

IDWAL

Report commissioned by:

Example Individual

Organisation:

Example Organisation



PRE-PURCHASE
INSPECTION

EXAMPLE LPG TANKER

IMO Number: 123456789

INSPECTED AT GABES TUNISIA

1st OCTOBER 2022



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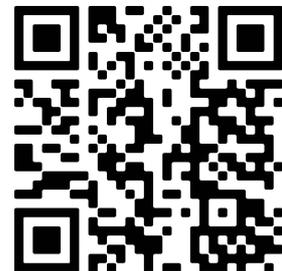
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ADDITIONAL DOCUMENTS



Vessel documents



Vessel photos



INSPECTION SUMMARY

84

IDWAL
GRADE



Example,
Tunisia



01 Oct
2022



Status:
Discharging



5 Hours
Aboard



Limited
documents
provided

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 Shipbuilder
Delivery Date	01/01/2015
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 Example Vessel is an Example DWT, Example Gross Tonnage, Example flagged, Small LPG Carrier vessel built to a good standard by Example Shipyard, in Japan under Example Class supervision. She was delivered on the 1st January 2015. The vessel continues to be Classed with Example Class Society.

A Pre-Purchase Inspection of the vessel was conducted on the 1st October 2022 in Tunisia by Idwal under instruction from Example Organisation.

Fair cooperation was provided by the ship's crew and no access was possible to the ballast tanks or cargo tanks and void spaces. The vessel was alongside, discharging Propane at the time of inspection. A sample of recent photos and inspection reports were provided for the ballast tanks. Cargo Tank inspection reports were provided from the last inspection in D.D. in Jul-2020. The Cargo Tank inspection reports do not contain photos but indicate that the tanks were found to be in good condition. It should be noted that that the latest inspection reports are over 12-months old and therefore a recent condition assessment of the cargo tanks was not seen.

The vessel was found to be in a good overall condition with an Idwal Grade above 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.

The onboard management was found to be good with the Safety Management system found to be well implemented and the vessel generally maintained to a good standard. The vessel was found to provide a safe working environment. The Port State Control (PSC) history was found to be good with 2 deficiencies and 0 detentions in the 7 inspections conducted in the past three years.

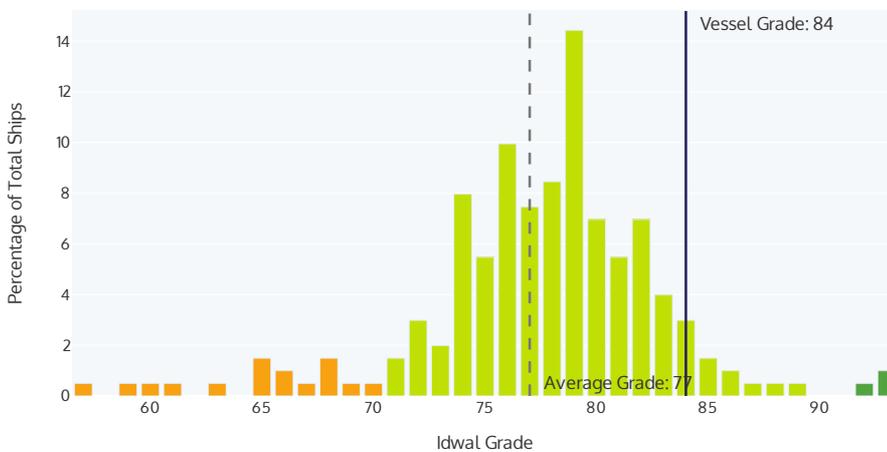
Given the good condition of the vessel it is estimated that the OPEX levels are likely to be as per industry norms for vessels of a similar age, type and size.

The vessel was delivered to market in Aug-2015 with an Energy Efficiency Design Index (EEDI) score of 20.2, which is within the upcoming regulatory requirements at the time of inspection.

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

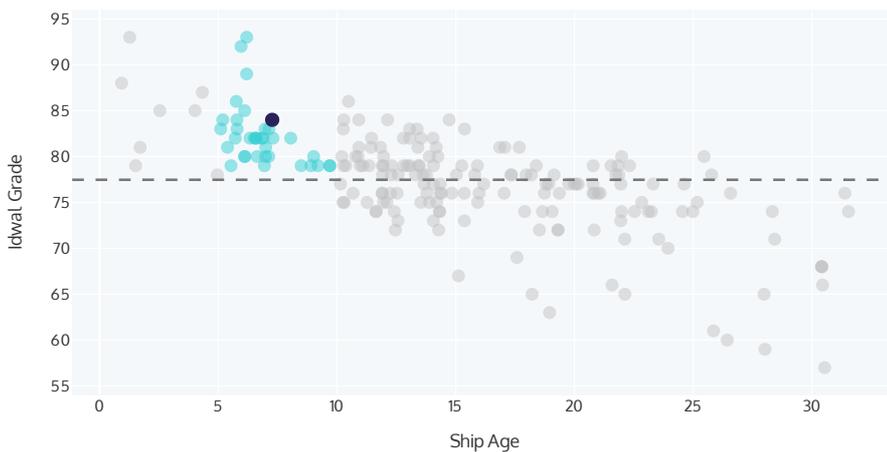


This graph shows the distribution of Idwal Grades against your ship's sector.

