



**GSE TEAM** 

Organisation:

Guangzhou Shipping Exchange Co., Ltd



# SHANDONG FU ZE

IMO Number: 9734721

INSPECTED AT SAO FRANCISCO DO SUL BRAZIL

1<sup>st</sup> SEPTEMBER 2023





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**Report commissioned for:** GSE TEAM

**Organisation:** Guangzhou Shipping Exchange Co., Ltd

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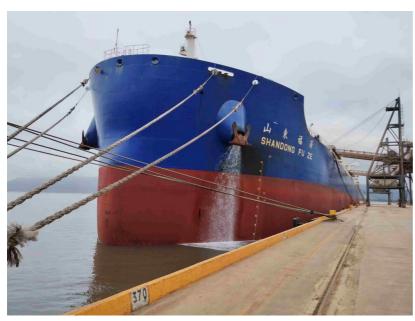


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# INSPECTION SUMMARY









01 Sep 2023



Status: Loading



17.5 Hours Aboard



Majority of documents provided

The SHANDONG FU ZE is an 81,781 DWT, 44,120 Gross Tonnage, China flagged, gearless Bulk Carrier vessel built to a good standard by Jiangsu Jinling Ships Co Ltd, in China under China Classification Society supervision and was delivered on the 15th March 2017. The vessel remains classed with the China Classification Society.

A Pre-purchase Inspection of the vessel was conducted from the 31st of August 2023 to the 1st of September 2023 in Sao Francisco Do Sul, Brazil by Idwal under instruction from Guangzhou Shipping Exchange Co., Ltd.

Good cooperation was provided by the ship's crew with access provided to the cargo holds. The ballast tanks were not able to be inspected due to the ballast operation being in progress however, previous inspection photos were shared for review with the assessment of the condition based on these. The vessel was alongside, loading at the time of inspection.



#### **VESSEL PARTICULARS**

Ship Name SHANDONG FU ZE

Previous Name N/A

IMO Number 9734721

Port of Registry Hong Kong
Ship Type Bulk Carrier

Flag

Classification Society China Classification

Society 2017-03

Registered OwnerSea 256 Leasing Co LtdTechnical ManagerThome Shipping Pte

Ltd

China

**Shipbuilder** Jiangsu Jinling Ships Co

Ltd

**Delivery Date** 15/03/2017 **Dead Weight** 81781.00 MT **Gross Tonnage** 44120.00 MT **Net Tonnage** 27591.00 MT **Length Overall** 229.00 m Breadth 32.26 m Depth 20.05 m **Summer Draught** 14.45 m Lightweight 13517.00 MT



The vessel was found to be in 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. The vessel was found to provide a safe working environment. The Port State Control (PSC) history was found to be very good with 0 deficiencies and 0 detentions in the 6 inspections conducted in the past three years.

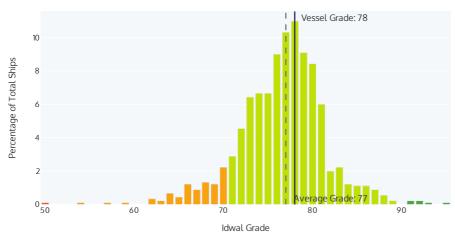
The vessel was delivered in March 2017 with an Energy Efficiency Design Index (EEDI) of 3.69 however, as per the data provided during the inspection, the Required EEXI for the vessel is now 3.49 which indicates a reduction in the main engine MCR may be required to meet compliance.



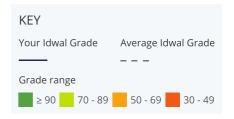
# COMPARE YOUR IDWAL GRADE

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

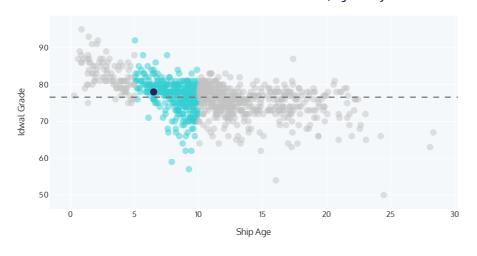
#### Your Idwal Grade vs other Panamax Bulk Carrier vessels



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



#### Your Idwal Grade vs other Panamax Bulk Carrier 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.



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]
Cargo Hold No.1 vertical ladder was observed with a slight bent, Hold No.2 pipe protection bars were observed with a slight bent, Hold No.5 platform from the vertical leader was observed with a slight bent and Hold No.5 protection bars for pipes were seen bent at certain places.	To plan and repair as considered necessary.	\$1000 - \$5000
It was noted that the fuel pump overhaul on auxiliary engine number 3 was overdue.	To be further investigated and any required overhaul carried out as soon as practical.	\$1000 - \$5000
It was noted that the main engine main start ball valve overhaul was overdue.	To be further investigated and any required overhaul carried out as soon as practical.	\$1000 - \$5000
The vessel was seen to be lacking critical spares with numerous items noted to be missing including emergency fire pump automatic deaerator valve and emergency generator starting motor/starter.	Ensure the vessel has adequate spares as recommended by the ship manager Safety Management System (SMS).	\$1000 - \$5000
The main engine was seen with oil stains and minor leaks near cylinder heads and near fuel pumps at the forward end of the main engine.	Rectify the leaks as soon as reasonably possible.	\$1000 - \$5000
Engine room pipework was found to have leaks around pipework related to hand-operated hydraulic pumps on engine room bottom plates	Rectify minor leaks, and consideration should be given to renewing deterioated pipework.	\$1000 - \$5000
lcing and a collection tray were observed below the evaporator unit in one of the provision stores.	To investigate and take appropriate action.	<\$1000
Oil leakage was observed near Auxiliary engine No.1 Fuel filters	To investigate and repair as required.	<\$1000
Black stained marks were observed on the main engine exhaust casing.	To investigate and take appropriate action.	<\$1000
According to the running hours data provided Auxiliary Engine No.1 was reported to have only 47 hours left for its	For information.	\$0

major overhaul of 12,000 hours.



