

# TECHNICAL REPORT

CJPG-JS-24-KY-630



## HAI XING YOU 606

Inspection Date      October 21st, 2022

## Technical Report

Entrusted by the customer, our company organizes the surveyor to inspect the technical condition of "HAI XING YOU 606" and issue the technical report according to the ship data provided by the customer. The report reflects the ship's technical status at the time of inspection and is for reference only. In case of any discrepancy, the current situation of the ship shall prevail, and our company shall not assume legal liability. The specific report is as follows:

Overall Grade	
3.7	Fair
Grade	Level
>4.5	Good
4.0-4.5	Fair to good
3.0-4.0	Fair
<3.0	Poor

## Principal Particulars

Ship Name	HAI XING YOU 606
Identification No.	CN20059267674
PoR	Ningbo, China
Type of Ship	Oil Tanker (flash point $\leq 60^{\circ}\text{C}$ )
Class	ZC
Trading Area	Offshore A1+A2
LOA	123.60m
LPP	116.00m
MLB	18.80m
MLD	9.60m
GRT/NRT	5914/3311
Summer Draft	7.200m
DWCC	8618t
No. of Cargo Tank (include slop tank)	10+2
Cargo Hold Capacity	10556.584m <sup>3</sup>
LDT	2793.2t
Date of Keel Laying	April 23th, 2005
Date of Delivery	July 10th, 2006
Shipbuilder	Zhejiang Zhenhua Shipbuilding Co., Ltd
M/E Manufacturer	Shaanxi Diesel Heavy Industry Co. Ltd.

Model of M/E	8DKM-28
Rated Power/Rated Speed /No.	2500kW×750r/min×1 set
Minimum Safe Manning	13 persons



## Overview

The ship is built as a oil tanker (flash point  $\leq 60^{\circ}\text{C}$ ) with single deck, and driven by single engine and propeller, total with 10 oil tanks and 2 slop tanks. The hatch cover on board is steel rotating type.

The cargo hold is double bottom and double shell, and with special coating.

The ship is equipped with a cargo oil pump compartment, which includes two sets of cargo oil pumps (material: cast steel shell, stainless steel screw) and two sets of ballast pumps (material: cast steel shell, copper impeller).

### 1. Tank Capacity

No.	Hatch Dimension (m)	Capacity (m <sup>3</sup> )
NO.1 (S)	Fr.131-Fr.153	838.051
NO.1 (P)	Fr.131-Fr.153	842.803
NO.2 (S)	Fr.109-Fr.131	1052.904
NO.2 (P)	Fr.109-Fr.131	1047.182
NO.3 (S)	Fr.86-Fr.109	1130.399
NO.3 (P)	Fr.86-Fr.109	1131.388
NO.4 (S)	Fr.64-Fr.86	1083.538
NO.4 (P)	Fr.64-Fr.86	1080.408
NO.5 (S)	Fr.42-Fr.64	1055.565
NO.5 (P)	Fr.42-Fr.64	1051.787
Slop Tank (P)	Fr.38-Fr.42	121.198
Slop Tank (S)	Fr.38-Fr.42	121.361
Total		10556.584

#### Concern:

1. The above capacity data is taken from the 'Certificate of Ship's Capacity'.

## 2. Engine Machinery

Machinery	NO.	Model	Parameter	Manufacturer
Main Engine	1	8DKM-28	2500kW×750r/min	SXD
Gear box	1	GWC52.59-01	—	—
1#2#3#Generator	3	MP-H-250-6	250kW×400V×50Hz	—
Primer Mover of 1#2#3#Generator	3	Z6170ZLD-1	300kW×1000r/min	—
Emergency generator	1	MP-H-90-4	90kW×400V×50Hz	—
Primer Mover of Emergency Generator	1	6135AD	99.3kW×1500r/min	—
Fuel oil waste gas boiler	1	LYF0.5/90-0.7	0.78MPa/500kg/h	ZHANGHJIA GANG GELIN
1# Cargo oil pump	1	2LB2-500-J	500m³/h	HUAIAN KAISHIBI
2# Cargo oil pump	1	2HM7000-128	500m³/h	HUANGGON G JIXIE
Ballast pump	2	--	187m³/h	SHUNDE SHUNDA
1# Fuel oil purifier	1	KYDH206CD— 23	—	NANJING LVZHOU
2# Fuel oil purifier	1	PHA605	—	ZHEJIANG HUAYI
Lubricating oil purifier	1	KYDR203CD— 23	—	NANJING LVZHOU
Bilge oil-water separator	1	CYSC—2	—	WUHAN GUOYING
Domestic Sewage Treatment Unit	1	WCJB-20	—	WUHAN ZHOGZHOU
Hydraulic steering gear	1	YD200	—	NANJING HANGZHUA NG
Windlass	2	YMFJ-46	37kW	TAIZHOU WANTONG

### 3. Communication and navigation equipment

Equipment	NO.	Model	Manufacturer
AIS	1	JHS-183	--
Magnetic compass 1	1	CPT-165A	--
Magnetic compass 2	1	CPT-190	
Radar	1	FAR-2117	--
Gyro compass	1	DH-11G	--
ECS	1	AWENA-1	
Echo sounder	1	ED162	--

## Technical status

### 1. Certificate and Inspection

Certificates Description	Authority	Issue Date	Expiry Date
Certificate of Registry	MSA	2023.05.16	2028.05.15
Certificate of Ownership	MSA	2008.06.23	--
Safety and Environmental Protection Certificate	ZC	2023.05.15	2028.06.26
Minimum Safety Manning Certificate	MSA	2023.05.16	2028.05.15
Transportation business license	Department of Transport	2021.07.13	2026.07.12

#### Concern:

- 1、The annual survey has been completed on 15/08/2024 in Zhoushan;
- 2、The date of the next special survey will be 26/06/2028;
- 3、The next intermediate survey will be carried out on 26/06/2025 or 26/06/2026.