KEY

- Your Idwal grade ———
- Average Idwal grade - - - -
- Grade range
- > 90 (green)
- 71 - 90 (yellow-green)
- 51-70 (orange)
- 30 - 50 (red)

Your Idwal Grade vs other LPG Tanker vessels, age 5-10 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]
 Corrosion was seen around a small historical crop and renewal repair on the port side of the Bulbous Bow indicating that the repair was not adequately re-coated.	If opportunities present, the area should be recoated to arrest further deterioration. It is recommended to review any other historical insert repairs which may have similar coating breakdown and developing corrosion.	<\$1000
 Small indentation seen in way of the port side around the boot-top section at the aft draft marks, in way of frame 9 port side which is the Aft Peak Tank.	The indentation did not look to be significant or structurally significant. If not done so already, the areas should be reviewed by Class during their next attendance, including inspection of the reverse side of the indentation for damage in the adjacent tank. If the indentation is outside Class limits and deemed structurally significant then repairs will need to be scheduled.	\$0
 Some of the requested engine room related documents were not provided for review, including the M.E. performance reports and running hour, maintenance history and overhaul schedule records. Only limited Consumption data was provided for the vessel.	For information only.	\$0
 The vessel's cargo tanks were unable to be inspected, though Cargo Tank inspection reports were provided from the last inspection in D.D. in Jul-2020. The Cargo Tank inspection reports do not contain photos but indicate that the tanks were found to be in good condition. It should be noted that that the latest inspection reports are over 12-months old and therefore a recent condition assessment of the cargo tanks was not seen.	For information.	\$0
 The vessel is fitted with Propeller Boss Cap Fins.	PBCF is an energy-saving device attached to the propeller of a vessel. It breaks up the hub vortex generated behind the rotating propeller (reportedly results in energy savings of upto 5%).	\$0

	The vessel is reportedly provided with fuel mass flowmeters.	Positive.	\$0
	A US coastguard approved Ballast Water Treatment System (BWTS) is fitted.	Positive.	\$0
	The vessel is fitted with an airseal on the stern tube and was using an Environmentally Acceptable Lubricant (EAL) in the bow thruster gears and is therefore Vessel General Permit (VGP) compliant in this regard.	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 market in 08 / 2015 with an Energy Efficiency Design Index (EEDI) score of 20.2, within the regulatory requirements at the time. This EEDI score is therefore the vessel's current Attained 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