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### Issued On: September 7 2023



	It was reported that an IMO approved BWTS is installed with no documentation provided onboard to verify it's USCG compliance	This is recommended to be further investigated.	\$0
	The vessel is reportedly fitted with free to access limited use Wi-Fi system		\$0
<b>Ø</b>	The vessel is fitted with an air seal on the stern tube and is therefore Vessel General Permit (VGP) compliant in this regard.		\$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 in March 2017 with an Energy Efficiency Design Index (EEDI) of 3.69 however, as per the data provided during the inspection, the Required EEXI for the vessel is now 3.49 which indicates a reduction in the main engine MCR may be required to meet compliance. 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 Attained EEDI/EEXI

3.49

gCO<sub>2</sub>/t.nm gCO<sub>2</sub>/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	78	Management	77
The following are grades representing inc	dividual areas of intere	est of the vessel:	
Design and Construction	80	Hull	80
Mooring Decks	80	Weather Decks and Fittings	80
Ballast Tanks and Systems	80	Accommodation	80
Bridge and Navigation Equipment	80	Engine Room and Machinery	60
Fire Fighting Equipment and Systems	80	Lifesaving Appliances	80
Safe Working Environment	80	Pollution Control	90
Onboard Management	80	Vessel Capabilities and Cargo Systems	80
Forthcoming Regulatory Compliance	60	Crew Welfare	80
Crew Performance	80	Safety Management	70
Planned Maintenance System (PMS)	80	Classification and Certification	80
PSC Performance	100		



## **DESIGN AND CONSTRUCTION**

The construction and design were found to be good overall, with the vessel built to IACS standards and Rules in China by Jiangsu Jinling
Ships Co Ltd with the keel laid on 18 November 2015. The vessel is a Bulk Carrier, with 7 holds, driven by a fixed pitch, direct drive propeller. The Main Engine is a NOx Tier 1, MAN B&W; the vessel has 3 Auxiliary Engines and no shaft generator. While crew reported the engines to be NOx Tier 2 no documentation was shared for review to verify with it

recommended this is further investigated and verified. The vessel is subject to the Enhanced Survey Program (ESP) and holds a Class notation for In Water Surveys. No Cargo Lifting Appliances are fitted and the vessel does not carry grabs. The engine room is fitted with an incinerator sludge burning system and UMS capabilities. It was also reported that an Engine Power Limiter (EPL) was fitted as detailed in the relevant Class Memo.



## HULL

The hull was seen to be in a good overall 80 condition, with the hull able to be inspected from the port side only. The vessel was found to be free of both major and minor structural defects. The hull plating had only minor localized surface corrosion, up to approximately 5% of the visible surface area. The coating damage and corrosion were primarily situated along the

shell plate, particularly on the aft part, where the coating had been abraded due to routine contacts. Hull markings were well painted and legible with no marine fouling observed. The vessel's last out of water bottom survey was credited on 17-Jan-22, with the vessel's next out of water bottom survey due by 14-Mar-27.



### MOORING DECKS

The Mooring decks were seen to be in a good condition overall with the decks found to be free of structural defects and had only minor localised spot corrosion, up to approximately 5% of the mooring deck plating total surface area, mainly located on the weld seams on fore and aft mooring deck plating. Cargo residues were observed on the mooring deck plating. Deck fittings were found to be in a good condition with fair leads and mooring rollers free to turn when tested. All Hydraulic windlass and winches were reported to be fully operational and free from hydraulic leakage as observed. Mooring machinery was in generally good condition with the band brake linings seen to have adequate remaining thickness. Visible anchor chains

and mooring ropes were in a good overall condition. Mooring practices were seen to be fair, due to certain mooring drums having overlapping turns on split drums and certain mooring drums were seen with inadequate turns on split drums. Snap-back zone warnings were seen to be posted at the entrances to mooring areas as per 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 was seen to be available near the Foc'sle.



## WEATHER DECKS AND FITTINGS

The Weather Decks and Fittings were deemed to be in good condition overall, with the decks found to be free of structural defects and had only minor localised spot corrosion, expected to not be more than 5% of the main deck plating total surface area, mainly located on cross decks and port side near number 1 hatch cover. Scattered residues of the current cargo were

noted throughout the weather decks. 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**

From the information provided the ballast tanks and systems were deemed to be in a good overall condition. Ballast tanks were not able to be entered due to ongoing ballasting operations. However, photographs of previous tank entries, reportedly taken on 18-Dec-22, were provided for review. From the photographs provided, it was reported that the ballast tanks were generally free of significant structural defects and where stated to have only minor localised spot corrosion, up to approximately 5% of the ballast tanks total surface area,

mainly located on the edge of structural members, frames and plating. Ballast tank fittings such as ladders and pipework were reported to be in a good overall condition with Anodes reported to be depleted by up to 10%. Tanks were reported to have no mud/sediment accumulation and were stated to be 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**