The business scope recorded in the Transportation business license is "Domestic coastal product oil transportation".

## 2.FSC Inspection

Date	Place	Defect Code	Note
2024.08.14	YANTAI	1-0650/10、2-1285/10、3-1825/10、 4-1850/10、5-1885/10	Closed
2024.02.27	HUIZHOU	1-1560/17、2-0745/17、3-2055/17、 4-1705/17、5-1699/99、6-1423/17	Closed
2023.08.22	YANTAI	1-1550/17、2-1651/17、3-0899/17、 4-1422/17	Closed
2023.02.21	JIAXING	1-1541/16、2-1623/99、3-0725/10、 4-2535/10、5-1422/10、6-1782/10、 7-1721/10、8-1524/10	Closed
2022.04.21	DONGGUAN	1-0899/16、2-1782/16、3-0899/16、 4-0730/17	Closed

### Concern:

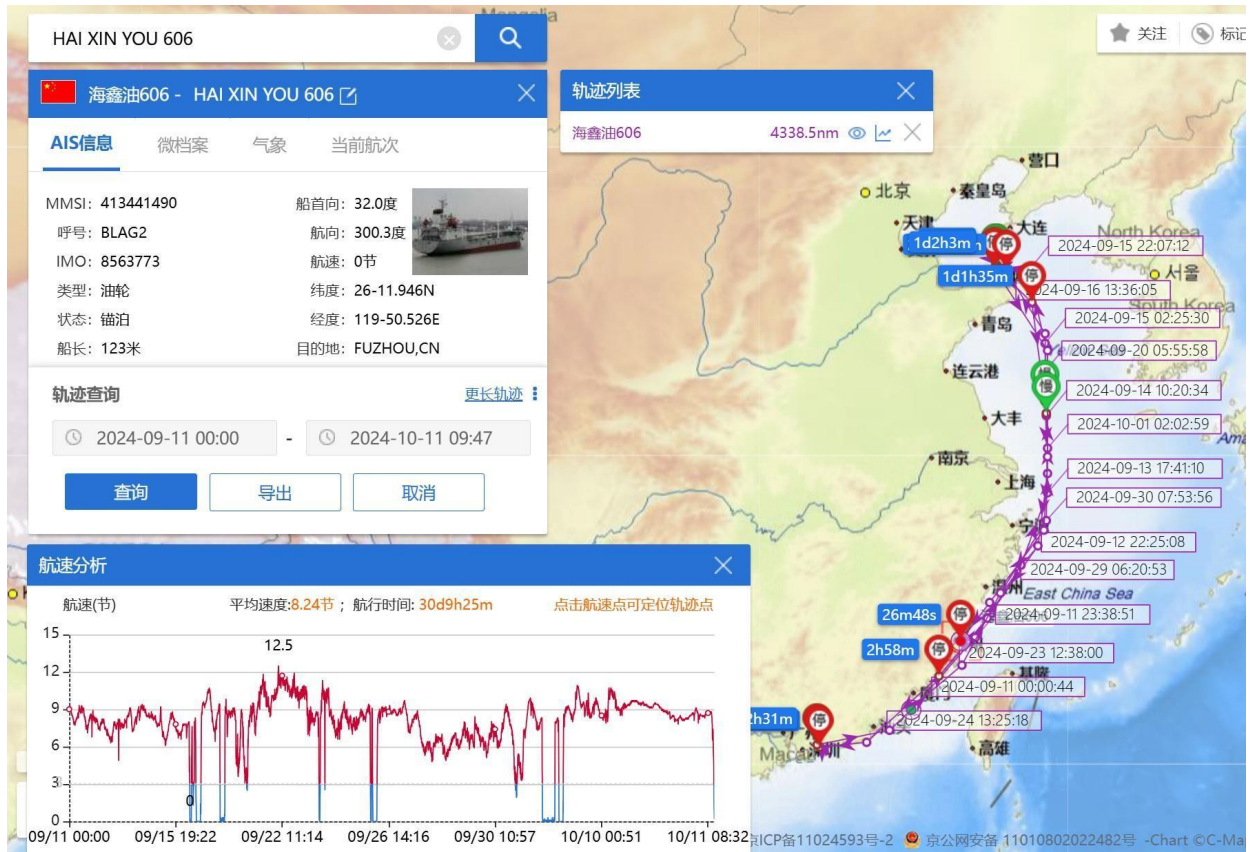
The defects found in the last FSCO inspection have been corrected and closed.