20.92

gCO₂/t.nm

Attained EEDI/EEXI

20.20

gCO₂/t.nm

This vessel meets the required EEDI/EEXI

GRADING DATA



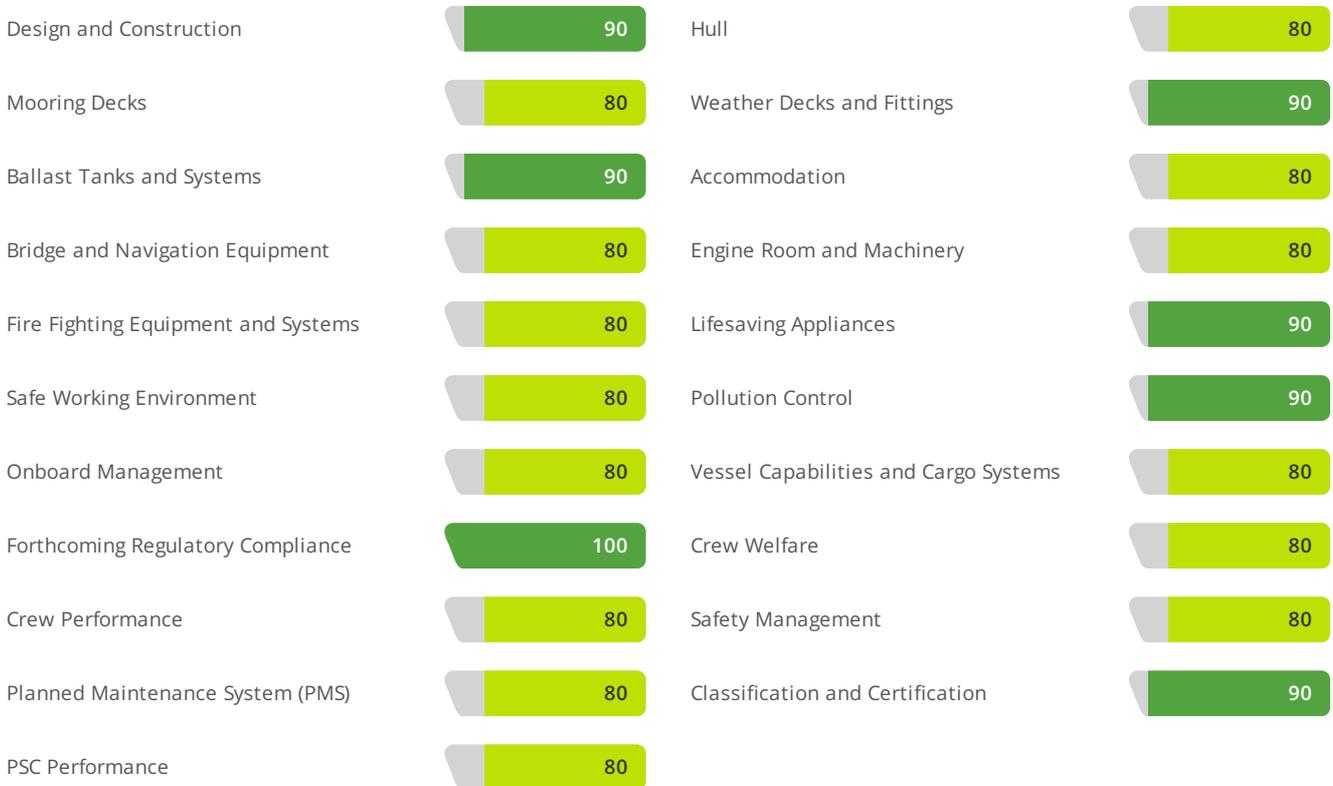
The Idwal Grade® is an industry recognised measure of asset integrity. Using proprietary algorithms, the Idwal Grade is programmatically calculated from over 500 individual data points, captured during a rigorous and standardised inspection process. Our data-driven methodology ensures that our reports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



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



DESIGN AND CONSTRUCTION

90

The construction and design was found to be good to very-good overall, with the vessel built to

IACS standards and Rules in Japan by Example Shipyard with the keel laid on the 28-Jan-2015. The vessel is a fully pressurised LPG tanker with 2 independent cylindrical horizontal aligned tanks. The vessel has two deep well cargo pumps and 2 cargo compressors. A Nitrogen Generator, Cargo Booster Pump and Cargo Heater are also provided. The machinery arrangement is conventional for a smaller vessel of this type with a single MAN-B&W, 2-Stroke, Single Acting, In-Line (Vertical) 5 Cyl. Main Engine driving a single Fixed Pitched Propeller. 2 Aux. Engine Generator sets are provided for auxiliary power generation. The single is rudder

is driven by a 1-Ram-2-Cyl. Rapson-Slide type Steering Gear Actuator. A 380kW Bow Thruster is provided. The vessel is not on the Enhanced Survey Program or Extended Dry Docking schedule but does hold a Class notation for In Water Surveys. The latest UTM report showed only minor steel diminution. The vessel is fitted with Propeller Boss Cap Fins. Apart from the equipment required by international rules and regulations, the bridge is also fitted with differential-gps and the engine room and machinery are fitted with fuel mass flowmeters, an incinerator sludge burning system, UMS capabilities, 2-stroke engine adaptive cylinder lubricators and centralised sea water cooling.

HULL

80

The hull was seen to be in a good overall condition, with the hull able to be inspected from the port side only. The vessel was found to be free of major structural defects, however, a small indentation was seen in way of the port side around the boot-top section at the aft draft marks, in way of frame 9 port side which is the Aft Peak Tank. The indentation did not look to be structurally significant. The visible hull plating had only very minor localised spot corrosion, covering up to approximately 3% of the visible surface area, with minor isolated areas predominantly along the boot-top, with isolated spots seen near the tug contact mark on the port side. Superficial rust staining was sighted from the scupper ports. Corrosion was seen around a small historical crop and

renewal repair on the port side of the Bulbous Bow indicating that the repair was not adequately recoated. Hull markings were well painted and legible with no marine fouling observed. The vessel's last out of water bottom survey was credited on the Example Date in Poland, with the vessel's next bottom survey due by the 04-Aug-23. The vessel has physical features for underwater inspection in lieu of drydocking survey and thus, subject to class approval, the vessel can carry out intermediate bottom surveys in-water in lieu of dry-docking. If the next bottom survey is completed in-water in lieu of dry-docking, then the vessel will not be required to dry-dock until her next Special Survey which is due by the 04-Aug-2025.

