor steel diminution. No additional Bridge or communication equipment was fitted apart from those required by international rules and regulations, though the engine room and machinery were fitted with UMS capabilities, centralised sea water cooling and dual air handling unit refrigeration compressors.

HULL

80

The hull was seen to be in a good overall condition, with the hull able to be inspected from the starboard side only. The vessel was found to be free of major structural defects, however, minor indentations were noted such as minor indentations on starboard side shell plating but was free of coating breakdown and corrosion. Hull markings were partly obscured with no marine fouling observed. The vessel's last out of water bottom survey was carried out on 26-Mar-21, with the vessel's next out of water bottom survey due by 26-Mar-24.

NOTABLE ITEMS

Description	Estimated Cost [USD]
Issue: Several hull markings were near illegible due to coating breakdown. **Corrective Action:** It is recommended that the affected areas are re-coated at the earliest opportunity.	<$1000

MOORING DECKS

70

The Mooring decks were seen to be in a fair to good condition overall with the decks found to be free of structural defects and had only minor localised corrosion, up to approximately 2% of the mooring deck plating total surface area, mainly located on plating in way of mooring winches and on deck welds. Deck fittings were found to be in a good condition with fairleads and mooring rollers free to turn when tested. All Hydraulic windlass(es) and winches were reported to be fully operational but were, however, not free of hydraulic leakage with the starboard aft winch had a small oil leakage in way of control lever unit. Mooring machinery was in good condition, however it was noted that the mooring winch band brakes were found not to be secured to their marks whilst engaged. Anchor chains and mooring ropes were in a good overall condition. Mooring practices were seen to be good and snap-back zone warnings were seen to be posted at the entrances to mooring areas as per industry best practice. The bitter end release arrangements were seen to be clear and unobstructed and the emergency towing booklet seen to be available near to the Foc'sle.

NOTABLE ITEMS

Description	Estimated Cost [USD]
Issue: Starboard aft winch had a small oil leakage in way of control lever unit. **Corrective Action:** It is recommended that this is rectified at the earliest opportunity.	<$1000

WEATHER DECKS AND FITTINGS

80

The Weather Decks and Fittings were seen to be in good condition overall, with the decks found to be free of structural defects and had only minor spot corrosion, up to approximately 5% of the main deck plating total surface area, mainly located on plating beneath pipework and deck welds. Deck fittings were found to be in a good condition with pipework and fittings free of leakages. The two portable gangways were in a good overall condition, with no notable defects found however, the provisions lifting appliances fitted on the deck were in a fair overall condition due to corrosion at the fittings. It was also noted that the vessel is not equipped with accommodation ladders.

BALLAST TANKS AND SYSTEMS

80

Ballast tanks and systems were deemed to be in a good overall condition. No tanks could be entered due to enclosed space entry was not permitted by terminal authority however, photographs of previous tank entries in 21-Mar-22 were provided for review. From the photographs provided, it was seen that the ballast tanks were found to be generally free of significant structural defects and had only minor spot corrosion, up to approximately 3% of the ballast tanks total surface area, mainly located on bulkheads as well as longitudinal frames and edges. It is however prudent to note the Class Memo which states "Further to imperfections found in the joint-weld of the manhole rings in the main deck all rings are to be verified at each periodical survey". Ballast tank fittings such as ladders and pipework were seen to be in a good overall condition with Anodes seen to be depleted up to 10%. Tanks were seen to have no mud/sediment accumulation and were free of any signs of staining from sewage or marine fouling. Ballast control systems such as valves and gauges were reported to be fully operational and all ballast pumps were in good working order and in good visual condition.

NOTABLE ITEMS

Description	Estimated Cost [USD]
Issue: Class Memo states "further to imperfections found in the joint-weld of the manhole rings in the main deck all rings are to be verified at each periodical survey". **Corrective Action:** For information.	$0

ACCOMMODATION

80

The accommodation areas were seen to be in a good condition overall with floor and wall coverings found to be in good condition and upholstery and furniture found to be free from deterioration and defects. The levels of housekeeping and cleanliness was found to be good with levels of hygiene also seen to be good in the sanitary facilities. The hospital was seen to be well equipped and ready for use with drugs and controlled substances locked away. The associated drugs log was kept up to date. The accommodation was found to be outfitted to an average quality. The Air Handling Unit (AHU) was found to be maintaining a comfortable temperature and was seen to be in good condition with no defects. The galley equipment was deemed to be in a good overall condition with all equipment reportedly in good working order. The galley was found to be in a clean condition but with galley hoods seen to have build up of grease, increasing the fire risk due to galley Hoods were not clean, with a build up of grease, creating a fire risk. Furthermore, internal door frames of sanitary spaces had localized corrosion. The vessel's walk-in cold rooms were found not to be clean and hygienic due to carton boxes are scattered on the cold store gratings however, temperatures were at the correct levels. Provision room components were seen to be generally free of frosting and deterioration. The external superstructure was found to be free of structural defects and had only minor spot corrosion, up to approximately 2% of the surface area, mainly located on plating surrounding portholes. The external superstructure fittings were seen to be in a good overall condition with all external accommodation doors in good working order and properly closing. It was also noted the Crew Welfare was found to be in good overall with it noted that the vessel is fitted with a free and unlimited Wi-Fi system and crew were reported to have access to an onboard training facility.

NOTABLE ITEMS

Description	Estimated Cost [USD]
Issue: Internal door frames of sanitary spaces had localized corrosion. **Corrective Action:** It is recommended that the affected areas are treated and restored at the earliest opportunity.	<$1000

	Description	Estimated Cost [USD]
✓	**Issue:** The vessel is reportedly fitted with free to access unlimited use Wi-Fi system **Corrective Action:** Positive.	$0

BRIDGE AND NAVIGATION EQUIPMENT

70

The Bridge and navigation equipment were found to be in a fair to good condition overall with housekeeping found to be good and with all bridge equipment reported to be fully operational. The vessel's VDR was found to be free from any unanticipated alarms with collection instructions posted nearby and with the Bridge Navigation Watch Alarm System (BNWAS) reported to be fully operational. The vessel's primary means of navigation, as listed on form E of the safety equipment certificate is a dual ECDIS system which were found to be up to date. RADAR blind sectors were seen to be posted near the RADARs with the compass deviation card up-to-date and available near to the helm. The compass deviation log was found to be satisfactory, with no major deviations and generally up-to-date. The vessel is licensed to cover GMDSS sea areas A1, A2, and A3 and had a valid shore-servicing agreement in place. The radio batteries were seen to be well maintained and in good condition and the EPIRB, SART and VHF handheld batteries were all in date as required. Berth to berth passage plans were seen on-board and were signed by all navigating officers with nautical publications provided in Electronic format. Master's standing and night orders were found to be signed by all navigating officers with the bridge log book correctly filled in and the GMDSS logbook also up to date and correctly filled in. The Monkey island was found to be in a good overall condition with the mast, aerials and antennas seen to be satisfactory and free of defects. However, the port side bridge wing speed indicator was defective. Crew onboard have reportedly requisitioned the requisite spares.