The accommodation areas were seen to be in a good condition overall with floor and wall 80 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 were 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 the drugs seen to be controlled and secured and with the associated drugs log 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 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 of frosting and deterioration. However, Icing and collection tray were observed below the evaporator unit in one of the provision stores, requiring further investigation and appropriate action. The external superstructure was found to be free of structural defects and had only minor localised spot corrosion, not more than 5% of the surface area, mainly located on porthole edges and weld seams. 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. The vessel's Crew Welfare was found to be good overall. The average contract length was reported to be 7 Months for the vessel's Officers and 9 Months for the vessel's crew, with it noted that a crew suggestion policy was seen to be in place. The vessel was reported to have free to access and limited use Wi-Fi onboard which was available to all crew. It was reported that the approximate average internet speed was average, indicating the crew were able to access social media apps and websites with ease. The vessel was seen to have various pieces of public recreational equipment that the crew could access, including Free Weights, Fixed weight machine, Treadmill, Cycling Machine, Table Tennis, Television, Games console, Karaoke, Entertainment Library - Books, DVDs, Games, etc., Musical Instruments, Barbecue, Public Computer, En-suite facilities for all crew members. These equipment were found to be in a good overall condition. As per crew reports access is provided to catering facilities at all times, with it also reported that crew were given additional time and resources to celebrate religious and cultural events. It was seen that various facilities were provided in all crew cabins, including Sofa, Desk, and Ample storage. It was also stated that the crew had access to a minimally-stocked bond store. It was stated that the vessel has onboard training facilities as provided by Videotel and Seagull, with it also noted as per crew reports additional periods of rest were given throughout the working week.

### **NOTABLE ITEMS**

Description

Estimated Cost [USD]



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**Issue:** Icing and a collection tray were observed below the evaporator unit in one of the provision

**Corrective Action:** To investigate and take appropriate action.

<\$1000



Description

**Estimated** Cost [USD]



**Issue:** The vessel is reportedly fitted with free to access limited use Wi-Fi system

\$0



## BRIDGE AND NAVIGATION EQUIPMENT

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. An in-date compass deviation card was seen to be posted near the helm and the compass deviation log was well-maintained and without any major deviations. The vessel is licensed to cover GMDSS sea areas A1, A2, and A3

and has 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 was 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.



#### ENGINE ROOM AND MACHINERY

The Engine room and machinery were found to be in a fair overall condition due to oil stains and 60 minor leaks observed near cylinder heads and near fuel pumps at the forward end of the main engine and oil leakage observed near Auxiliary engine No.1 Fuel filters. There were no significant defects reported or observed and the engine room was generally found to be clean. During the inspection, the Auxiliary Engines, purifiers, pumps and air compressors were seen running. Bilges and tank tops were generally free of oil or water. Pipework was seen with evidence of hydraulic oil leakage around pipework related to hand-operated hydraulic pumps on engine room bottom plates. Some pipework lagging has areas of deterioration and staining. Housekeeping was seen to be to a good overall standard with the vessel lacking critical spares as recommended by the ship manager's Safety Management System (SMS) with numerous items noted to be missing including emergency fire pump automatic deaerator valve and emergency generator starting motor/starter. A review of the latest lube oil analysis reports provided showed no areas of concern. The NOx Technical file was up to date and last updated on 24-Aug-23. The Main Engine was reported to be fully operational but was seen to be in a fair overall condition due to oil stains and minor leaks observed on cylinder heads and near fuel pumps at the forward end of the main engine. Black stain marks were also observed on the main engine exhaust casing which require to be further investigated. A review of the latest Main Engine performance report provided showed no areas of concern. A review of the latest engine running hours showed that the Bearings

and Cylinder Liners overhaul schedules are subject to Condition Based Monitoring (CBM) and therefore no dedicated overhaul intervals are provided and Cylinder heads and Pistons overhauls were within the service hours. It was however noted that the main start ball valve overhaul was overdue. Propulsion systems, such as shafts, gearing and bearings were in good working order with no defects reported or sighted. The 3 Auxiliary Engines were reported to be fully operational. Oil leakage was observed near the Auxiliary engine No.1 Fuel filters. A review of the latest Auxiliary engines performance report provided showed no areas of concern. According to the running hours data provided Auxiliary Engine No.1 was reported to have only 47 hours left for its major overhaul of 12,000 hours. It was also noted that the fuel pump overhaul on auxiliary engine number 3 was overdue. 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. The emergency generator was tested during the inspection and found to be in good working order and in a good overall condition.

#### **NOTABLE ITEMS**

Description

**Estimated** Cost [USD]



Issue: It was noted that the fuel pump overhaul on auxiliary engine number 3 was overdue.  Corrective Action: To be further investigated and any required overhaul carried out as soon as practical.	\$1000 - \$5000
Description	Estimated Cost [USD]
Issue: It was noted that the main engine main start ball valve overhaul was overdue.  Corrective Action: To be further investigated and any required overhaul carried out as soon as practical.	\$1000 - \$5000
Description	Estimated Cost
Issue: The vessel was seen to be lacking critical spares with numerous items noted to be missing including emergency fire pump automatic deaerator valve and emergency generator starting motor/starter.  Corrective Action: Ensure the vessel has adequate spares as recommended by the ship manager Safety Management System (SMS).	[USD] \$1000 - \$5000

[USD]

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**Issue:** The main engine was seen with oil stains and minor leaks near cylinder heads and near fuel pumps at the forward end of the main engine.

**Corrective Action:** Rectify the leaks as soon as reasonably possible.

\$1000 -\$5000





Description

Estimated Cost [USD]

**Issue:** Engine room pipework was found to have leaks around pipework related to hand-operated hydraulic pumps on engine room bottom plates

\$1000 -

**Corrective Action:** Rectify minor leaks, and consideration should be given to renewing deterioated pipework.

\$5000



Description

Estimated Cost [USD]





Issue: Oil leakage was observed near Auxiliary engine No.1 Fuel filters

**Corrective Action:** To investigate and repair as required.

<\$1000



Description

**Estimated** Cost [USD]



Issue: Black stained marks were observed on the main engine exhaust casing.

**Corrective Action:** To investigate and take appropriate action.

<\$1000



Description

**Estimated** Cost [USD]



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**Issue:** According to the running hours data provided Auxiliary Engine No.1 was reported to have only 47 hours left for its major overhaul of 12,000 hours.