NOTABLE ITEMS

Description	Estimated Cost [USD]
<p>Issue: Corrosion was seen around a small historical crop and renewal repair on the port side of the Bulbous Bow indicating that the repair was not adequately re-coated.</p>	
<p>Corrective Action: If opportunities present, the area should be recoated to arrest further deterioration. It is recommended to review any other historical insert repairs which may have similar coating breakdown and developing corrosion.</p>	<\$1000

Description	Estimated Cost [USD]
<p>Issue: Small indentation seen in way of the port side around the boot-top section at the aft draft marks, in way of frame 9 port side which is the Aft Peak Tank.</p> <p> Corrective Action: The indentation did not look to be significant or structurally significant. If not done so already, the areas should be reviewed by Class during their next attendance, including inspection of the reverse side of the indentation for damage in the adjacent tank. If the indentation is outside Class limits and deemed structurally significant then repairs will need to be scheduled.</p>	\$0

Description	Estimated Cost [USD]
<p>Issue: The vessel is fitted with Propeller Boss Cap Fins.</p> <p> Corrective Action: PBCF is an energy-saving device attached to the propeller of a vessel. It breaks up the hub vortex generated behind the rotating propeller (reportedly results in energy savings of upto 5%).</p>	\$0

MOORING DECKS

80

The Mooring decks were seen to be in a good condition overall with the decks found to be free of structural defects and free from significant coating breakdown and corrosion. Deck fittings were found to be in a good condition with fairleads and mooring rollers free to turn when tested. All Hydraulic windlasses and winches were reported to be fully operational and free from hydraulic leakage as observed. Mooring machinery was in good condition with the brake bands seen to have adequate thickness remaining and clutching and gearing arrangements sufficiently lubricated. The visible sections of the anchor

chains and mooring ropes were in a good overall condition with expected wear and tear. 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 the latest industry best practice. The Bosun's store was in a good overall condition with no issues to the structure, coatings or housekeeping observed. 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.

WEATHER DECKS AND FITTINGS

90

The Weather Decks and Fittings were seen to be in good to very-good condition overall, with the decks found to be free from structural defects and free from coating breakdown and corrosion. Deck fittings were found to be in a good condition with pipework and

fittings free of leakages and deck mooring machinery was in good condition. The accommodation ladders and gangways were in a good overall condition, with no notable defects found, as were provisions lifting appliances.

BALLAST TANKS AND SYSTEMS

90

Ballast tanks and systems were deemed to be in a good to very-good overall condition. No tanks could be entered, as the vessel was under commercial operations and was discharging with all ballast tanks in use. However, photographs of previous tank entries by the crew earlier in Nov-22 were provided for review. From the photographs provided, it was seen that the ballast tanks were found to be generally free from significant structural

defects and were free from notable coating breakdown and corrosion. Ballast tank fittings such as ladders and pipework were seen to be in a good overall condition. 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.

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 significant 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 with some additional recreation facilities provided for the crew including recreational Wi-Fi. The crew cabins share communal shower and sanitation facilities with officer cabins en-suite. 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 with the galley hoods also found to be kept clean. The vessel's walk-in cold rooms were found to be clean and hygienic with temperatures at the required levels. Provision room components were seen to be generally free from significant frosting and deterioration. The external superstructure was found to be free of structural defects and was free of coating breakdown and corrosion. 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.

BRIDGE AND NAVIGATION EQUIPMENT

80

The Bridge and navigation equipment were found to be in a 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 Paper and 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 from defects.

ENGINE ROOM AND MACHINERY

80

The Engine room and machinery were found to be in a good overall condition, with no significant defects reported or observed and with the engine room generally found to be clean. Some of the requested engine room related documents were not provided for review, including the M.E. performance reports and running hour, maintenance history and overhaul schedule records. Only limited Consumption data was provided for the vessel. During the inspection the Auxiliary Engines, purifiers, pumps, air compressors and sewage treatment plant were seen running. Bilges and tank tops were generally free of oil or water. Pipework was seen to be in good overall condition, free of leaks, temporary repairs and significant corrosion with pipework lagging seen to be all clean and intact. 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 some areas of note. The latest samples were dated Aug-2022. A caution notice was issued for the sample from the Bow Thruster due to water content. The NOx Technical file was up to date and last updated on 02-Jan-22. 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. Propulsion systems, such as shafts and bearings including the Bow thruster were in good working order with no defects reported or sighted. The 2 Auxiliary Engines were reported to be fully operational and were seen to be in good condition, with no major visible defects. The latest aux. engine performance tests were reportedly carried out at 200kW load which is not enough load to accurately assess the engines performance. Performance tests need to be conducted at closer to full load (70% M.C.R.). As per the limited records provided, none of the Aux. Engines were due their scheduled overhauls. The vessel's steam boiler was found to be fully operational and in good condition. The boiler safety valves were seen to be satisfactory and free of tampering. 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.