### Related Photos:

<p align="center"><b>船旗国监督检查报告</b></p> <p align="center">根据《中华人民共和国船舶安全监督规则》签发</p> <div style="display: flex; justify-content: space-between;"> <div> <p>船 名: 海鑫油606</p> <p>船 种 类: 油船</p> <p>船舶管理人: 中国航海集团海鑫航运有限公司</p> <p>□专项检查:</p> </div> <div> <p>船 籍 港: 宁波</p> <p>船舶识别号: CN20059267674</p> <p>船 长 签 名: 张 明</p> </div> </div> <table border="1"> <thead> <tr> <th>缺陷代码</th> <th>缺陷描述</th> <th>依据<sup>2</sup></th> <th>处理决定</th> <th>船检责任<sup>3</sup></th> </tr> </thead> <tbody> <tr> <td>0650</td> <td>驾驶室左舷侧带烟雾信号救生圈无法快速释放</td> <td>10</td> <td>缺陷已纠正</td> <td>否</td> </tr> <tr> <td>1285</td> <td>船上左舷侧压载泵出口压力表故障</td> <td>10</td> <td>缺陷已纠正</td> <td>否</td> </tr> <tr> <td>1825</td> <td>NO.5右舷货物管线上下处静电跨接失效</td> <td>10</td> <td>缺陷已纠正</td> <td>否</td> </tr> <tr> <td>1850</td> <td>甲板泡沫灭火系统比例调节阀未正确设置</td> <td>10</td> <td>缺陷已纠正</td> <td>否</td> </tr> <tr> <td>1885</td> <td>NO.2左舷观察孔防火网破损</td> <td>10</td> <td>缺陷已纠正</td> <td>否</td> </tr> </tbody> </table> <p>注: 本报告是对检查当时船舶安全技术状况抽查情况的记录, 不作为船舶适航的凭证。</p> <p>检查行动: <input type="checkbox"/> 40 <input type="checkbox"/> 50 <input type="checkbox"/> 70 <input type="checkbox"/> 152 <input type="checkbox"/> 155 <input type="checkbox"/> 99 (通知下一港) (通知船舶港海事管理机构) (通知船舶检验机构) (通知船员组织) (通知船东代表) (行政调查)</p> <div style="display: flex; justify-content: space-between;"> <div> <p>检查机构 (盖章): </p> <p>船舶安全检查专用章</p> </div> <div> <p>检查人员: 张 明</p> <p>检查日期: 2024.08.14</p> </div> </div> <p>此页一式两份 (一份海事机构留存、一份留船)</p> <p><small>1如无船舶管理机构, 则填写船舶所有人。 2如果未留缺陷, 填写无缺陷。 3如果未留, 判定缺陷责任。</small></p>		缺陷代码	缺陷描述	依据 <sup>2</sup>	处理决定	船检责任 <sup>3</sup>	0650	驾驶室左舷侧带烟雾信号救生圈无法快速释放	10	缺陷已纠正	否	1285	船上左舷侧压载泵出口压力表故障	10	缺陷已纠正	否	1825	NO.5右舷货物管线上下处静电跨接失效	10	缺陷已纠正	否	1850	甲板泡沫灭火系统比例调节阀未正确设置	10	缺陷已纠正	否	1885	NO.2左舷观察孔防火网破损	10	缺陷已纠正	否	<p>复查签字</p> <p>以上缺陷已全部纠正, 复查合格。</p> <div style="text-align: right;"> <p>船舶安全检查专用章</p> <p>检查日期: 2024.08.14</p> </div>
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### 3. Last 10 Ports and Cargo

According to the vessel's AIS information and logbook, the vessel has recently been operating mainly on the Yantai-Huizhou route.



#### 4. Thickness measurement

The hull thickness measurement of this ship was completed in Zhoushan in May 2023, and the maximum corrosion rate statistics for each area are as follows:

Area	Maximum corrosion rate
Deck	7.5%
Transverse structure	10.8%
Bottom shell	5.8%
Transverse bulkhead	9.0%

The results of the thickness measurement report show that the thickness of the hull plates of the ship are within the permissible limits.

## 5. Speed and Fuel Consumption

The fuel oil consumed by the main engine is MGO / 120# CST.

Condition	Economic Speed kn	Rotary Speed rpm	Fuel Consumption (t/d)	Design Speed kn
Ballast	8.0~10.0	540-560	~5	12
Laden	8.0~10.0	540-560	~5	

The fuel oil consumed by the auxiliary engine is MGO.

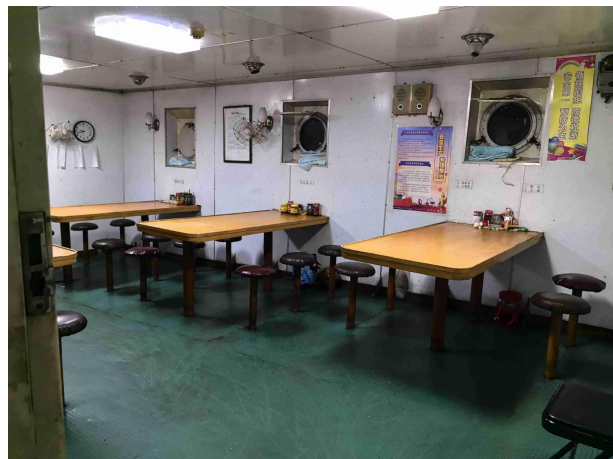
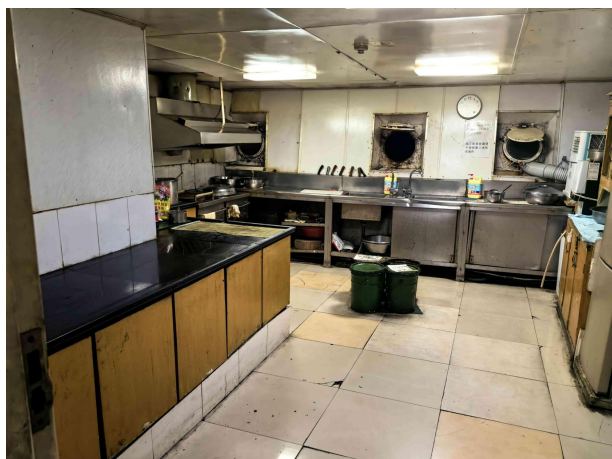
Condition	Working set	Fuel Consumption (t/d)
Sailing	1	0.48
Berthing	1	0.48
Loading	1	0.48
Unloading	2	0.96