**Corrective Action:** For information.

\$0



## FIRE FIGHTING EQUIPMENT AND SYSTEMS

to be in a 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 Water Spray and CO2 fixed firefighting in the engine room, and CO2 for the cargo areas. 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. A fire pump was tested

Fire Fighting Equipment and Systems were found

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. 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 shutdown equipment. The fire doors were found to be in good condition, closing effectively.



## LIFESAVING APPLIANCES

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 a free-fall lifeboat, which was seen to be in good overall condition externally and internally. The lifeboat engine 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 5 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 EEBD 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

Safe working was deemed to be good overall with 80 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 were adequately coated with non-slip paint and free of trip hazards. Portable gas detection meters were provided and stated to be calibrated. however not all crew were seen to be wearing the required PPE when on the open decks. 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. Regular drills were conducted on board with the last drill conducted on 13-Aug-23, which was an Abandon ship, Fire fighting, Oil spill and Rescue boat drill.



#### POLLUTION CONTROL

Pollution control was deemed to be good to very good overall and generally found to be well 90 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 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 was found to be well stocked with SOPEP equipment in good condition and an accurate list of equipment was posted nearby. The Oil Record Book (ORB) was seen to be well-maintained and up-to-date, with the last entry on the 29-Aug-23. It was reported that an IMO-approved Ballast Water Treatment System (BWTS) is fitted onboard with no documentation

provided to verify its USCG compliance which 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 air seal on 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 17-Aug-23. The Emission Control Area (ECA) change-over logbook was reviewed and found to be satisfactory with the date of last entry on 21-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 fuel oils (VLSFO) with a sulphur content of less than 0.5%.

#### NOTABLE ITEMS

Description Estimated

Cost

[USD]

**Issue:** It was reported that an IMO approved BWTS is installed with no documentation provided onboard to verify it's USCG compliance

**Corrective Action:** This is recommended to be further investigated.

\$0



Ref: 22/1435 Issued On: September 7 2023



**Estimated** Description Cost [USD]



Issue: The vessel is fitted with an air seal on the stern tube and is therefore Vessel General Permit (VGP) compliant in this regard.

\$0





### ONBOARD MANAGEMENT

Onboard management was found to be good 80 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. The Class-approved system-based Planned Maintenance System (PMS) was fully integrated with the SMS for ordering spares and general vessel management. The Port State Control (PSC) history was found to be very good with 0 deficiencies and 0 detentions in the 6 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.



## VESSEL CAPABILITIES AND CARGO SYSTEMS

Vessel capabilities and cargo systems were deemed to be in a good overall condition. Cargo holds 1, 2, 4, 5, 6 and 7 were entered for

inspection. The inspected cargo holds were found to be free of structural defects as well as any significant corrosion and coating breakdown with only minor abrasions noted to the lower hoppers from operational wear and tear. Cargo hold fittings such as ladders, handrails pipe guards etc. were seen to have slight damage and bend on the ladder and platform in certain holds. Hold 01 vertical ladder was seen with a slight bent. Hold 02 protection bars from pipes were observed with a slight bent. Hold 05 platform from the vertical leader was observed with slightly bent and hold 05 protection bars for pipes were seen bent at certain places. The last cargo carried was Coal (Coking, Steam Coal), with the next intended cargo reported to be Grain (Wheat, Maize, Rye, Barley etc.). The cargo holds were free of signs of water ingress both from internal and external sources. Cargo monitoring systems such as bilges, temperature sensors, water ingress sensors etc. were reported to be fully operational and regularly tested. The vessel is fitted with Side rolling hatch covers, which were seen to be well-aligned and closing correctly. Hatch covers were found to be free of structural defects and had only minor localised spot corrosion, not more than 5% of the surface area, mainly located on the interior sides, edges, wheels and cleats. Hatch cover operating systems were in full working order and were seen to be in good condition, free of corrosion and leakages. Hatch cover rubber seals and retaining channels were in good overall condition and free of temporary means of sealing such as foam or sealing tape. Hatch cover securing and hold open arrangements along with landing pads were seen to be in a good overall condition with no notable defects observed. Hatch coamings and longitudinal continuation brackets were found to be free of structural defects and had only minor localised spot corrosion, not more than 5% of the surface area, mainly located on the frames and edges. Compression bar/strips were seen to be in good condition with hatch coaming drain channels free of corrosion, scaling and debris and the hatch coaming nonreturn valves clear and operational. Stability calculations were seen to be carried out and the vessel holds a Document of Compliance (DOC) for the carriage of Dangerous Goods (DG).

### **NOTABLE ITEMS**

Description Estimated

Cost

[USD]

**Issue:** Cargo Hold No.1 vertical ladder was observed with a slight bent, Hold No.2 pipe protection bars were observed with a slight bent, Hold No.5 platform from the vertical leader was observed with a slight bent and Hold No.5 protection bars for pipes were seen bent at certain places.

\$1000 -\$5000

**Corrective Action:** To plan and repair as considered necessary.















# OPERATIONAL DATA

## **Operational Data Condition**

Does the vessel have an Exhaust Gas Cleaning System (EGCS)?



Total High Sulphur Fuel Oil (HSFO) capacity:	0 m <sup>3</sup>
Total Very and Ultra Low Sulphur Fuel Oil (VLSFO and ULSFO) capacity:	2,441.5 m <sup>3</sup>
Total Marine Gas Oil (MGO) and Diesel Oil (DO) capacity:	302.4 m <sup>3</sup>

Does the vessel have any energy efficiency technologies installed?