NOTABLE ITEMS

Description	Estimated Cost [USD]
<p> Issue: The vessel is reportedly provided with fuel mass flowmeters.</p> <p>Corrective Action: Positive.</p>	\$0

FIRE FIGHTING EQUIPMENT AND SYSTEMS

80

Fire Fighting Equipment and Systems were found to be in a good condition overall. The vessel was 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 Local Water Spray fixed firefighting in the engine room, Local Water Spray for the cargo areas and Galley CO2 and Water Mist in the accommodation. The Cargo Tanks are protected by a Dry Powder Fixed System. There are 2 stations; One tank at the aft of the vessel and a second one in forward. Fixed firefighting systems were all reported to be in good working condition with operating instructions clearly posted. The main and emergency fire pumps were reportedly fully operational and both were found to be in a good condition,

free of leakages. 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 not tested during the inspection, but was reported 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 good overall condition with no defective shut down equipment sighted. The fire doors were found to be in good condition, closing effectively and free from any unauthorised 'hold-open' arrangements.

LIFESAVING APPLIANCES

90

Lifesaving appliances were seen to be in a good to very-good overall condition with all equipment regularly serviced and inspected as required. The vessel is fitted with 2 davit launched lifeboats, which were seen to be in good overall condition externally and internally. The lifeboat engines were not tested during the inspection, but was reported to be in good working order. The vessel has no dedicated rescue boat and uses the starboard lifeboat as a rescue boat. 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. The pilot ladders were renewed on the 29-June-2022. Regular drills were conducted on board with the last drill conducted on the 03-Nov-22, which was a Fire and Abandon ship drill.

POLLUTION CONTROL

90

Pollution control was deemed to be good to very-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 not tested during the inspection though the 15ppm Oil Content Meter (OCM) was seen to be calibrated. The bilge overboard was seen to be sealed and 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 05-Nov-22. A US coastguard approved Ballast Water Treatment System (BWTS) is fitted

and was reported 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 airseal on the stern tube and was using an Environmentally Acceptable Lubricant (EAL) in the bow thruster gears 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 05-Nov-22. The vessel's incinerator was found to be fully operational and 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]
<p>Issue: The vessel is fitted with Propeller Boss Cap Fins.</p> <p>Corrective Action: PBCF is an energy-saving device attached to the propeller of a vessel. It breaks up the hub vortex generated behind the rotating propeller (reportedly results in energy savings of upto 5%).</p>	\$0

Description

Estimated
Cost [USD]

Issue: A US coastguard approved Ballast Water Treatment System (BWTS) is fitted.

Corrective Action: Positive.

\$0

Description

Estimated
Cost
[USD]

Issue: The vessel is fitted with an airseal on the stern tube and was using an Environmentally Acceptable Lubricant (EAL) in the bow thruster gears and is therefore Vessel General Permit (VGP) compliant in this regard.

Corrective Action: Positive.

\$0

ONBOARD MANAGEMENT

80

Onboard management was found to be good overall. The paper-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. The Class-approved system-based Planned Maintenance System (PMS) was fully integrated with the SMS for ordering of spares and general vessel management. The Port State Control (PSC) history was found to be good with 2 deficiencies and 0 detentions in the 7 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 though only fair cooperation was provided but limited documents available.

NOTABLE ITEMS

Description	Estimated Cost [USD]
<p> Issue: Some of the requested engine room related documents were not provided for review, including the M.E. performance reports and running hour, maintenance history and overhaul schedule records. Only limited Consumption data was provided for the vessel.</p> <p>Corrective Action: For information only.</p>	\$0

VESSEL CAPABILITIES AND CARGO SYSTEMS

80

Vessel capabilities and cargo systems were deemed to be in a good overall condition. The vessel's cargo tanks were unable to be inspected, though Cargo Tank inspection reports were provided from the last inspection in D.D. in Jul-2020. The Cargo Tank inspection reports do not contain photos but indicate that the tanks were found to be in good condition. It should be noted that the latest inspection reports are over 12-months old and therefore a recent condition assessment of the cargo tanks was not seen. The vessel is fitted with two fully pressurised cylindrical, horizontal aligned cargo tanks. Tanks were reported to be in a generally good structural condition with no damage, deformity or indentations sighted or reported. Two cargo compressors are provided. The cargo compressors were reported to be fully operational. The cargo tank gauging system was reported

to be fully operational (float type). The temperature and pressure monitoring system was reported to be in good order. Inert gas is provided through an N2 generator. The cargo booster pump was reported to be in full working order. The Cargo is discharged through two deep well pumps with a single pump fitted in each tank. The capacity of the cargo pumps is 300m³/h. A Cargo heater is provided to increase the temperature of the Cargo to facilitate pumping. The Lowest temperature allowed is - 10 degrees C. Only one grade of cargo can be carried at any given time. A Class approved loading computer is installed and available in the Ships office / CCR. The vessel's last SIRE inspection was conducted in Oct-2022 with 2 observations raised (not disclosed). Both observations have reportedly been dealt with.