## 6. GALLEY & ACCOMMODATION

No.	Description	Good	Fair to good	Fair	Poor
1	The housekeeping in the crew quarters is neat and tidy and the waste water pipes from the toilet or sanitary unit are in a satisfactory condition.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Cabins are adequately lit and emergency lighting is in working order.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	The dining room and galley are clean and tidy with utensils neatly arranged.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	There are no significant drips or leaks from extractor hoods and ventilation ducts and no fire hazards.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	Domestic waste is effectively segregated and stored in the designated area as required.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Refrigeration room door handles and alarms are in satisfactory condition and maintain appropriate refrigeration temperatures.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Cold store food is neatly arranged with clean surfaces and no expired food.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Insulation wrapping of cold store refrigeration pipework is complete and pipework joints are free from corrosion or leaks.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

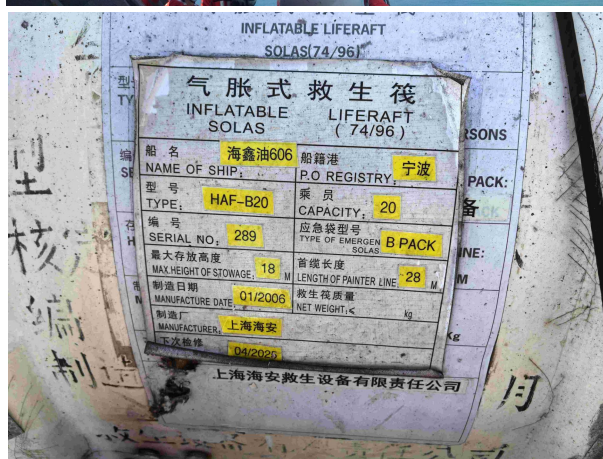
Note: The above inspection items were found in "Fair" level overall.



## 7. Lifesaving Equipment

No.	Description	Good	Fair to good	Fair	Poor
1	The lifeboat has a good appearance, and the ship name, port of registry, and other markings were clear and stored correctly.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	The frame structure has a good appearance and well lubricated	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	The motor of the lifeboat was well maintained, and was easy to start (check records of tests or manoeuvre).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	The lifeboat was fully equipped with life-saving appliances, food and fresh water.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	The operation procedures and maintenance manual of the lifeboat were posted, and lighting fixtures were equipped beside.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	The life raft and hydrostatic pressure release device were properly fixed, and found in normal maintenance cycle.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Life rings, lights, smoke floats, etc. are in correct position and in satisfactory cosmetic condition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Lifebuoys, lights, floats, etc. were in the correct position and in good appearance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Flame parachutes, rope throwers, etc. are of approved type and properly stored.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note: The above inspection items were found in "Fair to good" level overall.

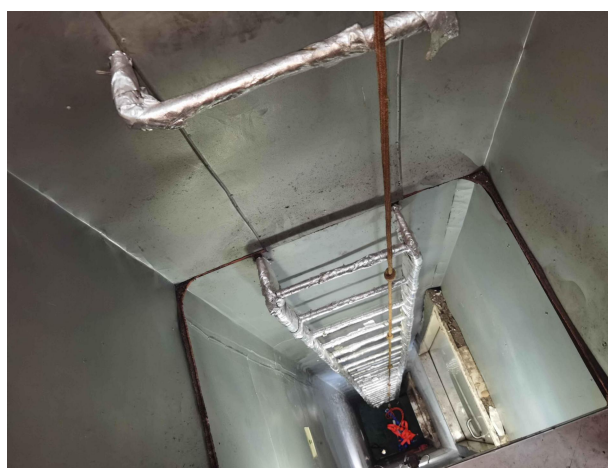
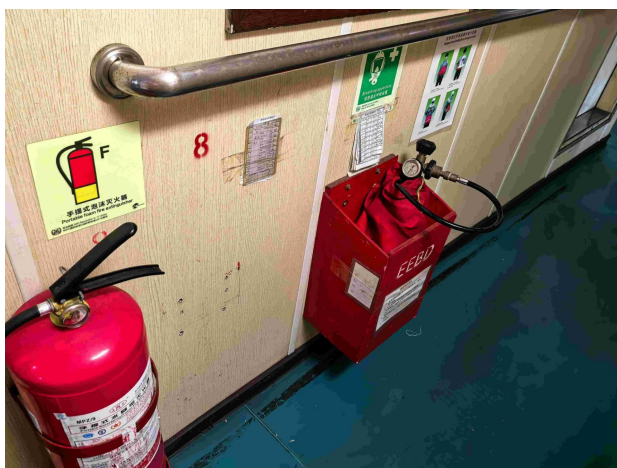
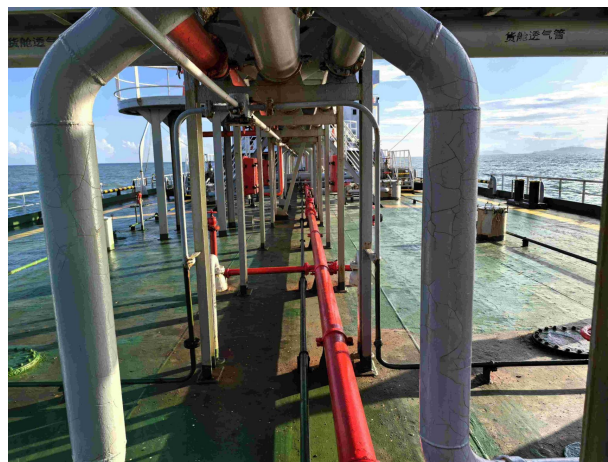
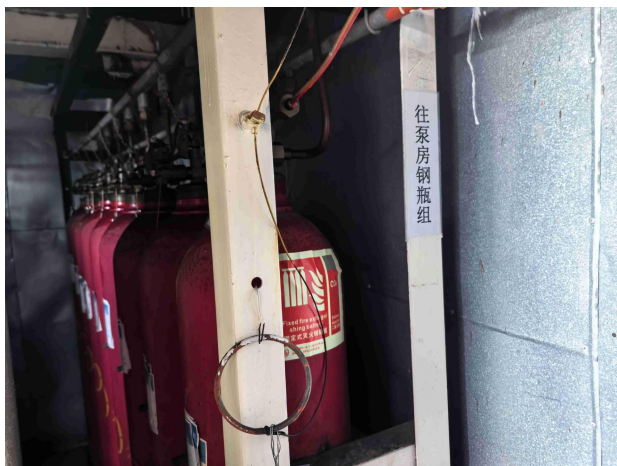