NOTABLE ITEMS

Description	Estimated Cost [USD]
Issue: The port side bridge wing speed indicator was defective. crew onboard have reportedly requisitioned the requisite spares. **Corrective Action:** It is recommended that this is repaired and made fully operational at the earliest opportunity.	<$1000

ENGINE ROOM AND MACHINERY

60 The Engine room and machinery were found to be in a fair overall condition. This is to a large extent due to one of the Engine Room Control Room Alarm monitoring screens is not functioning. A replacement monitor screen has been ordered. As well as repair patch identified on pipework below the floor plates in the engine room. However there were no significant defects reported or observed and with the engine room generally found to be clean. During the inspection the Auxiliary Engines, purifiers and pumps were seen running. Bilges and tank tops were generally free of oil or water. Pipework was seen to be in fair condition with some issues identified such as with some pipework lagging having areas of deterioration and staining. Housekeeping was seen to be to a good overall standard with the vessel found to be equipped with adequate critical spares as recommended by the ship manager Safety Management System (SMS) which were seen to be neatly stowed and secured. A review of the latest lube oil analysis reports provided showed no areas of concern. It was also noted that the previous gearbox LO analyses were indicating an elevated level of water content. New samples have been taken and after analyses the water content found within acceptable limits. The NOx Technical file was up to date and last updated on 12-May-21. The Main Engine was reported to be fully operational and was seen to be in good condition, with no major visible defects. A review of the latest Main Engine performance report provided showed no areas of concern. Main Engine overhaul schedule is subject to Condition Based Monitoring (CBM) and therefore no dedicated overhaul interval is provided and maintenance requirements are ascertained from performance reports and inspections. Propulsion systems, such as shafts, gearing and bearings including the Bow thruster were in good working order with no defects reported or sighted. The 3 Auxiliary Engines were reported to be fully operational and were seen to be in good condition, with no major visible defects. However, it was identified that there were signs of oil leakage and staining in way of auxiliary engines. A review of the latest Auxiliary engines performance report provided showed no areas of concern. Auxiliary engines running hour data was provided on board the vessel and found to be within the respective overhaul intervals. All Auxiliary equipment was found to be fully operational and in good condition. The steering gear was seen in good working order, free of leakage with emergency steering instructions seen to be posted nearby. The machinery spaces are operated in Unmanned mode and the alarm and control system was seen to be free of any serious alarms. Electrical distribution systems including the main switchboard were in good working order and switchboard insulation readings were adequate. Furthermore, the bilge alarms, main engine fuel leakage and OMD alarms have been tested satisfactorily. Load sharing between generators No.2 and No.3 found satisfactorily. The emergency steering was also tested at the time of the inspection. Crew onboard reported that the vessel is awaiting a spare reverse Osmosis pump.

NOTABLE ITEMS

Description	Estimated Cost [USD]

Issue: One of the engine room control room alarm monitoring screens is not functioning. a replacement monitor screen has been ordered.

Corrective Action: It is recommended that this is repaired and made fully operational at the earliest opportunity.

$0

Description	Estimated Cost [USD]
Issue: Signs of oil leakage and staining in way of auxiliary engines. **Corrective Action:** It is recommended that the source of the leakage is identified and repaired at the earliest opportunity.	$1000 - $5000



Description	Estimated Cost

		[USD]
	Issue: The salt water cooling pump mechanical seals had signs of leakage. **Corrective Action:** It is recommended that the source of the leakage is identified and repaired at the earliest opportunity.	<$1000

Description	Estimated Cost [USD]
Issue: The insulation value alarms could not be activated while tested. **Corrective Action:** It is recommended that this is further investigated and dealt with at the earliest opportunity.	$1000 - $5000

Description	Estimated Cost [USD]
Issue: Repair patch identified on pipework below the floor plates in the engine room. **Corrective Action:** It is recommended that this is permanently repaired at the earliest opportunity.	$1000 - $5000

FIRE FIGHTING EQUIPMENT AND SYSTEMS

70

Fire Fighting Equipment and Systems were found to be in a fair to good condition overall and generally free of fire hazards with all firefighting equipment seen to be regularly serviced and inspected. The fire detection and alarm system was found to be fully operational and was free of signs of tampering and alarms. The vessel is fitted with CO2 and Water Spray fixed firefighting in the engine room, Water Spray for the cargo areas and None in the accommodation. The vessel is also fitted with dry power fire monitors on the weather deck which cover cargo areas. Fixed firefighting systems were all reported to be in good working condition however, not all instructions were clearly posted with no clear operating instructions were posted for the firefighting systems. It was noted the CO2 release system is fitted with a time delay which is not mentioned on the CO2 release instructions. The main and emergency fire pumps were reportedly fully operational and both were found to be in a good condition, free of leakages. A fire pump was tested during the inspection and was found to deliver adequate pressure. The fire main and ancillaries such as hydrants and valves were in good overall condition, free of defects. Fire extinguishers were all in good condition and all portable equipment were positioned in accordance with the fire plan. Firefighting outfits and associated equipment were all in good condition with BA equipment found fully charged and ready for use. The emergency generator was tested during the inspection and found to be in good working order and in a good overall condition. Remote shutdown emergency devices such as quick closing valves, machinery stops and ventilation dampers were deemed to be in a fair overall condition, with defects found to the the starboard engine room ventilation fire damper did not properly close when tested. The fire doors were found to be in good condition, closing effectively and free from any unauthorised 'hold-open' arrangements.

NOTABLE ITEMS

Description	Estimated Cost [USD]
Issue: The starboard engine room fire damper does not close properly **Corrective Action:** It is recommended that this is corrected as soon as operationally permissible.	<$1000

LIFESAVING APPLIANCES

80

Lifesaving appliances were seen to be in a good overall condition with all equipment regularly serviced and inspected as required. The vessel is fitted with 1 free-fall lifeboat, which was seen to be in good overall condition externally and internally. The lifeboat engine(s) was tested during the inspection and found to be in good working order. The vessel's rescue boat was found to be in a good overall condition and ready for immediate use. The vessel is equipped with 2 life rafts, which were found to be in good condition with Hydrostatic Release Units (HRUs) in date and correctly rigged. Davits and lowering arrangements were found to be in good condition overall with evidence of regular maintenance, servicing and inspection sighted and evident. Ancillary lifesaving equipment such as lifejackets, immersion suits and EEBD's etc. were found to be in good condition and ready for immediate use with man overboard smoke and light signals seen to be in date. Embarkation ladders were found to be in a good, well maintained condition with the pyrotechnics and line throwing apparatus found to be stored appropriately and within their expiry dates.

SAFE WORKING ENVIRONMENT

80

Safe working was deemed to be good overall with no unsafe practices observed during the inspection and the vessel presenting a generally safe working environment. Hazards were seen to be clearly marked and external walkways adequately coated with non-slip paint and free of trip hazards. Adequate PPE was seen to be worn by crew at all times and portable gas detection meters were provided and calibrated. Hazardous substances were seen to be generally safely managed with appropriate Material Safety Data Sheets provided. Risk Assessments (RA) were seen to be up to date and satisfactory with enclosed space entry procedures followed and an effective Permit To Work (PTW) system in place. Main and emergency exits were clearly identified and unobstructed with all IMO signage seen to be satisfactory. Pilot ladders and boarding arrangements were seen to be in a good safe condition with clear pilot boarding instructions posted. Regular drills were conducted on board with the last drill conducted on the 28-Oct-22, which was an fire fighting and abandon ship drill.