# 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	Yanmar	
Model	ME-C		6EY18ALV	6EY18ALV	6EY18ALV	
Mark/Series/Revision	8		7,579FXG	7,580FXG	7,581FXG	
Number of Cylinders	6		6	6	6	
Speed (RPM)	92		900	900	900	
Bore (mm)	600		180	180	180	
Stroke (mm)	2,400		280	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	167		210.75	210.75	210.75	
Nox Tier	1		1	1	1	
Fuel Oil Consumption at full load (tonnes/day)	30.5		2.5	2.5	2.5	
Cylinder Oil Consumption (litres/day)	140					
System Oil Consumption (litres/day)	50		10	10	10	



Major Overhaul Interval (Hours)	12,000	12,000	12,000
Running Hours since last overhaul (Hours)	11,953	9,461	9,449
	Vessel Speed (knots)	Cons	sumption (t/day)
Loaded Eco	12		23
Loaded Service	13.50		33
Ballast Eco	13		21
Ballast Service	14		28

# Main Engine Maintenance

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



Main Engine No.1	gine No.1 Unit Running Hours											
	1	2	3	4	5	6	7	8	9	10	11	12
Cylinder Heads	4,567	2,719	2,719	0	0	6,658						
Pistons	4,567	2,719	2,719	0	0	6,658						
Bearings	37,703	37,703	37,703	37,703	37,703	37,703						
Cylinder Liners	37,703	37,703	37,703	37,703	37,703	37,703						

### **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)?

**√** Yes

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	17-Jan-22	14-Mar-27
Intermediate	17-Feb-20	14-Mar-24
Annual	22-Jan-23	14-Mar-24
Bottom In Water		16-Jan-25
Bottom in dry dock	17-Jan-22	14-Mar-27



What was the location of the last out-of-water docking?	Shanhaiguan Shipbuilding Industry Co - China
Is the vessels last dry dock report provided and attached?	Yes
Has the vessel remained with the same flag since build?	Yes
Has the vessel remained with the same Class since build?	Yes
In total, how many of the following does the vessel have?: Conditions of Class, Recommendations of Class, Statutory Findings, Statutory Items, Conditions of Authority, Etc.	0
Does the vessel have any Class Memos, Observations or Additional Requirements?  Please provide further details	Memorandum for owner and surveyor as follows: 1. The M/E power/speed was limited, the M/E power performance of the vessel as follows: Max continuous output(MCR): 8,141 kw Engine speed at MCR: 85.6 rpm. 2.Two(2) sets of International Load Line Certificate were issued and kept on board the ship. The International Load Line Certificate corresponding to the summer free board 5,559 mm was in use and the International Load Line Certificate corresponding to the summer freeboard 7,206 mm was sealed in an envelope. 3.With effect from January 1,2,010, ships at berth in Europe Union ports for more than two(2) hours shall not use marine fuels with a sulphur content exceeding 0.1% by mass except that ships switch off all engines and use shore side electricity while at berth in ports. Please refer to Article 4b of EU Directive2,005/33/EC for details. 4.Periodic servicing of launching appliances of survival crafts and on-load release gear of lifeboats or rescue boats should be carried out in accordance with SOLAS Ch.III/Reg.20.11 at specific intervals. Next fiveyear servicing should be performed not later than January 14, 2,027. 5.The means of embarkation and disembarkation should be operationally tested with the specified maximum operational load in accordance with SOLAS Ch.II-1/Reg.3-9. Next date of Max. operational load test on accommodation ladder/winch is January 12, 2,027.
The cost for the next out of water bottom survey or dry docking based on a far eastern shipyard and includes all	000 000

survey and normal maintenance costs is approximately

estimated at:

900,000



Vessel: Shandong Fu Ze

Ref: 22/1435

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?



Under what IACS Class society supervision was the vessel built?

CCS - China Classification Society

Did the vessel provide Ultrasonic Thickness Measurement (UTM) reports?

No, vessel less than 10 years old

#### **Hull & Structure**

#### **Bridge & Communication**

What features were seen on the bridge?



Furuno

#### **Engine Room & Firefighting**

What features were seen in the engine room?







# 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?	Yes
What was the level of Hull coating breakdown and corrosion?	Minor
Coating breakdown and corrosion was mainly located in the following areas:	along the shell plate,mostly on the aft part
The amount of surface area coating breakdown and corrosion was approximately:	5%
Type of coating breakdown and corrosion:	Localised Spot
What was the condition of the hull markings?	Well painted and clearly legible
What level of marine fouling was seen?	None
Were fenders installed on the hull?	<b>x</b> 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:	observed on the weld seams
The amount of surface area coating breakdown and corrosion was approximately:	5%
Type of coating breakdown and corrosion:	✓ Localised ✓ Spot
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
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.	No certain mooring drums were seen with overlapping turns on split drums and certain mooring drums were seen with inadequate turns on split drums
Was the last brake test seen to be stencilled on the mooring winches?	✓ Yes
Date of last test	02-Jun-23
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?	Minor
Coating breakdown and corrosion was mainly located in the following areas:	cross deck sections
The amount of surface area coating breakdown and corrosion was approximately:	4%
Type of coating breakdown and corrosion:	<b>V</b> Localised <b>V</b> 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?	✓ 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.	<b>✗</b> No



# BALLAST TANKS AND SYSTEMS

Ballast Tanks and Systems Condition	
Were ballast tanks entered?	<b>✗</b> No
Reason tanks were not entered:	Ballast tanks full or required for cargo operations
Were recent (last 12 months) ballast tank inspection photographs provided?	Yes
Date photos were provided:	18-Dec-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:	edge of structural members, frames and plating.
The amount of surface area coating breakdown and corrosion was approximately:	5%
Type of coating breakdown and corrosion:	✓ Localised ✓ Spot
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%



Ref:



How much mud/sediment was seen inside the ballast tanks?	None
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