## 8. Fire & Safety Appliance

No.	Description	Good	Fair to good	Fair	Poor
1	The fire detection system is normally open and the manual alarm buttons are basically not broken or invalid.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Main fire pumps, fire isolation valves, emergency fire pumps and pipework are in good condition; emergency fire pump operating procedures are complete and regularly tested and operated.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Hydrant appearance is intact, handwheel switch is normal, no significant corrosion or leaks in pipework.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	The hose reel is intact, the water hose and water pistol are of a type approved by the Marine Inspectorate and the nozzles are in good condition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Portable fire extinguishers are correctly located and in good condition, with valid inspection marks, and a sufficient number of spare extinguishers are provided.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	The CO2 cylinder and release device are within the inspection period, the automatic audible alarm is not faulty and the complete and correct operating instructions are displayed.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	There is no looseness or leakage in the connection of the CO2 piping system; there is sufficient pressure in the starter cylinder; the safety pin packing lead wire of the head valve has been removed.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Vents, shutters and other closing devices are in good condition with clear and correct on/off markings.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	All signs for safety equipment and escape routes are in place, reflective signs comply with IMO requirements, and main and emergency exits are clear.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Emergency escape routes are fireproof, clear and unobstructed; lighting, lifelines and escape ladders are complete; self-closing doors are in normal opening and closing condition, with no back hooks.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note: The above inspection items were found in "Fair to good" level overall.



## 9.Pollution Control

No.	Description	Good	Fair to good	Fair	Poor
1	The nameplate of the Oil/Water Separator is in accordance with the certificate, the surface of the equipment is clean, the direction and colour of the pipework and valves are clearly marked, and the operating instructions are posted nearby.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	If the oil/water separator's 15ppm oil meter exceeds the standard, the oil discharge monitor alarms and automatically stops the discharge within the specified time (check the records in the oil/water record book).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	The O/W Separator does not have an illegal bypass pipe or connection discharging directly to the outboard engine, and there is no significant dismantling mark on the flange bolts on the outlet pipe; the outboard engine discharge valve is in the closed and locked condition in port and there is a no-discharge warning sign.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	The identification plate of the domestic sewage treatment plant is in accordance with the certificate; there is no rust through the body; the sewage pump, air compressor, etc. are not defective.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Domestic Sewage Treatment Plant High level alarm without fault; Discharge pump start and stop function failure; Bursting fan pressure gauge is normal; No direct discharge outside illegal bypass pipe or connection.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	The boiler nameplate is in accordance with the certificate; and is regularly inspected.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Boiler body and flue show no signs of smoke and insulation is intact.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Boiler safety valves are intact, with no leaks in steam lines or valve parts, and complete insulation wrapping on external surfaces.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Boiler fuel supply lines are free of drips and there is an oil collecting tray under the combustion unit.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	The format of the ballast water record book complies with the requirements of the	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



	Convention and the ballast water management plan is approved by the flag state or classification society.				
11	The nameplate of the ballast water treatment system is in accordance with the certificate; the surface of the equipment is clean, pipework and colours and valves are clearly marked; operating instructions are posted near the equipment.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note: The above inspection items were found in "Fair to good" level overall.



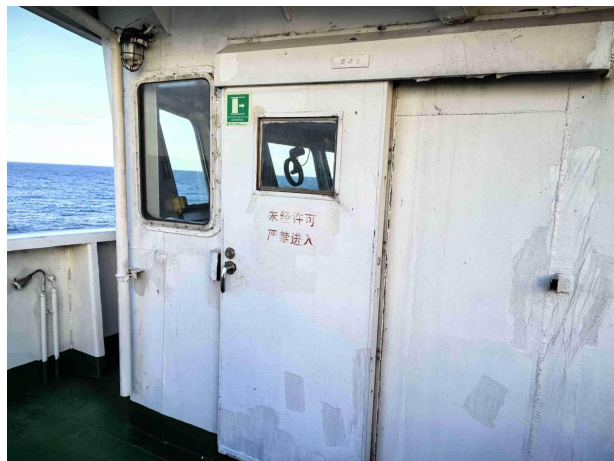
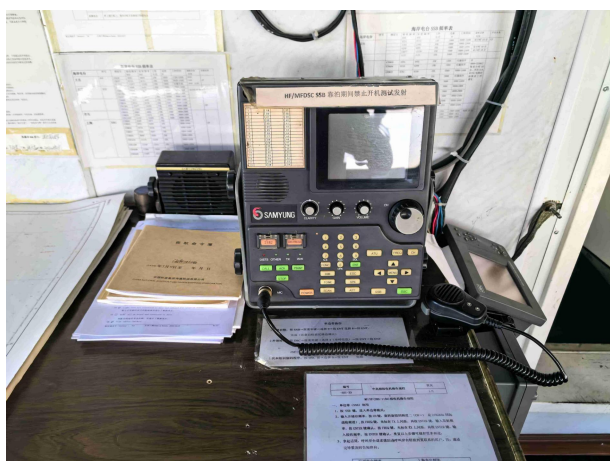