POLLUTION CONTROL

80

Pollution control was deemed to be good overall and generally found to be well implemented on board with the vessel free of pollution hazards. The vessel holds a Class-approved Inventory of Hazardous Materials, which is required for entry into EU ports. The vessel's Oily Water Separator (OWS) was found to be fully operational and in good overall condition, with no obvious defects. The OWS was simulation tested during the inspection and the 15ppm Oil Content Meter (OCM) was seen to be calibrated. The bilge overboard was seen to be locked against unauthorised opening and the oily water treatment system as a whole was seen to be free from signs of tampering or unauthorised modification. The SOPEP locker or box was found to be well stocked with SOPEP equipment in good condition and an accurate list of equipment posted nearby. The Oil Record Book (ORB) was seen to be well-maintained and up-to-date, with the last entry on the 06-Nov-22. A US coastguard approved Ballast Water Treatment System (BWTS) is fitted and was found to be fully operational and in good overall condition. The vessel's ballast record book was seen to be up to date and correctly filled in. The vessel is fitted with an Environmentally Acceptable Lubricant (EAL) in the stern tube and is therefore Vessel General Permit (VGP) compliant in this regard. The vessel's sewage treatment plant was found to be fully operational and in good overall condition, with no obvious defects. Garbage segregation was found to be good, with adequate, labelled containers and garbage seen to be well sorted and containers seen to be made of approved non-combustible materials. The Garbage Record Book (GRB) was seen to be well-maintained and up-to-date, with the last entry on the 04-Nov-22. The Emission Control Area (ECA) change-over logbook was reviewed and found to be satisfactory with the date of last entry on 17-Apr-20. Incinerator was reported to not be utilized by crew onboard, but was seen to be in good overall condition, with no obvious defects. The vessel complies with IMO 2020 regulations by employing the use of Very Low Sulphur Fuels Oils (VLSFO) with a sulphur content of less than 0.5%.

NOTABLE ITEMS

Description	Estimated Cost [USD]
Issue: Incinerator was reported to not be utilized onboard. **Corrective Action:** For information.	$0

	Description	Estimated Cost [USD]
✓	**Issue:** The vessel holds a Class approved Inventory of Hazardous Material (IHM) **Corrective Action:** An IHM is required for entry into EU ports.	$0

	Description	Estimated Cost [USD]
✓	**Issue:** The vessel is fitted with an Environmentally Acceptable Lubricant (EAL) in the stern tube and is therefore Vessel General Permit (VGP) compliant in this regard. **Corrective Action:** Positive.	$0

	Description	Estimated Cost [USD]
✓	**Issue:** A USCG approved BWTS is installed **Corrective Action:** Positive.	$0

ONBOARD MANAGEMENT

80

Onboard management was found to be good overall. The computer-based Safety Management System (SMS) was deemed to be functioning and well implemented in general, with Permits to Work (PTW), risk assessments and procedures understood and followed. Onboard management was found to deal with accidents, near misses and deficiencies in an effective manner and regular safety committee meetings were carried out on board. The vessel's MLC certificate was valid with records of hours of rest (ILO) correct and up to date and maximum work hours not regularly exceeded. The PMS system was found to be kept up to date with no critical overdue work orders. It was also noted presently the vessel is changing from Certica PMS to Shipnet One. At the moment the SMS, as well as stocks and parts, are being maintained in Certica.

No maintenance history could be retrieved from the Shipnet One PMS at the time of the inspection. The Class-approved system-based Planned Maintenance System (PMS) was fully integrated with the SMS for ordering of spares and general vessel management. However, the Port State Control (PSC) history was found to be poor with 16 deficiencies and 1 detentions in the 3 inspections conducted in the past three years. The vessel's flag is not targeted by any Memorandum of Understanding (MoU) or the USCG. Security access controls were deemed to be satisfactory with the vessel conforming to International Ship and Port Security (ISPS) standards. The Master and crew were prepared for the inspection and provided good cooperation with the majority of requested documents provided.

VESSEL CAPABILITIES AND CARGO SYSTEMS

70

The Vessel Capabilities and Cargo Systems were assessed to be in a fair to good condition for a vessel of the same age and type. Cargo tanks were not permitted to be entered during the inspection and no vessel inspection photographs or inspection reports were provided for review but have been requested. Furthermore, due to terminal restrictions the void spaces could not be entered. However, void space inspection reports dated 23 Aug 2022 are provided and enclosed. From the photographs provided the spaces were assessed to be in good structural condition with no significant coating breakdown or corrosion noted or reported by crew onboard. Furthermore, from the photographs provided it was assessed that the tank dome sealing was free from defects with no damage identified. The last cargo carried was LPG, with the next intended cargo reported to be also LPG. The compressor room was found to be in good condition, though no airlocks are fitted. Cargo pipework was in generally in satisfactory overall condition with pipes, manifolds and relevant deck equipment were suitably marked. However, there was isolated spot corrosion concentrated on cargo pipework, cable trays as well as U-bolts. The hose handling crane was in working order, however the port side hose handling crane throttle valve is blocked. Crew onboard reported that the requisite spares have been requisitioned. Tank level, pressure and temperature monitoring systems were in full working order and the Cargo Control Room (CCR) was in a good overall condition. Cargo Emergency Shutdown Devices (ESDs) were in full working order as observed. The Maximum Allowable Relief Valves (MARVs) were in good condition and operating pressures were clearly marked. The vessel is fitted with a vent mast, which was seen to be in a good overall condition. Gas monitoring instruments are provided on board which were calibrated, with records of calibration provided. Fixed gas monitoring equipment was in full working order. The vessels last SIRE inspection was on the 30th June 2022, in which 5 observations were recorded. Not all had been fully resolved due to the aforementioned Class memo concerning joint-welds of manhole rings. The Cargo heater, Cargo pipework insulation, Nitrogen plant and Compressor were all found to be in good condition with no operational defects reported or seen.

NOTABLE ITEMS

	Description	Estimated Cost [USD]
−	**Issue:** Port side hose handling crane throttle valve is blocked. Crew onboard reported that the requisite spares have been requisitioned. **Corrective Action:** It is recommended that this is rectified at the earliest opportunity and ensure that the cargo hose handling crane is fully operational.	$0

	Description	Estimated Cost [USD]
	Issue: Isolated spot corrosion concentrated on cargo pipework, cable trays as well as U-bolts.	
	Corrective Action: It is recommended that the affected areas of corrosion are treated and restored at the earliest opportunity.	$0

OPERATIONAL DATA

Operational Data Condition

Does the vessel have an Exhaust Gas Cleaning System (EGCS)? ☒ No

Total High Sulphur Fuel Oil (HSFO) capacity:	m^3
Total Very and Ultra Low Sulphur Fuel Oil (VLSFO and ULSFO) capacity:	375.7 m^3
Total Marine Gas Oil (MGO) and Diesel Oil (DO) capacity:	260.2 m^3

What fuel type does the vessel run on for the majority of the time?	Diesel / Gas Oil

Does the vessel have any energy efficiency technologies installed? ☒ No

Engines Table

	Main Engine 1	Main Engine 2	Aux Engine 1	Aux Engine 2	Aux Engine 3	Aux Engine 4
Designer	MAN B&W		Cummins	Cummins	Cummins	Cummins
Model	ME-C		KTA 19-D	KTA 19-D	KTA 19-D	6CTA 8.3
Number of Cylinders	8		6	6	6	6
Speed (RPM)	800		1,500	1,500	1,500	1,500
Bore (mm)	270		159	159	159	114
Stroke (mm)	380		159	159	159	135
Specific Fuel Oil Consumption (SFOC) (g/kWhr) At 75% load for ME and 50% load for AEs, corrected to ISO conditions, as stated on Nox technical files	190		215	215	215	93.8
Nox Tier	1		1	1	1	1
Fuel Oil Consumption at full load (tonnes/day)			1.2	1.2	1.2	0.9
System Oil Consumption (litres/day)	1.5		0.2	0.2	0.2	0.1
Major Overhaul Interval (Hours)			26,000	26,000	26,000	
Running Hours since last overhaul (Hours)			20,486	20,709	15,330	