NOTABLE ITEMS

Description	Estimated Cost [USD]
 <p data-bbox="225 1512 1299 1630">Issue: The vessel's cargo tanks were unable to be inspected, though Cargo Tank inspection reports were provided from the last inspection in D.D. in Jul-2020. The Cargo Tank inspection reports do not contain photos but indicate that the tanks were found to be in good condition. It should be noted that the latest inspection reports are over 12-months old and therefore a recent condition assessment of the cargo tanks was not seen.</p> <p data-bbox="225 1653 600 1680">Corrective Action: For information.</p>	\$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:	520 m ³
Total Marine Gas Oil (MGO) and Diesel Oil (DO) capacity:	105 m ³
What fuel type does the vessel run on for the majority of the time?	Light Fuel Oil (LFO)

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	N/A	Yanmar	Yanmar		
Model	5L35MC 6.1		6EY18ALW	6EY18ALW		
Number of Cylinders	5		6	6		
Speed (RPM)	185		900	900		
Bore (mm)	350		180	180		
Stroke (mm)	1,050		280	280		
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	186.2		230.7	230.7		
Nox Tier	2		2	2		
Fuel Oil Consumption at full load (tonnes/day)	11.5		0.87	0.87		
Cylinder Oil Consumption (litres/day)	50					
System Oil Consumption (litres/day)	15					
Major Overhaul Interval (Hours)			10,000	10,000		
Running Hours since last overhaul (Hours)			869	1,323		

	Vessel Speed (knots)	Consumption (t/day)
Loaded Eco	13	11

Main Engine Maintenance

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? Yes
- Is the vessel ice classed? No

Survey	Date Last Completed	Date Next Due
Main / Special / Renewal	05-Aug-20	04-Aug-25
Intermediate		04-Aug-23
Annual	29-Oct-22	04-Aug-23
Bottom In Water		04-Aug-23
Bottom in dry dock	05-Aug-20	04-Aug-25

What was the location of the last out-of-water docking?

Szczecin, Poland

Is the vessels last dry dock report provided and attached?

Yes

Provide details of works done in last dry dock

Full report was not available on board. Work completed reportedly included: 1. Hull Treatment - painting and anti-fouling paint application 2. Overhaul of Cargo System Equipment 3. Calibration 4. Deck flanges for MARVS and safety valves maintenance. 5. 5 yearly Inspection of LSA- maintenance, painting , new stencils and new reflection tape for life boats - 6. Wire replacement. 7. Steel repair : Stbd side after peak tank small crop and renew(small); Port side bulbous bow crop and renew. 8. Standard S.S. scope.

Does the vessel intend to dry dock before the next scheduled bottom survey?

No

Has the vessel remained with the same flag since build?

Yes

Has the vessel remained with the same Class since build?

Yes

Does the vessel have any Conditions of Class or Recommendations of Class?

No

Does the vessel have any Class Memos, Observations or Additional Requirements?

No

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:

900,000

What was the status of the vessel at the time of inspection?

Discharging

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 Society

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

What features were seen on the hull?

Post-swirl device e.g. Boss Cap fins

Propeller Boss Cap Fins-MOL Techno-Trade, Ltd PBCF is an energy-saving device attached to the propeller of a vessel. It breaks up the hub vortex generated behind the rotating propeller (reportedly results in energy savings of 5%).

Bridge & Communication

What features were seen on the bridge?

Differential-GPS

Engine Room & Firefighting

What features were seen in the engine room?

Fuel Mass Flowmeters

Incinerator sludge burning system

MIURA BGW-10N

UMS Capabilities (regardless of Class notation)

Automatic Centralized Control Unmanned (ACCU)

2-Stroke Engine Adaptive Cylinder Oil Control e.g.
MAN B&W Alpha Lubricator

Centralised Sea Water cooling

HULL

Hull Condition

What sections of the hull were inspected?

Port 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

small indentation seen in way of the port side around the boot-top section at the aft draft marks, in way of frame 9 port side which is the Aft Peak Tank.

What was the level of Hull coating breakdown and corrosion?

Minor

Coating breakdown and corrosion was mainly located in the following areas:

minor isolated areas predominantly along the boot-top, with isolated spots seen near the tug contact mark on the port side. Superficial rust staining sighted from the scupper ports. Corrosion was seen around a small historical insert repair on the port side of the Bulbous Bow indicating that the repair was not adequately recoated.