## 10. Navigating Bridge & Communications Equipment

No.	Description	Good	Fair to good	Fair	Poor
1	Pilothouse layout and field of vision are in accordance with approved drawings, windscreen wipers or pivoting windows are installed as required and are working properly.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Equipped with the latest edition of nautical library materials, Notices to Mariners and Correction Notices are received in a timely manner, voyage plans and signatures are obtained before sailing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	All types of charts relating to safety management are displayed in the cockpit and updated to the latest edition.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	The control box for the navigation lights is an approved product, the colour of the indicator light is the same as that of the signal light and the brightness of the indicator light can be adjusted.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	The navigation lights are double sets of lamps; the inside of the port light cover is brushed with black paint without peeling; the surface of the number lights is clean, the spacing meets the requirement of 2 metres (when its display function can indicate the status of a vessel) and is in the same vertical line; the signal mast has a device for climbing and repairing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	The configuration of the main navigational equipment is essentially the same as that recorded in the certificate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	The main and sub compass readings do not exceed $\pm 0.5^\circ$ ; the compass case is free of large air bubbles or vapour; the self-contained compass light is free of defects; the operating instructions are displayed near the electric compass; and an up-to-date corrected self-correction table for the magnetic compass is displayed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	The effective diameter of the radar meets the regulatory requirements; the radar display echo is normal; the radar function buttons and knobs are normal; the radar power supply, display and operating system are fault-free; the radar is equipped with a Chinese operating manual and	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	instruction manual.				
9	The AIS is normally open, the displayed heading matches the actual heading, the static information matches the actual, and the nine-digit code matches the certificate MMSI.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	ECS electronic charts are products approved by the Marine Inspectorate, the screen can be displayed normally, the function keys on the panel are normal and the electronic chart data is updated in real time.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	The GMDSS radio station working day log is standardised, clear and complete.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	VHF equipment power-on display identification code matches ship's MMSI; DSC transceiver functioning normally.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	MF/HF radio equipment is not defective; DSC test is normal; emergency lighting is provided at the operating position.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	NAVTEX display is normal and recently printed paper data is clear.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	SART case is watertight, no missing or deteriorated buoyant short ropes and effective batteries.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	EPIRB housing is watertight, securely mounted, no rusted bolts, batteries functional, hydrostatic pressure relief functional.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	VDR-SAM/HIGHLANGER B2, tested and functioning properly, battery and beacon valid.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note: The above inspection items were found in "Fair " level overall.

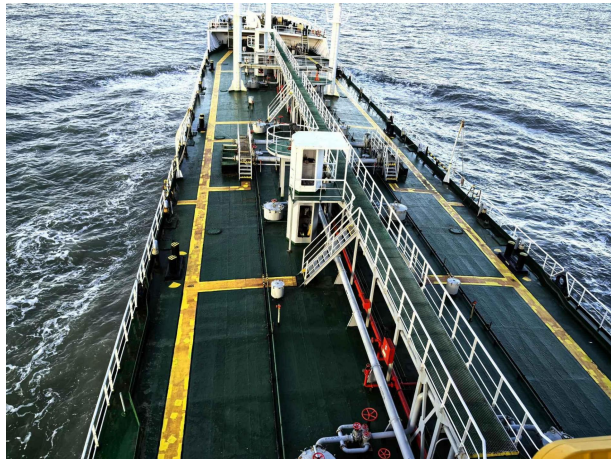
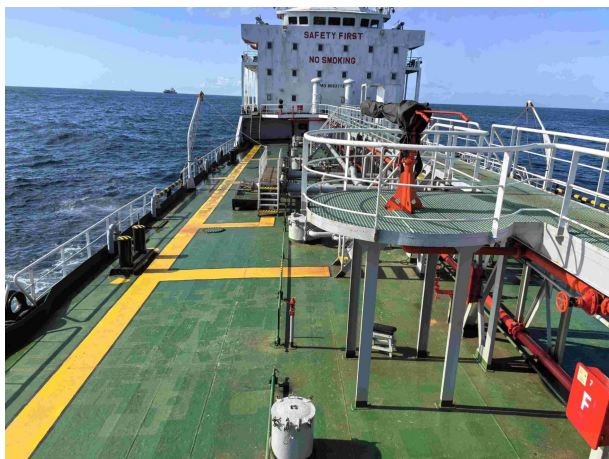


## 11. Hull and Deck

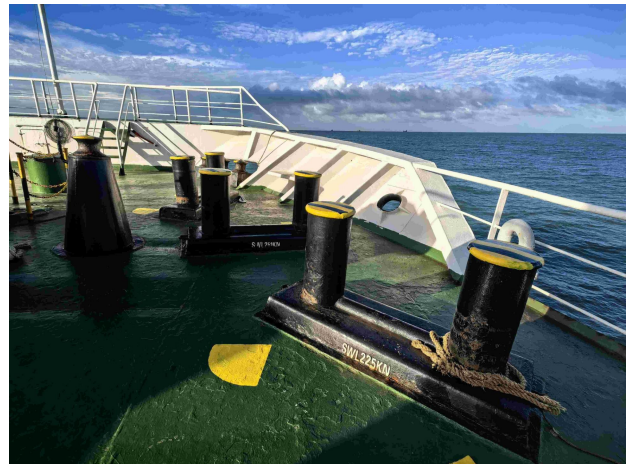
No.	Description	Good	Fair to good	Fair	Poor
1	Ship's name, port of registry and IMO marks are clear and complete.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Load line and water markings are clear and complete.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	Partial coating condition is visible on the outer hull plate.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	There is no significant deformation of the outer hull structure.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	Partially coated upper deck.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	No significant deformation of upper deck structure.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	There are no deformations, cracks, missing cogwheels and no welding of the guardrails.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	The position of the steel gangway, pilot's ladder and discharge port does not interfere with the embarkation and disembarkation of personnel.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	Air ducts on the upper deck are in good condition, equipped with effective closing devices and all service compartments are clearly marked.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	Anchors, winches and rope guides are in satisfactory condition.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11	Visible parts of anchor chain are in satisfactory condition.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12	Mooring bollards, cables and visible parts of cables are in satisfactory condition.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13	Walkway, deck and handrails are structurally sound.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14	Crane can be started and operated normally.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note: The above inspection items were found in "Fair" level overall.