	Vessel Speed (knots)	Consumption (t/day)
Loaded Eco	9	8.5
Loaded Service	12.5	10
Ballast Eco	9	8.5
Ballast Service	13	10.5

Main Engine Maintenance

Component	Condition Based Monitoring?	Overhaul Interval
Cylinder Heads	Yes	16,000
Pistons	Yes	16,000
Bearings	Yes	16,000
Cylinder Liners	Yes	16,000

Main Engine No.1 — **Unit Running Hours**

	1	2	3	4	5	6	7	8	9	10	11	12
Cylinder Heads	2,030	2,030	2,030	2,030	2,030	2,030	2,030	2,030				
Pistons	2,030	2,030	2,030	2,030	2,030	2,030	2,030	2,030				
Bearings	2,030	2,030	2,030	2,030	20,302,030	2,030	2,030	2,030				
Cylinder Liners	2,030	2,030	2,030	2,030	2,030	2,030	2,030	2,030				

Class Surveys

Were all Class and Statutory certificates valid? ☑ Yes

Is the vessel on the Extended Dry Docking (EDD) program? ☒ No

Is the vessel on the Enhanced Survey Program (ESP)? ☒ No

Does the vessel have an In Water Survey Class notation? ☒ No

Is the vessel ice classed? ☒ No

Survey	Date Last Completed	Date Next Due
Main / Special / Renewal	26-Mar-21	17-Mar-26
Intermediate		17-Jun-24
Annual	26-Mar-22	17-Jun-23
Bottom in dry dock	26-Mar-21	26-Mar-24

What was the location of the last out-of-water docking?	*Example Port, Denmark*
Is the vessels last dry dock report provided and attached?	☒ No
Provide details of works done in last dry dock	*Besides normal class related and standard dry dock works, steelwork on the rudder, megger testing and repairs to ventilators have been carried out*
Does the vessel intend to dry dock before the next scheduled bottom survey?	☒ No
Has the vessel remained with the same flag since build?	☒ No
Please provide details of previous flags	*Example Flag until 01/09/2,021*
Has the vessel remained with the same Class since build?	☒ No
Please provide details of previous Class societies	*Example Class*
Does the vessel have any Conditions of Class or Recommendations of Class?	☒ No
Does the vessel have any Class Memos, Observations or Additional Requirements?	☑ Yes
Please provide further details	*Issued Description of Memoranda 03 Apr 2,018 Further to imperfections found in the joint-weld of the manhole rings in the main deck all rings are to be verified at each periodical survey. Records of regular inspection are to be kept by the ship's crew. 03 Apr 2,018 Inserts installed in main deck: 1,000 x 1,300 x 18 mm, EH36, at manholes Nr. 19 (fr. 71, CD SB, 2), Nr. 22, (fr. 75, BWT 3S, 3) and Nr. 23 (fr 95, BWT 2P).*

The cost for the next out of water bottom survey or dry docking based on a far eastern shipyard and includes all survey and normal maintenance costs is approximately estimated at:	1,000,000
What was the status of the vessel at the time of inspection?	Loading

DESIGN AND CONSTRUCTION

Design and Construction Condition

Has the vessel been built to the standards and Rules of an IACS-member Class Society?

☑ Yes

Under what IACS Class society supervision was the vessel built?	Example Class
Did the vessel provide Ultrasonic Thickness Measurement (UTM) reports?	Yes
Did the UTM report show any diminution of steelwork?	Minor

Please provide further details

The latest UTM report provided showed minor levels of steel diminution.

Hull & Structure

Bridge & Communication

Engine Room & Firefighting

☑ UMS Capabilities (regardless of Class notation)

The vessel is being operated with UMS

☑ Centralised Sea Water cooling

The vessel is fitted with centralised Sea Water cooling

☑ Dual Air Handling Unit Refrigeration compressors

Dual Air Handling Compressors are provided.

HULL

Hull Condition

What sections of the hull were inspected?	Stbd side

Was the vessel free of any major structural damage or indentations? ☑ Yes

Was the vessel free of any minor structural damage or indentations? ☒ No *minor indentations on starboard side shell plating*

What was the level of Hull coating breakdown and corrosion?	None
What was the condition of the hull markings?	Partly obscured
What type of anti-fouling coating was applied?	TBT-Free anti-fouling
What level of marine fouling was seen?	None

Were fenders installed on the hull? ☒ No

What were the vessels draughts?

Fwd: (m)	3.90
Aft: (m)	4.30

Was the upper sections of the rudder visible? ☒ No

MOORING DECKS

Mooring Decks Condition

Were the decks free of any structural damage or deformations?	☑ Yes
What was the level of coating breakdown and corrosion observed on the decks?	Minor
Coating breakdown and corrosion was mainly located in the following areas:	on plating in way of mooring winches and on deck welds
The amount of surface area coating breakdown and corrosion was approximately:	2%
Type of coating breakdown and corrosion:	☑ Localised
What was the general condition of the deck fittings?	Good
Were fairleads and mooring rollers free to move when tested?	☑ Yes
Were all mooring machinery reported to be fully operational?	☑ Yes
What type of windlass(es) and winches were fitted?	Hydraulic
Were the windlass(es) and winches seen to be free of hydraulic oil leaks?	☒ No *the starboard aft winch had a small oil leakage in way of control lever unit*
Was the mooring machinery hydraulic pump unit (HPU) seen to be free from leaks?	☑ Yes
What was the condition of the mooring machinery?	Good

What amount of band brake lining was seen to be remaining?	Moderate / Adequate

Were clutching and gearing arrangements sufficiently greased? ☑ Yes

What condition were the visible sections of the anchor chains seen to be in?	Good
What type of mooring lines did the vessel have?	Rope
What was the condition of the mooring ropes / wires?	Good

Were safe mooring practices observed? i.e. no overlapping turns on split drum, chafing of lines or unsafe leading. ☑ Yes

Was the last brake test seen to be stencilled on the mooring winches? ☑ Yes

Date of last test	*22-Mar-22*

What type of snap back warning signs/zones were posted?	Signs at the entrance to the mooring decks

Was the Bosun's / Foc'sle store available for inspection? ☑ Yes

What was the condition of the bosun's store structure?	Structurally sound with no visible damage
What was the condition of the bosun's store coatings?	Minor instances of coating breakdown and corrosion
Was the condition of the bosun's store housekeeping?	Neat and tidy with items secured

Were the bitter end release arrangements seen to be clear and unobstructed?	☑ Yes
Was an 'emergency towing booklets/procedures' available near to the foc'sle?	☑ Yes

WEATHER DECKS AND FITTINGS

Weather Decks and Fittings Condition

Were the decks free of any structural damage or deformations? ☑ Yes

What was the level of coating breakdown and corrosion observed on the decks?	Minor
Coating breakdown and corrosion was mainly located in the following areas:	on plating beneath pipework and deck welds
The amount of surface area coating breakdown and corrosion was approximately:	5%