✓ Yes
Good
Good
Good
Good
✓ Yes
✓ Yes
Yes
Average quality of outfitting
√Yes
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?	Minor
Coating breakdown and corrosion was mainly located in the following areas:	porthole edges and weld seams
The amount of surface area coating breakdown and corrosion was approximately:	3%







Type of coating breakdown and corrosion:	<b>✓</b> Localised <b>✓</b> Spot
What was the general condition of external superstructure fittings?	Good
Crew Welfare What is the average contract length for crew members?	
Officers:	7 Months
Crew:	9 Months
Was Wi-Fi provided on-board?	Yes, Free, Limited
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  Very Cycling Machine  Very Cyc
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









# BRIDGE AND NAVIGATION EQUIPMENT

### **General Condition** Was all the bridge equipment reported to be fully operational? Was the bridge found to be clean and well maintained with good housekeeping? Were all required bridge equipment annual performance tests (e.g. VDR and AIS) completed in the last 12 months? Was the vessel fitted with a Voyage Data Recorder (VDR)? Type of VDR fitted: VDR Was the VDR seen to be free from any unanticipated alarms? Were the VDR collection instructions posted and known to the Master? Was the vessels Bridge Navigation and Watch Alarm System (BNWAS) fully operational, and turned on when at sea? Normal time setting at sea 12 mins **Navigation Condition** Secondary **Primary** What was the vessels primary & secondary means of **ECDIS ECDIS** navigation as listed on Form E?

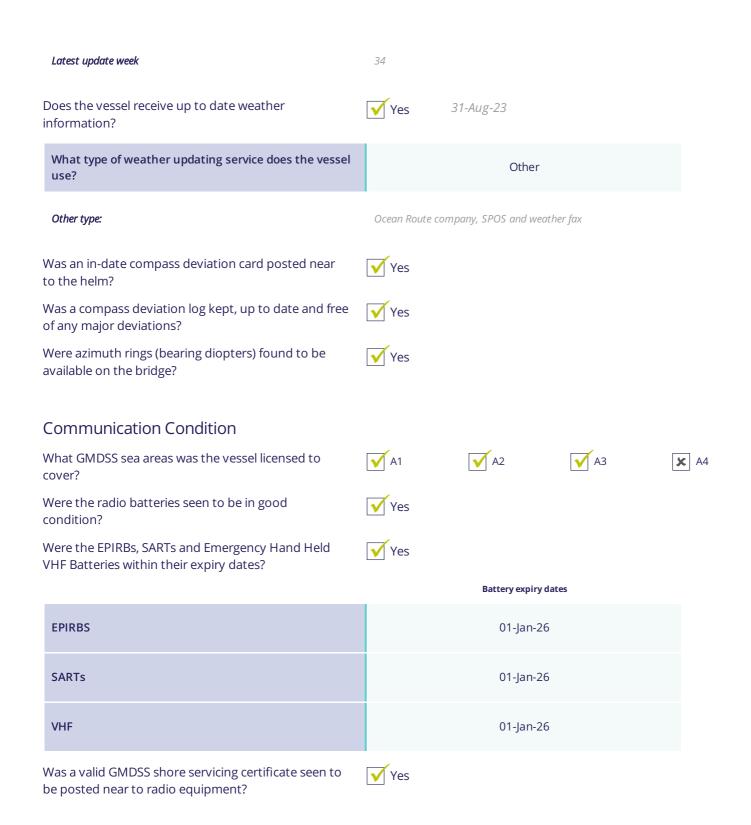
Were the primary & secondary means of navigation

found to be up to date?









Vessel:



### **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	30-Aug-23
	30-Aug-23
Date of last test  External Condition	30-Aug-23
	30-Aug-23  ✓ Yes
External Condition  Was the Monkey Island found to be in good, well	
External Condition  Was the Monkey Island found to be in good, well maintained condition?  Were the main mast, aerials and antennas seen to be	✓Yes



## ENGINE ROOM AND MACHINERY

General Condition		
What equipment was seen running?	Auxiliary Engines  Purifiers  Air compress	ors
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)?	No few items are not on board spare parts list provided	l as per critical
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?	<b>✗</b> No	
Was the NOx Technical file kept up to date?	Yes	
Date of entry:	24-Aug-23	
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 there any overdue maintenance on the Main

What condition did the Main Engine appear to be in?

Please provide further details

oil stains and minor leaks were observed on cylinder heads and near fuel pumps at forward end of main engine.

Were Main Engine performance reports provided for review?

Were the performance reports satisfactory?

Yes

**✗** No

#### Propulsion

**Engine Turbochargers?** 

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?	None

#### **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?	Fair
Please provide further details	oil leakage was observed near Auxiliary engine No.1 Fuel filters
Were Auxiliary Engines performance reports provided for review?	✓ Yes
Were the performance reports satisfactory?	Yes
Does the vessel have a shaft generator?	<b>✗</b> 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?	No evidence of hydrauli pipework related to hydraulic pumps or bottom plates	
Was all pipework free of temporary repairs?	√ Yes	
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
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



## 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		26-Aug-23	
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	<b>X</b> Flame
	Smoke	<b>x</b> Smoke	Smoke
	<b>X</b> Heat	<b>★</b> Heat	<b>✓</b> 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
	<b>√</b> CO2	<b>√</b> CO2	<b>X</b> Water Mist
	Foam	Deck Foam	Galley CO2
	<b>✓</b> Water Spray	<b>★</b> Water Spray	Wet Chemical
	<b>X</b> None	None	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?	✓ 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?	✓ 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?

\*\*Location:\*\*

Near accommodation entrance\*\*

Was the BA equipment fully charged in good condition?

Was the Quick Closing Valve system in good working order?

Were fire doors in good condition and effectively closing?

