

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report **October 22 1942** When handed in at Local Office **19** Port of **TORONTO, CANADA**

No. in Survey held at **TORONTO, CANADA** Date, First Survey **Sept. 8, 1942** Last Survey **October 20 1942**

Reg. Book. on the **10,000 ton Cargo Vessel "FORT FINLAY"** (Number of Visits **32**) Tons **Gross 7133.95 Net 4243.92**

Built at **Vancouver, B.C.** By whom built **West Coast Shipbuilders Ltd.** Yard No. **112** When built **1942**

Engines made at **TORONTO, Ontario** By whom made **John Inglis Co. Ltd.** Engine No. **133 M52** When made **1942**

Boilers made at **-** By whom made **-** Boiler No. **-** When made **-**

Registered Horse Power **-** Owners **Wartime Merchant Shipping Ltd.** Port belonging to **-**

Nom. Horse Power as per Rule **504** <sup>505</sup> Is Refrigerating Machinery fitted for cargo purposes **-** Is Electric Light fitted **yes**

Trade for which Vessel is intended **-**

**ENGINES, &c.**—Description of Engines **Triple Expansion. Superheat 575°F.** Revs. per minute **76**

Dia of Cylinders **24.5"x37"x70"** Length of Stroke **48"** No. of Cylinders **3** No. of Cranks **3**

Crank shaft, dia. of journals **as per Rule 13.98** Crank pin dia. **14.25** Crank webs **Mid. length breadth 24.5** Thickness parallel to axis **9"HP.MP.**

**as fitted 14.25** Mid. length thickness **shrunk** Thickness around eye-hole **9.5"LP. 7 1/8"Pin**

Intermediate Shafts, diameter **as per Rule -** Thrust shaft, diameter at collars **as per Rule 13.98** **7 5/8"Jour.**

**as fitted -** **as fitted 14.25"**

Tube Shafts, diameter **as per Rule -** Screw Shaft, diameter **as per Rule -** Is the **{ tube }** shaft fitted with a continuous liner **{ - }**

**as fitted -** **as fitted -** **as per Rule -**

Bronze Liners, thickness in way of bushes **as per Rule -** Thickness between bushes **as per Rule -** Is the after end of the liner made watertight in the propeller boss **-**

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner **-**

If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive **-**

If two liners are fitted, is the shaft lapped or protected between the liners **-** Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft **-**

If so, state type **-** Length of Bearing in Stern Bush next to and supporting propeller **-**

Propeller, dia. **-** Pitch **-** No. of Blades **-** Material **-** whether Moveable **-** Total Developed Surface **-** sq. ft.

Feed Pumps worked from the Main Engines, No. **None** Diameter **-** Stroke **-** Can one be overhauled while the other is at work **-**

Bilge Pumps worked from the Main Engines, No. **2** Diameter **4.5"** Stroke **26"** Can one be overhauled while the other is at work **yes**

Feed **{ No. and size Two 10"x7"x24" 4000 Imp. Pumps connected to the { No. and size -**

Pumps **{ How driven Independent Gallons Main Bilge Line { How driven -**

Ballast Pumps, No. and size **-** Lubricating Oil Pumps, including Spare Pump, No. and size **-**

Are two independent means arranged for circulating water through the Oil Cooler **-** Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room **-**

In Pump Room **-** In Holds, &c. **-**

Main Water Circulating Pump Direct Bilge Suctions, No. and size **-** Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size **-**

Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes **-**

Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges **-**

Are all Sea Connections fitted direct on the skin of the ship **-** Are they fitted with Valves or Cocks **-**

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates **-** Are the Overboard Discharges above or below the deep water line **-**

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel **-** Are the Blow Off Cocks fitted with a spigot and brass covering plate **-**

What Pipes pass through the bunkers **-** How are they protected **-**

What pipes pass through the deep tanks **-** Have they been tested as per Rule **-**