Type of coating breakdown and corrosion: ☑ Spot

What was the general condition of the deck fittings e.g handrails, brackets, vent heads, walkways, lighting etc.?	Good

Does the vessel have mooring winches fitted on the main deck? ☒ No

Were deck equipment and pipework free of leakages? ☑ Yes

What was the condition of the accommodation ladders or gangways?	Good

Was the vessel fitted with a provision lifting appliance(s)? ☑ Yes

What was the condition of the provision lifting appliance(s)?	Fair

Please provide further details *corrosion at the fittings*

Does the vessel carry any major spares on external decks e.g. propeller blades, anchor etc. ☒ No

BALLAST TANKS AND SYSTEMS

Ballast Tanks and Systems Condition

Were ballast tanks entered?	☒ No
Please provide further details	*Reason tanks were not entered: enclosed space entry was not permitted by terminal authority*
Were recent (last 12 months) ballast tank inspection photographs provided?	☑ Yes
Date photos were provided:	*21-Mar-22*
Were inspection reports or reports of the tanks condition provided?	☑ Yes
Were the tanks free of any structural damage or indentations?	☑ Yes

What was the level of Ballast Tank coating breakdown and corrosion?	Minor
Coating breakdown and corrosion was mainly located in the following areas:	on bulkheads as well as longitudinal frames and edges
The amount of surface area coating breakdown and corrosion was approximately:	3%

Type of coating breakdown and corrosion:	☑ Spot
Were ballast tanks coatings certified to PSPC standards?	☑ Yes

What was the condition of ballast tank fittings (e.g. ladders, handrails, pipes & manhole seals)?	Good

Were the ballast tanks fitted with sacrificial anodes?	☑ Yes
Anode depletion:	*10%*

How much mud/sediment was seen inside the ballast tanks?	None
Please provide further details	%

Were the tanks seen to be free from any signs of staining from oil, sewage or marine fouling?	☑ Yes
Were ballast tank manhole covers seen to be in good condition?	☑ Yes
Were the remote ballast control systems fully operational (e.g. valves, gauging etc)?	☑ Yes
Were the ballast and/or anti-heeling pumps reported to be fully operational?	☑ Yes

What condition were the ballast and/or anti-heeling pumps in?	Good

ACCOMODATION

Internal Accomodation Condition

Were accommodation spaces used for their assigned purposes? ☑ Yes

What was the condition of the flooring and wall coverings?	Good
What was the condition of the upholstery and furniture?	Good
What were the general levels of housekeeping and cleanliness?	Good
What was the level of hygiene of the sanitary facilities?	Good

Was all laundry equipment in good working order? ☑ Yes

Was the Hospital well equipped and ready for use? ☑ Yes

Were the drugs controlled and substances seen to be locked away? ☑ Yes

Was the associated drugs log kept up to date? ☑ Yes

What was the quality of accommodation outfitting?	Average quality of outfitting

Did the Air Handling Unit (AHU) maintain a comfortable temperature? ☑ Yes

What was the condition of the AHU?	Good

Galley Condition

What was the level of cleanliness in the Galley?	Clean	
Was all galley equipment operational?	☑ Yes	
What was the general condition of galley equipment?	Good	
Were the insides of Galley hoods clean?	☒ No	*Galley Hoods were not clean, with a build up of grease, creating a fire risk.*
What type of cold provisions stores does the vessel have?	Walk-in stores / Cold rooms	
Were provisions stores well organised with no provisions stored directly on the deck?	☑ Yes	
Were provisions stores clean and hygienic?	☒ No	*carton boxes are scattered on the cold store gratings*
Were provisions stores at the required temperatures?	☑ Yes	
Were provision stores temperatures recorded and records kept nearby?	☑ Yes	
Were provisions machinery, pipework and door seals free of frosting and deterioration?	☑ Yes	
Were lock-in alarms or handles in good working condition?	☒ No	*The vegetable store locked-in handle was seized due to being frozen.*

External Areas Condition

Was the external Superstructure / Accommodation Block found to be free from damages?	☑ Yes	
Were accommodation external doors found to be in good condition and providing an adequate seal?	☑ Yes	

What was the level of external accommodation superstructure coating breakdown and corrosion?	Minor
Coating breakdown and corrosion was mainly located in the following areas:	on plating surrounding portholes
The amount of surface area coating breakdown and corrosion was approximately:	2%

Type of coating breakdown and corrosion:

- [x] Spot

What was the general condition of external superstructure fittings?	Good

Crew Welfare

What is the average contract length for crew members?

Officers:	4 Months
Crew:	6 Months

Was Wi-Fi provided on-board?	Yes, Free, Unlimited

What is the approximate average internet speed?	Fast (Able to stream music or short videos in low quality)

Is access provided to catering facilities or food at all times?

- [x] Yes

What Public Recreation equipment did the crew have access to?

- [x] Treadmill
- [x] Cycling Machine
- [x] Rowing Machine
- [x] Television
- [x] Games console
- [x] Karaoke
- [x] Entertainment Library - Books, DVDs, Games, etc.
- [x] Musical Instruments
- [x] En-suite facilities for all crew members

What was the quality of crew recreation facilities?	Fair

Are crew given time and resources to celebrate religious or cultural events (i.e. Christmas, Independence days etc.)?

☑ Yes

What facilities were provided in crew cabins?

☑ Sofa ☑ Desk

Does the vessel have any onboard training facilities?	Yes

Type of onboard training facilities:

☑ Other

Please provide further details

Ocean training

Is there a crew suggestion policy in place?

☑ Yes

Does the crew have access to a bonded store?	Yes, minimal stock

Are the crew given additional periods of rest throughout the working week (e.g Sunday off)?	Yes

BRIDGE AND NAVIGATION EQUIPMENT

General Condition

Was all the bridge equipment reported to be fully operational?	☑ Yes
Was the bridge found to be clean and well maintained with good housekeeping?	☑ Yes
Was the view from the bridge clear and unobstructed?	☑ Yes
Were all required bridge equipment annual performance tests (e.g. VDR and AIS) completed in the last 12 months?	☑ Yes
Was the vessel fitted with a Voyage Data Recorder (VDR)?	☑ Yes
Type of VDR fitted:	*VDR*
Was the VDR seen to be free from any unanticipated alarms?	☑ Yes
Were the VDR collection instructions posted and known to the Master?	☑ Yes
Was the vessels Bridge Navigation and Watch Alarm System (BNWAS) fully operational, and turned on when at sea?	☑ Yes
Normal time setting at sea	*12 mins*

Navigation Condition

	Primary	Secondary
What was the vessels primary & secondary means of navigation as listed on Form E?	ECDIS	ECDIS

Were the primary & secondary means of navigation found to be up to date?	☑ Yes	
Latest update week	*44*	
Was the Echo Sounder fully operational?	☑ Yes	
Were the RADARs fully operational?	☑ Yes	
Were the "blind sectors" posted near to the RADARs?	☑ Yes	
Does the vessel receive up to date weather information?	☑ Yes	*05-Nov-22*

What type of weather updating service does the vessel use?	Digital subscription

Was an in-date compass deviation card posted near to the helm?	☑ Yes	
Was a compass deviation log kept, up to date and free of any major deviations?	☑ Yes	
Were azimuth rings (bearing diopters) found to be available on the bridge?	☑ Yes	