Were fire doors free of unauthorised "hold-open" arrangements?

Were all ventilation dampers remote closing positions well labelled and in good working order?

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



## LIFESAVING APPLIANCES

Lifsaving Appliances Condition Were all Lifesaving Appliances regularly serviced?	
were all Lifesaving Appliances regularly serviceu:	✓ Yes
Date of last service:	26-Aug-23
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?	5
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?	11-Jan-27
Were legible launching/recovery instructions posted near to survival craft?  Was evidence of regular maintenance, service and inspection of the launching appliances sighted and evident?	✓ Yes ✓ Yes
What was the date of the last abandon ship drill?	13-Aug-23
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?	<b>x</b> 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?	<b>✗</b> No	not all crew were seen to be wearing the required PPE when on the open decks
Are 'Enclosed Space Entry' procedures implemented?	✓ Yes	
Is an effective Permit To Work (PTW) process implemented?	Yes	
Date of last PTW:		24-Aug-23
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:		14-Nov-22

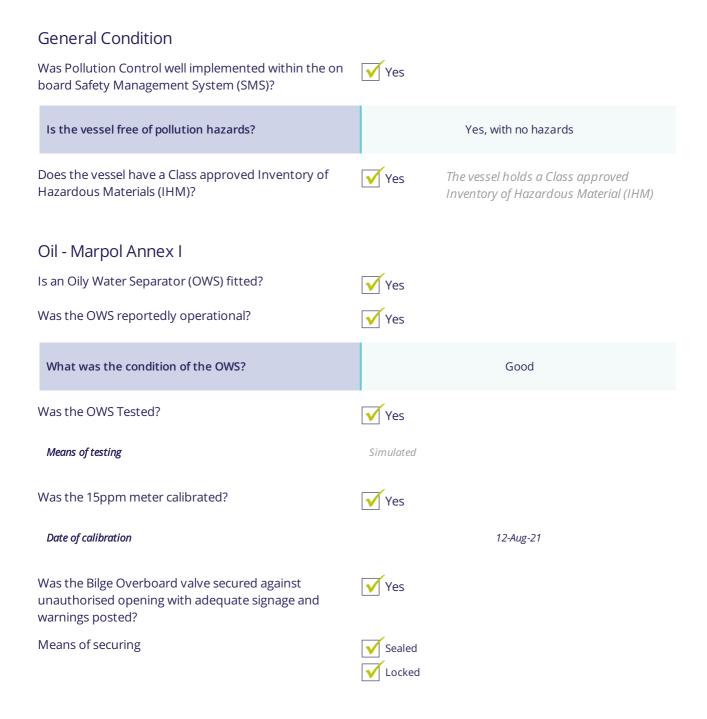




What is the working language of the vessel?	English
Are standing orders, procedures, instructions and manufacturers' manuals written in a language which can be understood by the crew?	Yes
Are all IMO signs correctly placed, and compliant with IMO requirements?	Yes
Is the vessel equipped with an approved SOLAS training manual?	Yes
Were the pilot ladders and boarding arrangements in a good, safe condition?	Yes
Are regular drills conducted on board?	Yes
Last drill date	13-Aug-23
Last drill type	Abandon ship, Fire fighting, Oil spill and Rescue boat



### POLLUTION CONTROL









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	29-Aug-23
Category of last entry	С
Were previous bunkering checklists correctly filled out?	✓ Yes
Date of last bunkering	03-Jul-23
Were bunker samples correctly stored?	✓ Yes
Does the vessel have a Ballast Water Treatment System (BWTS) fitted?	✓ Yes
Ballast Water Treatment System	
Manufacturer:	Qingdao Headway Technology Co. Ltd
Type:	Electrolysis
What regulation is listed on the Ballast Water Management Certificate?	D-2
Type of BWTS approval:	IMO approval
Was the BWTS operational?	✓ Yes

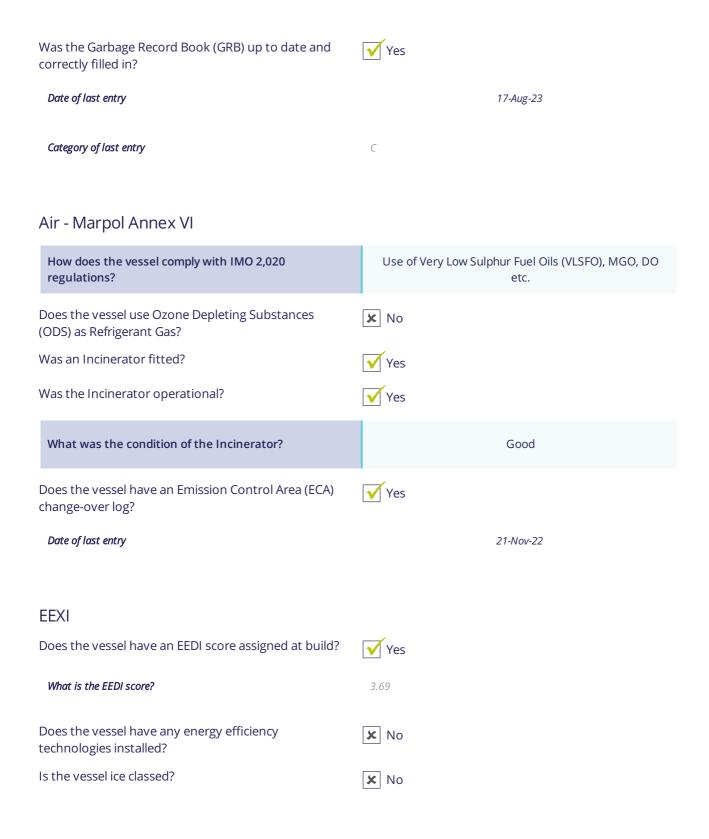


What was the condition of the BWTS?	Good
Was the Ballast Record Book up to date and correctly filled in?	Yes
Date of last entry	09-Aug-23
Is the Vessel General Permit (VGP) compliant?	Yes  Due to the use of an EAL or the airseal arrangements in place for the stern tube, the vessel is considered VGP compliant in this regard for trade to the USA
How is the vessel VGP Compliant? *Environmentally Acceptable Lubricant	Stern Tube Airseal
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	
How was the condition of Garbage segregation?	Good
Were Garbage containers of approved, non-combustible type?	Yes