The amount of surface area coating breakdown and corrosion was approximately:

3%

Type of coating breakdown and corrosion:

Localised

Pitting

Spot

What was the condition of the hull markings?

Well painted and clearly legible

What type of anti-fouling coating was applied?

SEA GRANDPRIX 880 HS Chugoku Marine Paints, Ltd

What level of marine fouling was seen?

None

Were fenders installed on the hull?

No

What were the vessels draughts?

Fwd: (m)	3.0
Aft: (m)	4.3

Was the upper sections of the rudder visible?

Yes

What condition was the rudder in?	Good
-----------------------------------	------

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?

None

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? Yes

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

02-Sept-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?

Coatings fully intact with no 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?

None

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? Yes

What was the condition of the mooring winches?

Good

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)?

Good

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: Vessel was under commercial operations and was discharging with all ballast tanks in use.

Were recent (last 12 months) ballast tank inspection photographs provided?

Yes

Date photos were provided:

03-Nov-22

Were inspection reports or reports of the tanks condition provided?

No

Were the tanks free of any structural damage or indentations?

Yes

What was the level of Ballast Tank coating breakdown and corrosion?

None

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?

No

Anode depletion:

%

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

ACCOMMODATION

Internal Accommodation 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?

Yes

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?

Yes

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?

Yes

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?

None

What was the general condition of external superstructure fittings?

Good

Crew Welfare

What is the average contract length for crew members?

Officers:

6 Months

Crew:

9 Months

Was Wi-Fi provided on-board?

Yes, Free, Unlimited

What is the approximate average internet speed?

Average (Able to access social media apps and websites with ease)

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

Yes

What Public Recreation equipment did the crew have access to?

- Free Weights
- Treadmill
- Television
- Entertainment Library - Books, DVDs, Games, etc.
- Public Computer
- Fixed weight machine
- Cycling Machine
- Games console
- Musical Instruments

What was the quality of crew recreation facilities?

Good

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?

- Carpets
- Desk
- Sofa
- Ample storage

Does the vessel have any onboard training facilities?

Yes

Type of onboard training facilities:

Seagull

Is there a crew suggestion policy in place?

Yes

Does the crew have access to a bonded store?

Yes, well stocked

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?

Weather fax

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-Mar-24

SARTs

30-Mar-26

VHF

30-Dec-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?

Paper and 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

05-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? No

Were bridge wing engine speed and compass repeaters seen to be in good working condition? Yes

ENGINE ROOM AND MACHINERY

General Condition

What equipment was seen running?

- Auxiliary Engines
- Pumps
- Sewage treatment plant
- Refrigeration Compressor
- Purifiers
- Air compressors
- Auxiliary Boiler

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?

- Yes

latest samples dated Aug-2,022. Caution notice issued for the sample from the Bow Thruster due to water content.

Was the NOx Technical file kept up to date?

- Yes

Date of entry:

02-Jan-22

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?

2

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?

No

latest performance tests were reportedly carried out at 200kW load which is not enough load to accurately assess the engines performance. Performance tests need to be conducted at closer to full load (70% M.C.R.).

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?

Yes

What type of boiler is fitted?

Steam

Was the boiler in good working condition?

Yes

What condition did the Boiler appear to be in?

Good

Were boiler safety valves in satisfactory condition?

Yes

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? Yes

Was all pipework free of corrosion or soft patches? Yes

What condition was pipework lagging in?	Clean
---	-------

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

27-Jul-22

Were all relevant Fire and Safety instructions correctly posted? Yes

What was the vessels Fixed fire detection systems?

	Engine Room	Cargo Holds	Accommodation
<input checked="" type="checkbox"/> Flame	<input checked="" type="checkbox"/> Flame	<input type="checkbox"/> Flame	<input type="checkbox"/> Flame
<input checked="" type="checkbox"/> Smoke	<input checked="" type="checkbox"/> Smoke	<input type="checkbox"/> Smoke	<input checked="" type="checkbox"/> Smoke
<input checked="" type="checkbox"/> Heat	<input checked="" type="checkbox"/> Heat	<input type="checkbox"/> Heat	<input checked="" type="checkbox"/> Heat
<input type="checkbox"/> 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
<input checked="" type="checkbox"/> CO2	<input checked="" type="checkbox"/> CO2	<input checked="" type="checkbox"/> Water Mist
<input checked="" type="checkbox"/> Foam	<input checked="" type="checkbox"/> Deck Foam	<input checked="" type="checkbox"/> Galley CO2
<input checked="" type="checkbox"/> Water Spray	<input checked="" type="checkbox"/> Water Spray	<input checked="" type="checkbox"/> Wet Chemical
<input checked="" type="checkbox"/> None	<input checked="" type="checkbox"/> None	<input checked="" type="checkbox"/> None

Were all fixed fire fighting systems in good working condition?