Communication Condition

What GMDSS sea areas was the vessel licensed to cover?	☑ A1	☑ A2	☑ A3	☒ A4
Were the radio batteries seen to be in good condition?	☑ Yes			
Were the EPIRBs, SARTs and Emergency Hand Held VHF Batteries within their expiry dates?	☑ Yes			

	Battery expiry dates
EPIRBS	30-Sept-26
SARTs	30-Jun-26
VHF	18-Feb-26

Was a valid GMDSS shore servicing certificate seen to be posted near to radio equipment?	☑ Yes

Documentation Condition

Were berth to berth passage plans seen on-board?	Yes
Were passage plans signed by all navigating officers?	☑ Yes
What format were nautical publications provided in?	Electronic
Were the Master's standing orders and night orders found to be signed by all navigating officers?	☑ Yes
Was the bridge log book up to date and correctly filled in?	☑ Yes
Was the GMDSS log book up-to-date and correctly filled in?	☑ Yes
Date of last test	*06-Nov-22*

External Condition

Was the Monkey Island found to be in good, well maintained condition?	☑ Yes	
Were the main mast, aerials and antennas seen to be in good condition and free from damage?	☑ Yes	
Were bridge wing manoeuvring controls fitted?	☑ Yes	
Were the bridge wing manoeuvring controls reported to be fully operational and free from signs of water ingress?	☑ Yes	*PS bridge wing speed indicator is not working, awaiting spares.*
Were bridge wing engine speed and compass repeaters seen to be in good working condition?	☒ No	*the port side bridge wing speed indicator was defective. Crew onboard have reportedly requisitioned the requisite spares.*

ENGINE ROOM AND MACHINERY

General Condition

What equipment was seen running?	☑ Auxiliary Engines ☑ Purifiers ☑ Pumps
Was the engine room free of any significant defects, either reported by crew or observed?	☑ Yes
What was the general cleanliness of the Engine Room?	Clean
Were bilges and tank tops free of oil and water?	☑ Yes
Was housekeeping to a good overall standard?	☑ Yes
Was the vessel equipped with adequate critical spares as recommended by the ship manager Safety Management System (SMS)?	☑ Yes
Were spares neatly stowed and correctly secured?	☑ Yes
Were all sounding pipe self-closing devices in good working order and sounding pipes capped?	☑ Yes
Were recent copies of lube oil analysis reports provided for review?	☑ Yes
Were any caution (amber) or action (red) alerts seen on the lube oil analysis reports?	☒ No
Was the NOx Technical file kept up to date?	☑ Yes
Date of entry:	*12-May-21*
Were Chief Engineer Standing Orders clearly posted and signed by all engineers?	☑ Yes
Were all machinery special tools provided and in good condition?	☑ Yes

Main Engine Condition

Was the main engine in good working condition?	Yes
What condition did the Main Engine appear to be in?	Good
Were Main Engine performance reports provided for review?	☑ Yes
Were the performance reports satisfactory?	☑ Yes
Was there any overdue maintenance on the Main Engine Turbochargers?	☒ No

Propulsion

What type of propulsion does the vessel have?	Fixed Pitch Propeller (FPP)
Were the Propulsion systems, including shafts, machinery and electric motors, if relevant, in good working condition?	☑ Yes
What type of thruster systems does the vessel have?	☑ Bow Thruster
Was the thruster(s) in good working condition?	☑ Yes
What condition did the thruster(s) appear to be in?	Good

Power Generation

How many Auxiliary Engines does the vessel have?	3
Were the auxiliary engines in good working condition?	☑ Yes

What condition did the Auxiliary Engines appear to be in?	Good

Were Auxiliary Engines performance reports provided for review? ☑ Yes

Were the performance reports satisfactory? ☑ Yes

Does the vessel have a shaft generator? ☒ No

Does the vessel have a shaft motor (Power Take-In)? ☒ No

Auxiliary Machinery

Does the vessel have an Auxiliary Boiler? ☒ No

Equipment	Fully operational?	Condition
Purifiers	Yes	Good
Pumps	Yes	Good
Coolers	Yes	Good
Air Compressors	Yes	Good
Fresh Water Generator	Yes	Good
Filters	Yes	Good
Fans	Yes	Good
Refrigeration Systems	Yes	Good

Was all engine room pipework free of leakages? ☑ Yes

Was all pipework free of temporary repairs?	☒ No	*repair patch identified on pipework below the floor plates*
Was all pipework free of corrosion or soft patches?	☑ Yes	
What condition was pipework lagging in?	Stain	
Was the steering gear in good working condition?	☑ Yes	
Was the steering gear free of leakages?	☑ Yes	
Was the emergency steering communication equipment and gyro repeater working as required?	☑ Yes	
Were emergency steering instructions posted nearby?	☑ Yes	
Was the Engine workshop clean and tidy?	☑ Yes	

ECR and Electrical

Was the Engine Control Room clean and tidy?	☑ Yes
Was the Engine Control and Alarm system free of any serious alarms?	☑ Yes
Does the vessel have an Unmanned Machinery Space (UMS) notation?	☑ Yes
Does the machinery space operate in UMS mode?	☑ Yes
Were all Electrical distribution systems in good working condition?	☑ Yes
Were Main Switchboard Insulation readings adequate?	☑ Yes
Were distribution and switchboard panels protected with approved rubber matting?	☑ Yes

FIRE FIGHTING EQUIPMENT AND SYSTEMS

Fire and Safety Appliances Condition

Was the vessel free of fire hazards? ☑ Yes

Was all fire and safety equipment regularly serviced? ☑ Yes

Date of last service	23-Mar-22

Were all relevant Fire and Safety instructions correctly posted? ☑ Yes

What was the vessels Fixed fire detection systems?

	Engine Room	Cargo Holds	Accomodation
	☒ Flame	☒ Flame	☒ Flame
	☑ Smoke	☒ Smoke	☑ Smoke
	☑ Heat	☒ Heat	☑ Heat
	☒ Smoke & Heat (Combined)	☒ Smoke & Heat (Combined)	☒ Smoke & Heat (Combined)

Was the fire detection system reportedly fully operational? ☑ Yes

Was the fire detection system free of alarms or signs of tampering? ☑ Yes

What is the vessels Fixed firefighting systems?

Engine Room	Cargo Holds	Accomodation
☑ CO2	☒ CO2	☒ Water Mist
☒ Foam	☒ Deck Foam	☒ Galley CO2
☑ Water Spray	☑ Water Spray	☒ Wet Chemical
☒ None	☒ None	☑ None

Were all fixed fire fighting systems in good working condition?	☑ Yes	
Were clear operating instructions posted for the fixed firefighting systems?	☒ No	*No clear operating instructions were posted for the firefighting systems.*
Was the fixed firefighting system release protected against unauthorised operation?	☑ Yes	
Was the main fire pump working?	☑ Yes	
Was the emergency fire pump working?	☑ Yes	
Was a fire pump tested during the inspection?	☑ Yes	
Did the fire pump maintain adequate pressure?	☑ Yes	
Were the main and emergency fire pumps in good condition and free of leakages?	☑ Yes	
What was the condition of the fire main and ancillaries such as pipework hydrants and valves?	Good	
Does the vessel have a fire control station?	☒ No	
Were all portable equipment in place as per the fire plan?	☑ Yes	
Were all fire extinguishers in good condition?	☑ Yes	
Were the firefighting outfits and associated equipment in good condition?	☑ Yes	