## 12. Ballast tank and void space

No.	Description	Good	Fair to good	Fair	Poor
1	Corrosion and thinning condition in the ballast tanks and void space.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	The anti-corrosion condition in the ballast tanks and void space.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	No buckling/fracture/crack/temporary repair/poor alignment in the ballast tanks and void space.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	The manhole cover of the ballast tank was found no deformed or corroded, the sealing gasket was not damaged.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	The pipeline passing through the watertight bulkhead with collar plate and was effectively welded without cracks or leaks.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	The ballast tank valve can be effectively closed externally with an audible and visual alarm system in the control room.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note: The shipowner did not provide photographs of the ballast tanks in relation to the empty tanks due to insufficient light and ventilation in the ballast tanks.

### 13. Cargo hold, oil pump, pipework and control room.

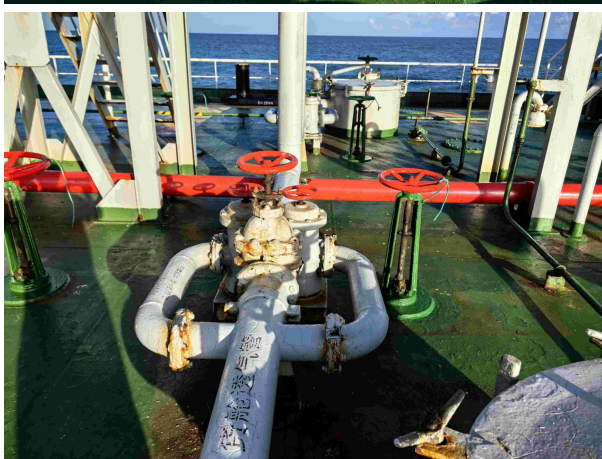
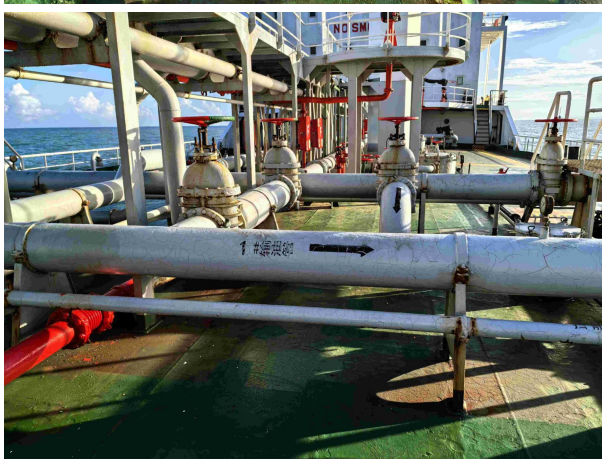
No.	Description	Good	Fair to good	Fair	Poor
1	Cargo tank area rotating fuel tank cover, grommets, rotating structure, paint is basically intact, no rust and corrosion, can open the tank smoothly.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Cargo oil tank area deck step bridge paint is intact, step bridge grating, both sides of railing structure is basically intact.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	There is no damage to the insulation package of the deck pipe system in the cargo tank area, no leakage from the flange interface of the pipe system, and no corrosion of the fire fighting pipe.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	The cargo oil tanks are well coated, the ladder rack structure is complete, the welds of the tank structure are still full and the bilge pipe is neatly arranged.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	The screen of the cargo control room console can be displayed normally and the function buttons on the panel are normal.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Pump room door opens and closes with cabin fan, light chain; pump room ventilation louvres without rust, cabin ventilation can be closed from outside, fire door puller intact.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	The watertight bulkhead of the pump compartment and the cabin boundary interface are fitted with fireproof thermal insulation, the material has no significant damage and the nail cover has not fallen off.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	The pump body in the pump compartment has intact paint and no significant corrosion; the pipeline flange seal is intact, with no large gap and no significant corrosion on the bolts.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Inside the pump room, the lubrication of the hand wheel screw of the submarine door is still good and the submarine valve box has a small amount of corrosion.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	No oil stains on the steel plate in the pump room, no leakage along the lower edge of the bulkhead and no large oil stains in the bilge.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



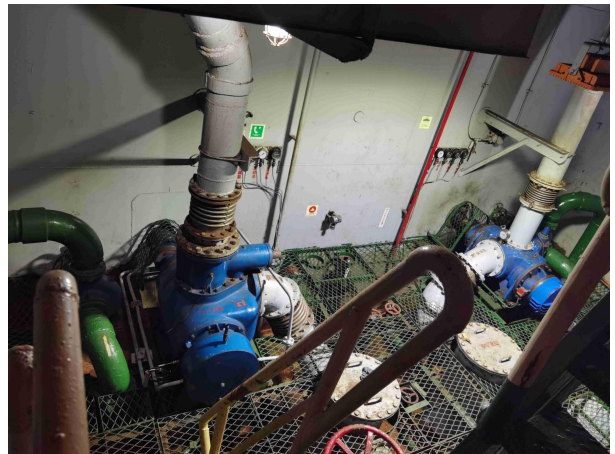
Note: The above inspection items were found in "Fair " level overall.