Yes

Were clear operating instructions posted for the fixed firefighting systems?

Yes

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?

No

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?

Yes

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:

2 near gangway +poop deck fire station

Was the BA equipment fully charged in good condition? Yes

Was the Emergency Generator tested during the inspection? No

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? Yes

Were all remote machinery shutdown systems well labelled and in good working order? Yes

LIFESAVING APPLIANCES

Lifesaving Appliances Condition

Were all Lifesaving Appliances regularly serviced? Yes

Date of last service:	15-Oct-22
How many lifeboats is the vessel equipped with?	2
What type of lifeboat is the vessel fitted with?	Davit launched
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? No

Were lifeboat engines in good working order? Yes

What type of rescue boat was fitted?	Lifeboat designated as rescue boat
Which lifeboat is designated?	Stbd
How many life rafts does the vessel have?	02
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?

05-Aug-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?

03-Nov-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:

03-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:

30-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

03-Nov-22

Last drill type

Fire 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? Yes

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? No

Was the 15ppm meter calibrated? Yes

Date of calibration

01-May-19

Was the Bilge Overboard valve secured against unauthorised opening with adequate signage and warnings posted? Yes

Means of securing Sealed
 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

05-Nov-22

Category of last entry

code 1

Were previous bunkering checklists correctly filled out? Yes

Date of last bunkering

01-Oct-22

Were bunker samples correctly stored? Yes

Does the vessel have a Ballast Water Treatment System (BWTS) fitted? Yes

Ballast Water Treatment System

Manufacturer:

ERMA FIRST ESK Engineering Solutions S.A

Type:

Electrolysis

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

05-Nov-22

Is the Vessel General Permit (VGP) compliant?

Yes

Due to the use of an EAL or the airtight 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 Airseal
 Bow Thruster EAL

Type of EAL

BIOSTAT 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?

No

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

05-Nov-22

Category of last entry

Plastic

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?

Yes

What was the condition of the Incinerator?

Good

Does the vessel have an Emission Control Area (ECA) change-over log?

No

EEXI

Does the vessel have an EEDI score assigned at build?

Yes

What is the EEDI score?

20.2

What fuel type does the vessel run on for the majority of the time?

Light Fuel Oil (LFO)

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):

186.2

Auxiliary Engines

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

230.7

Does the vessel have a shaft motor (Power Take-In)?

 No

What is the expiry date of the International Air Pollution Prevention (IAPP) certificate?

04-Aug-25

ONBOARD MANAGEMENT

Onboard Management Condition

Does the vessel have a functioning Safety Management System (SMS)? Yes

How was the SMS Implemented?

Paper Documents

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

30-Aug-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

03-Nov-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:	7
No. of Deficiencies in Past three years:	2
No. of Detentions in Past three years:	0

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	MARSEC Level 2. Patrol- Check Identity + Escort + search baggage and provisions.
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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
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Were the Master and crew prepared for the Inspection? Yes

What level of cooperation was provided by the crew and Master?

Fair

Were documents provided as requested?

Limited 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	(m ³)
CT No.1 combined	2,510.54
CT No.2 combined	2,509.71

Cargo Tank Capacities	(m ³)
Total Capacity	5,020.25

Were the Cargo tanks able to be entered and inspected?

No

Why were tanks not entered?

vessel loaded with cargo. Cargo Tank inspection reports were provided from the last inspection in D.D. in Jul-2,020.

Were recent vessel cargo tank inspection photographs provided?

No

Were cargo tank structural members found to be free from damage?

Yes

Were the cargo tank fittings such as ladders, hand rails and pipe guards etc. found to be free from damage? Yes

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

Were the void spaces and cofferdams adjacent to cargo tanks free of any cold spots with no damage/deterioration to insulation. Yes

Does the vessel have any independent tanks, i.e. tanks located the deck? No

What was the last cargo carried?

Propane

What is the next intended cargo to be carried?

Not yet fixed

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?

Yes

Were compressor room airlock audible and visual alarms in full working order?

Yes

Do the compressor room fans maintain a positive pressure in the Compressor Room?

Yes

Is the vessel fitted with a motor room?

No

What condition was the cargo pipework in?

Good

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?

Yes

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?

Yes

What condition was the Vent Masts Fixed Fire Fighting Extinguishing system in?

Good

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?

16-Oct-22

How many observations were raised in the last SIRE inspection?

2

Have all observations been fully resolved?

Yes

What was the date of the last CDI inspection?

01-Sept-21

How many observations were raised in the last CDI inspection?

2

Have all observations been fully resolved?

Yes

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	Yes	Good
Spray Pumps	Yes	Good
Reliquification plant	NA	
Cargo Pipework insulation	NA	
Compressor	Yes	Good
Condenser	NA	