Were the International Shore Connections on board?	☑ Yes	
Location:	*port side and starboard poop deck near accommodation entrancesnear the accommodation entrances*	
Was the BA equipment fully charged in good condition?	☑ Yes	
Was the Emergency Generator tested during the inspection?	☑ Yes	
Was the Emergency Generator in working order?	☑ Yes	
Were Emergency Generator Starting instructions clearly posted?	☑ Yes	
What was the condition of the Emergency Generator?	Good	
Was the "18 hour" fuel level marked on the emergency generator fuel tank?	☑ Yes	
Was the Quick Closing Valve system in good working order?	☑ Yes	
Were fire doors in good condition and effectively closing?	☑ Yes	
Were fire doors free of unauthorised "hold-open" arrangements?	☑ Yes	
Were all ventilation dampers remote closing positions well labelled and in good working order?	☒ No	*the starboard engine room ventilation fire damper did not properly close when tested*
Were all remote machinery shutdown systems well labelled and in good working order?	☑ Yes	

LIFESAVING APPLIANCES

Lifsaving Appliances Condition

Were all Lifesaving Appliances regularly serviced? ☑ Yes

Date of last service:	23-Mar-22
How many lifeboats is the vessel equipped with?	1
What type of lifeboat is the vessel fitted with?	Free-fall
What was the external condition of the lifeboat(s)?	Good
What was the internal condition of the lifeboat(s)?	Good

Were Lifeboat Engines able to be tested? ☑ Yes

Were lifeboat engines in good working order? ☑ Yes

What was the condition of the rescue boat?	Good
How many life rafts does the vessel have?	2
What was the condition of the life rafts?	Good

Were Liferaft Hydrostatic Release Units (HRU) in date and correctly rigged? ☑ Yes

What was the condition of the Davits and lowering arrangements for the lifeboat(s), rescue boat and liferafts?	Good
What Date is the next Davit wire due for change?	17-Nov-25

Were legible launching/recovery instructions posted near to survival craft?	☑ Yes
Was evidence of regular maintenance, service and inspection of the launching appliances sighted and evident?	☑ Yes

What was the date of the last abandon ship drill?	28-Oct-22

Were all lifejackets, immersion suits, EEBDs and other lifesaving ancillary equipment in good condition and ready for use?	☑ Yes
Were Man Overboard Buoy (MOB) smoke and light signals in date?	☑ Yes
Were the embarkation ladders in a good, well maintained condition?	☑ Yes
Were pyrotechnics and line throwing apparatus available, stored in an appropriate container and within their expiry dates?	☑ Yes

SAFE WORKING ENVIRONMENT

Safe Working Environment Condition

Were any unsafe practices observed during the inspection?	☒ No
Did the vessel provide a safe working environment?	☑ Yes
Were all hazard markings clear?	☑ Yes
Were external walkways adequately coated with anti-slip paint and free of trip hazards?	☑ Yes
Are all hazardous substances including safely managed and stored with relevant Material Safety Data Sheets (MSDS)?	☑ Yes
Is Personal Protective Equipment (PPE) provided and worn by crew?	☑ Yes
Are 'Enclosed Space Entry' procedures implemented?	☑ Yes
Is an effective Permit To Work (PTW) process implemented?	☑ Yes
Date of last PTW:	04-Nov-22
Is an effective Risk Assessment (RA) process in place?	☑ Yes
Was evidence of the annual and 5-yearly inspections of both fixed and portable lifting equipment and appliances sighted?	☑ Yes
Are main and emergency exits clearly identified and unobstructed?	☑ Yes
Are sufficient portable oxygen and gas detection meters provided and regularly calibrated?	☑ Yes
Date of last calibration:	13-Oct-22

What is the working language of the vessel?	English

Are standing orders, procedures, instructions and manufacturers' manuals written in a language which can be understood by the crew?	☑ Yes
Are all IMO signs correctly placed, and compliant with IMO requirements?	☑ Yes
Does the vessel have an adverse history of accidents and near-misses?	☒ No
Is the vessel equipped with an approved SOLAS training manual?	☑ Yes
Were the pilot ladders and boarding arrangements in a good, safe condition?	☑ Yes
Does the vessel have clear pilot boarding instructions posted?	☑ Yes
Are regular drills conducted on board?	☑ Yes

Last drill date	28-Oct-22
Last drill type	fire fighting and abandon ship

POLLUTION CONTROL

General Condition

Was Pollution Control well implemented within the on board Safety Management System (SMS)?	☑ Yes	
Is the vessel free of pollution hazards?	Yes, with no hazards	
Were scuppers plugged in port as required?	☒ No	*no scupper plugs were engaged on the poop deck. The main deck scupper plugs were in place.*
Does the vessel have a Class approved Inventory of Hazardous Materials (IHM)?	☑ Yes	*The vessel holds a Class approved Inventory of Hazardous Material (IHM)*

Oil - Marpol Annex I

Is an Oily Water Separator (OWS) fitted?	☑ Yes	
Was the OWS reportedly operational?	☑ Yes	
What was the condition of the OWS?	Good	
Was the OWS Tested?	☑ Yes	
Means of testing	*Simulated*	
Was the 15ppm meter calibrated?	☑ Yes	
Date of calibration	*12-Nov-20*	

Was the Bilge Overboard valve secured against unauthorised opening with adequate signage and warnings posted?	☑ Yes
Means of securing	☑ Locked
Was the oily water treatment system including valves and pipework free of any signs of tampering, bypass, or modifications?	☑ Yes
Was the SOPEP locker or box well stocked?	☑ Yes
What was the condition of the SOPEP equipment?	Good
Was a list of SOPEP equipment posted and accurate?	☑ Yes
Was the Oil Record Book (ORB) up to date and correctly filled in?	☑ Yes
Date of last entry	*06-Nov-22*
Category of last entry	/
Were previous bunkering checklists correctly filled out?	☑ Yes
Date of last bunkering	*03-Nov-22*
Were bunker samples correctly stored?	☑ Yes
Does the vessel have a Ballast Water Treatment System (BWTS) fitted?	☑ Yes

Ballast Water Treatment System

Manufacturer:	Example Manufacturer
Type:	UV
What regulation is listed on the Ballast Water Management Certificate?	D-2

Type of BWTS approval:	USCG approval

Was the BWTS operational? ☑ Yes

What was the condition of the BWTS?	Good

Was the Ballast Record Book up to date and correctly filled in? ☑ Yes

Date of last entry — *03-Nov-22*

Is the Vessel General Permit (VGP) compliant? ☑ Yes — *Due to the use of an EAL or the airseal arrangements in place for the stern tube, the vessel is considered VGP compliant in this regard for trade to the USA*

How is the vessel VGP Compliant? *Environmentally Acceptable Lubricant ☑ Stern Tube EAL

Type of EAL — *Clarity Synthetic EA oil 100*

Sewage - Marpol Annex IV

Was a Sewage Treatment Plant fitted? ☑ Yes

Was the Sewage Treatment Plant operational? ☑ Yes

What was the condition of the Sewage Treatment Plant?	Good

Does the vessel have a sewage holding tank? ☑ Yes

What was the condition of the Sewage Holding Tank?	Good

Garbage - Marpol Annex V

Does the vessel have a garbage management plan? ☑ Yes

How was the condition of Garbage segregation?	Good

Were Garbage containers of approved, non-combustible type? ☑ Yes

Was the Garbage Record Book (GRB) up to date and correctly filled in? ☑ Yes

Date of last entry *04-Nov-22*

Category of last entry *B*

Air - Marpol Annex VI

Does the vessel have a valid IAPP certificate? ☑ Yes

Is the vessel compliant with IMO 2,020 Sulphur cap regulations? ☑ Yes

How does the vessel comply with IMO 2,020 regulations?	Use of Very Low Sulphur Fuel Oils (VLSFO), MGO, DO etc.