**Concern:**

The shipowner did not provide the relevant photographs of the cargo hold interior.







#### 14. Engine Room and Machinery

No.	Description	Good	Fair to good	Fair	Poor
1	The cabin platforms and bilges are kept in a clean and tidy condition, with no significant oil stains or flammable materials present.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	The cabin lighting and emergency lighting are fully functional and in good condition.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	The main electrical and mechanical equipment is in good condition, with no significant oil or water leakage or temporary drainage.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	The main mechanical and electrical equipment is effectively maintained in accordance with the manufacturer's specified intervals (please refer to the monthly turbine report and equipment operating hours, maintenance records, etc.).	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	The main and auxiliary engine monitoring devices are complete and in a normally open condition, as well as regularly tested.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	The high-pressure fuel pipes for the main and auxiliary engines are protected by double casing and a leakage alarm device or splash baffle.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	The exhaust pipes of the main and auxiliary engines are free of any leakage and the insulation is fully intact.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	The surfaces of the fuel/slick oil dispenser and fuel supply unit are free of large amounts of oil and in good condition.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	The nameplate for the rudder equipment is consistent with the certificate and bears a product approval certificate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	The inspection found no evidence of leakage at the rudder pipe system joints, valves or cylinder disc root. The cylinder is equipped with bleeder valves at both ends, and the pressure gauge is in good working order.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11	The rudder is equipped with anti-skid measures for personnel protection.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	The rudder room is divided into three sections: compass, rudder angle device and driving station. All equipment is consistent and clear, and communication with the driving station is normal.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	The room is also equipped with a diagram of the equipment and operating procedures.				
13	Insulation measures are in place for the location of and around the main switchboard, and the ground fault monitoring device is fully operational.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	The emergency generator sets, their associated feeder wires and the enclosures of the distribution boards have been fitted with protective ground wires.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	Please be advised that the level of fuel or oil in the emergency generator tank is between two-thirds and three-quarters full.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	The voltage of the starting battery for the emergency generator set is within the normal range and displays a new or test mark.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	The emergency power distribution board is functioning correctly, with all indicator lights and panel displays showing a normal open state.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	The cabin pipework, subsea valves and outboard valves are free of significant corrosion, leakage, temporary repairs or cement boxes.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
19	The cabin is supplied with the necessary spare parts for the main and auxiliary engines, and the machine shop is equipped with the appropriate repair tools and replacement parts.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note: The above inspection items were found in "Fair" level overall.









## Key concerns

No.	Description
1	This vessel was built as oil tanker (flash point $\leq 60^{\circ}\text{C}$ ) under ZC classification in 2006.
2	The cargo hold is double bottom and double shell, total 10 oil tanks and 2 slop tanks, the capacity (including slop tanks) is 10556.584m <sup>3</sup> .
3	The inner wall material of cargo tank and slop tank is carbon steel with special coating, the material of cargo tank pipeline is carbon steel, and the material of cargo oil pump is cast steel for the shell and stainless steel for the screw.
4	The vessel is equipped with 1 set 2LB2-500-J cargo oil pump with 500m <sup>3</sup> /h and 1 set 2HM7000-128 cargo oil pump with 500m <sup>3</sup> /h.
5	The annual survey has been completed on 15/08/2024 in Zhoushan. The next intermediate survey will be carried out on 26/06/2025 or 26/06/2026 and the special survey is 26/06/2028.
6	The FSCO inspections of the vessel in the last three years were basically common defects, with no detention items, and have been corrected and closed.
7	The ship sails with full load and rotation speed of M/E at 540-560rpm, the average speed is 8-10 knots. The fuel oil consumed by M/E is MGO or 120# CST, and the fuel consumption is 5t/d. The fuel oil consumed by A/E is MGO, and the fuel consumption is 0.48t/d.
8	The hull thickness measurement corrosion rate of this ship during the special survey in May 2023 is within the permissible range, with a larger value of 10.8%.
9	The annual survey and repair of the main and auxiliary engines in August 2024 are basically routine items, and without significant abnormalities in the appearance of the pump room equipment. The status shall be "Fair".
10	The photos used in this report are historical photos provided by the shipowner for reference only.



## Technical Report Attachment

### Annex 1 : Grade details

Item	Grade
<b>Basic attributes</b>	<b>15%</b>
Shipbuilder	3.5
Classification society	3.5
Document on board	4.0
<b>Performance Condition</b>	<b>25%</b>
Speed	3.5
Fuel Consumption	4.0
FSC.SMS	4.0
<b>Appearance Condition</b>	<b>30%</b>
Galley & Accommodation	3.5
Lifesaving and Fire & Safety Appliance	4.0
Hull Structure	3.5
Cargo Hold	3.5
Deck Machinery	3.5
<b>Mechanical Working Condition</b>	<b>30%</b>
Anti Pollution System	4.0
Navigating Bridge & Communications Equipment	3.5
Engine Room and Machinery	3.5
Pump/Valve/Piping system	3.5
<b>Overall</b>	<b>3.7</b>

## Annex 2 : Grade Specification

Grade	Level	Description
> 4.5	Good	Unimpaired condition without significant wear, or deviation from original strength and operating efficiency. No maintenance or repair required.
4.0-4.5	Fair to good	Unimpaired condition but may require some minor maintenance to bring to a good standard.
3.0-4.0	Fair	Condition where wear and tear or other deficiencies of a minor nature, do not require correction or repair.
< 3.0	Poor	Condition in which the adequacy of strength and/or operational efficiency is marginally below acceptable limits, or is in doubt. Remedial action is required.