Main Engine(s)	
Specific Fuel Oil Consumption (SFOC) (g/kWhr):	167
Auxiliary Engines	
Specific Fuel Oil Consumption (SFOC) (g/kWhr):	210.75
Does the vessel have a shaft motor (Power Take-In)?	<b>✗</b> No
What is the expiry date of the International Air Pollution Prevention (IAPP) certificate?	14-Mar-27



## 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	14-May-23
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	29-Aug-23
Are hours of maximum permissible work regularly exceeded?	<b>✗</b> 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	Bassnet
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?  Port State Control (PSC) inspection history	× No
No. of Inspections in Past three years:	6
No. of Deficiencies in Past three years:	0
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	On gangway by duty crew
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



Ref:



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 - BULK

### Vessel Capabilities and Cargo Systems - Bulk Condition

Cargo hold	Capacity (m³)	Uniform deck load limit (t/m²)	Steel Coil Capacity By: Total weight (mt)
Cargo Hold No.1	12,495.2		
Cargo Hold No.2	14,928.9		
Cargo Hold No.3	14,465.7		
Cargo Hold No.4	12,827.8		
Cargo Hold No.5	13,945.8		
Cargo Hold No.6	13,889.4		
Cargo Hold No.7	14,275.5		
Total	96,828.3		0
How many cargo holds does the vessel have?		7	
Were the cargo holds able to be entered and inspected?	V	Yes	
Which holds were entered		1, 2, 4, 5, 6 and 7. Cargo hold 0 operation.	







Were recent vessel cargo hold inspection photographs provided?	<b>✗</b> No	
Were any cargo hold inspection reports or condition information provided?	<b>✗</b> No	
Were cargo holds structural members found to be free from damage (e.g. side plating, tank top and framing)?	Yes	
Were the cargo hold fittings such as ladders, hand rails and pipe guards etc. found to be free from damage?	× No	slight damage and bend of ladder and platform in certain holds.
What was the level of cargo hold coating breakdown and corrosion?		None
What was the last cargo carried?		Coal (Coking, Steam Coal)
What is the next intended cargo to be carried?		Grain (Wheat, Maize, Rye, Barley etc)
Were all cargo monitoring systems (e.g. bilges, temperatures, water ingress etc.) fully operational and regularly tested?	Yes	
Were cargo hold bilges dry, clean and clear of debris or cargo?	√Yes	
Were the cargo holds free from signs of water ingress?	<b>√</b> Yes	
Were the cargo holds free from signs of previous and/or current internal leaks (e.g. from manholes or adjacent tanks etc)?	Yes	
and/or current internal leaks (e.g. from manholes or	Yes	Natural

Hatch Covers Condition





What type of hatch covers are fitted?	Side rolling
What was the make of the Hatch covers?	TTS
Were the hatch covers found to be correctly aligned?	Yes
Were the hatch cover found to be free from structural damage?	Yes
What level of coating breakdown and corrosion was seen on the hatch covers?	Minor
Coating breakdown and corrosion was mainly located in the following areas:	interior sides and edges
The amount of surface area coating breakdown and corrosion was approximately:	3%
Type of coating breakdown and corrosion:	<b>V</b> Localised <b>V</b> Spot
Were the hatch cover operating systems found to be fully operational?	Yes
What was the condition of the hatch cover operating system, free from corrosion, leakage etc.?	Good
What was the condition of the hatch cover rubber seals/gaskets and retaining channels?	Good
Were the hatch covers free from temporary means of sealing such as expanding foam or sealing tape?	Yes
What was the condition of hatch cover securing arrangements?	Good
What was the condition of hatch cover hold-open arrangements?	Good
What was the condition of the hatch cover landing pads?	Good



### **Hatch Coamings Condition**

Were the hatch coamings found to be free from structural damage, paying particular attention to



Vessel:

hatch coaming longitudinal stays?	
What was the level of hatch coaming coating breakdown and corrosion?	Minor
Coating breakdown and corrosion was mainly located in the following areas:	frames and edges
The amount of surface area coating breakdown and corrosion was approximately:	2%
Type of coating breakdown and corrosion:	<b>V</b> Localised <b>V</b> Spot
Were the compression bars/strips seen to be in good condition?	✓ Yes
Were the hatch coaming drain channels seen to be free from corrosion, scaling or debris?	√Yes
Were hatch coaming non-return valves found to be clear and fully operational?	Yes
Documentation and Additional Features	
Does the vessel have a Document of Compliance (DOC) for the carriage of dangerous goods?	Yes
Does the vessel have a Certificate of Authority to carry grain?	√Yes
Was there an approved Cargo Loading Manual on board?	√Yes
Is the vessel certified to carry heavy cargoes?	✓ Yes
Was there an approved stability booklet on board?	✓ Yes



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Did the vessel use a Class-approved computer based loading/stability software?

Name of software

Shipmanager-88

Were previous and current stability calculations seen to be carried out?

Is the vessel fitted with equipment for the carriage of additional cargoes (e.g. Log stanchions, lashing points etc.)?

Does the vessel carry her own cargo grabs?

No



## CARGO LIFTING APPLIANCES

Cargo Lifting Appliances Condition