Does the vessel use Ozone Depleting Substances (ODS) as Refrigerant Gas? ☒ No

Was an Incinerator fitted? ☑ Yes

Was the Incinerator operational? ☒ No *the incinerator is not being used*

What was the condition of the Incinerator?	Good

Does the vessel have an Emission Control Area (ECA) change-over log? ☑ Yes *the vessel is not being operated in ECA zones*

Date of last entry *17-Apr-20*

EEXI

Does the vessel have an EEDI score assigned at build? ☒ No

What fuel type does the vessel run on for the majority of the time?	Diesel / Gas Oil

Does the vessel have any energy efficiency technologies installed? ☒ No

Is the vessel ice classed? ☒ No

Main Engine(s)

Specific Fuel Oil Consumption (SFOC) (g/kWhr):	190

Auxiliary Engines

Specific Fuel Oil Consumption (SFOC) (g/kWhr):	215

Does the vessel have a shaft motor (Power Take-In)? ☒ No

What is the expiry date of the International Air Pollution Prevention (IAPP) certificate?	17-Mar-26

ONBOARD MANAGEMENT

Onboard Management Condition

Does the vessel have a functioning Safety Management System (SMS)?	☑ Yes
How was the SMS Implemented?	Software / Electronic System
Were the officers familiar with, and allowed easy access to, the SMS?	☑ Yes
Was the SMS well implemented on board, with Permits to Work, Risk Assessments and Safety procedures understood and followed?	☑ Yes
Is the SMS system regularly reviewed by the Master?	☑ Yes
Date of last review	29-Jun-22
Does the vessel management deal with accidents, near-misses and deficiencies in an effective manner?	☑ Yes
Are regular safety committee and management meetings carried out on board?	☑ Yes
Does the vessel have a valid MLC certificate?	☑ Yes
Were Hours of Rest (ILO) records correct and up to date?	☑ Yes
Last updated	31-Oct-22
Are hours of maximum permissible work regularly exceeded?	☒ No
Is an effective Planned Maintenance System (PMS) implemented and kept up to date?	☑ Yes

What type of Planned Maintenance System (PMS) does the vessel have?	Class-approved system
Name of PMS	Example PMS

Was the PMS a fully integrated type system? (i.e. has integration with the SMS, spares ordering and is accessible by shore side management) ☑ Yes

Were there any critical overdue PMS work orders? ☒ No

Port State Control (PSC) inspection history

No. of Inspections in Past three years:	3
No. of Deficiencies in Past three years:	16
No. of Detentions in Past three years:	1

Is the vessel flag targeted by Port State Authorities? ☒ No

Is an effective system of security access control, conforming to ISPS standards, in place upon boarding the vessel? ☑ Yes

Type of access control	Gangway watch

Do the Master and Chief Engineer have an effective hand over procedures? ☑ Yes

Are random or specific drug and alcohol testing carried out? ☑ Yes

Tests Carried out by	Onboard by Master	External Company

Were the Master and crew prepared for the Inspection? ☑ Yes

What level of cooperation was provided by the crew and Master?	Good
Were documents provided as requested?	Majority of documents provided
What was the overall impression of the general management of the vessel?	Well managed

VESSEL CAPABILITIES AND CARGO SYSTEMS - GAS CARRIER

Cargo Tanks

How many Cargo Tanks does the vessel have?	2
How many cargo segregations can the vessel carry?	1
Type of Gas Carrier	LPG
Type of Containment	Fully-Pressurised

Cargo Tank Capacities	(m³)
CT No.1 combined	1,839
CT No.2 combined	1,839

Cargo Tank Capacities	(m³)
Other / Independent deck tanks	0
Total Capacity	3,678

Were the Cargo tanks able to be entered and inspected? ☒ No

Why were tanks not entered? *tanks were containing cargo*

Were recent vessel cargo tank inspection photographs provided?	☒ No
Does the vessel have void spaces surrounding the cargo tanks?	☑ Yes
Were the void spaces and cofferdams surrounding the cargo tanks able to be entered for inspection?	☒ No
Does the vessel have any independent tanks, i.e. tanks located the deck?	☒ No

What was the last cargo carried?	LPG
What is the next intended cargo to be carried?	LPG

Pumping and Piping Systems

What type of main cargo pumps are fitted?	Electrically Driven deep well
	m³/hr
What is the capacity of the deep well pumps?	300
What is the manufacturer of the deep well pumps?	Example Manufacturer
Were all the pumps fully operational?	☑ Yes
What condition were the pumps in?	Good
Is the vessel fitted with a compressor room?	☑ Yes

What was the condition of the compressor room?	Good

Were the airlocks on the compressor room in good working order? ☒ No

Compressor room airlocks were not in full working order due to: *no airlocks are fitted*

Is the vessel fitted with a motor room? ☒ No

What condition was the cargo pipework in?	Fair

Cargo pipework was in fair/poor condition due to: *minor isolated spot corrosion on cargo pipework*

Are deck cargo piping, manifolds and relevant deck equipment suitably marked? ☑ Yes

Are reducers and removable U-bends, if carried, in good condition?	Yes

Is the vessel fitted with a hose handling crane(s)? ☑ Yes

Is the crane in full working order? ☒ No

The hose handling crane was not in full working order due to: *the port side hose handling crane throttle valve is blocked, awaiting spares.*

What condition was the crane(s) in?	Good

Monitoring and Safety Arrangements

Are tank level, pressure and temperature monitoring systems in full working order? ☑ Yes

Is the Cargo Control Room (CCR) in good overall condition? ☑ Yes

Are all cargo Emergency Shutdown Devices (ESD) in full working order?	☑ Yes	
What condition were the Maximum Allowable Relief Valves (MARVs) in?	Good	
Were the operating pressures clearly marked on the MARVs?	Yes	
Is the vessel fitted with Vent Masts?	☑ Yes	
What condition was the Vent Masts in?	Good	
Are Vent Masts fitted with a Fixed Fire Fighting system?	☒ No	
If appropriate, are fire wires in good condition and properly rigged?	Yes	
Is the vessel provided with suitable gas monitoring instruments?	☑ Yes	
Are the monitoring instruments calibrated and records available?	☑ Yes	*No evidence of calibration of Gas monitoring Instruments was provided.*
Does the vessel have a loading computer?	Yes, Class approved	
Is all Fixed Gas monitoring equipment in full working order?	☑ Yes	
Are Float Level Gauges fitted?	☑ Yes	

What condition was the Float Level Gauges in?	Good

Vetting

What was the date of the last SIRE inspection?	30-Jun-22
How many observations were raised in the last SIRE inspection?	5

Have all observations been fully resolved? ☒ No *Class memo concerning joint-welds of manhole rings*

Is the vessel older than 15 years? ☒ No

Equipment (LPG)	Fully operational?	Condition
Vaporiser	NA	
Cargo heater	Yes	Good
Inert Gas (IG) system	NA	
Nitrogen plant	Yes	Good
Cargo Booster	NA	
Spray Pumps	NA	
Reliquification plant	NA	
Cargo Pipework insulation	Yes	Good
Compressor	Yes	Good
Condenser	NA	