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times **-**

Is the arrangement of Valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one compartment to another **-** Is the Shaft Tunnel watertight **-** Is it fitted with a watertight door **-** worked from **-**

**MAIN BOILERS, &c.**—(Letter for record **-**) Total Heating Surface of Boilers **7140 Sq. Ft. (3 Boilers)**

Which Boilers are fitted with Forced Draft **All three Boilers** Which Boilers are fitted with Superheaters **All three Boilers**

No. and Description of Boilers **Three Scotch Marine** Working Pressure **220 lbs. per sq. in.**

**IS A REPORT ON MAIN BOILERS NOW FORWARDED? No.**

**IS A DONKEY BOILER FITTED? No.** If so, is a report now forwarded? **-**

Can the donkey boiler be used for domestic purposes only **-** N.E.M.No. **694** **6 Oct. 1941. N.Y.**

**PLANS.** Are approved plans forwarded herewith for Shafting **LLOYDS Main Boilers** John S. Heck per C.M.

(If not state date of approval) **APPROVAL 15.11.40**

Superheaters **-** General Pumping Arrangements **-** Oil fuel Burning Piping Arrangements **-**

## SPARE GEAR.

Has the spare gear required by the Rules been supplied **Yes**

State the principal additional spare gear supplied **1 Set Piston Rings and Springs for HP. MP. and LP. pistons and HP. piston Valve, top and bottom. 1 set of pads for ahead face of Thrust Bearing. 2 Bottom end Bolts and nuts 4 Top end Bolts & nuts, 2 Main Bearing Bolts & Nuts, 6 Coupling Bolts & Nuts, 1 Bottom end Bearing (2 Halves) 2 Pairs Top end Bearings, 1 Set Bottom end Bearing Liners, 1 Set Metallic Packing for HP.LP.MP. Piston Rods & Valve Spindles. 1 Set (6) Air Pump Head Valve Discs. (Top & Bottom) 4 Pressure Glasses, 4 Springs, 4 Guide Rings, 8 Gaskets, 1 Pump Unit complete for Lubricator. 1 Glycerine Gun, 1 Valve & Seat for S.D.N.R. Valve & Lift Valve on Suc & Disch Chests, 3 Carrying bars for Crossheads. 1 lifting bar for Main Bearings, 1 Wear down Gauge for Crankshaft. 1 Set Spanners & Wrenches as per Specification.**

The foregoing is a correct description  
The John Inglis Company Limited  
Date Oct. 26/42 (Sgd.) Jas McKenzie. Manufacturer.



Sept. 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, 25, 26, 28, 29, 30.

During progress of work in shops - - Oct. 2, 3, 5, 6, 7, 10, 12, 13, 14, 15, 16, 20.

Dates  
of Survey  
while  
buildingDuring erection on  
board vessel - - -

Total No. of visits 32

	HP	MP	LP	HP	MP	LP	HP	MP	LP
Dates of Examination of principal parts — Cylinders	24.9.42	16.9.42	10.9.42	24.9.42	16.9.42	10.9.42	24.9.42	16.9.42	10.9.42
Pistons	12.10.42	12.10.42	12.10.42	12.10.42	12.10.42	12.10.42	12.10.42	12.10.42	12.10.42
Crank shaft	16.9.42	16.9.42	16.9.42	16.9.42	16.9.42	16.9.42	16.9.42	16.9.42	16.9.42
Tube shaft	-	-	-	-	-	-	-	-	-
Stern tube	-	-	-	-	-	-	-	-	-
Completion of fitting sea connections	-	-	-	-	-	-	-	-	-
Completion of pumping arrangements	-	-	-	-	-	-	-	-	-
Main boiler safety valves adjusted	-	-	-	-	-	-	-	-	-
Crank shaft material	O.H. Steel	O.H. Steel	O.H. Steel	O.H. Steel	O.H. Steel	O.H. Steel	O.H. Steel	O.H. Steel	O.H. Steel
Intermediate shafts, material	-	-	-	-	-	-	-	-	-
Screw shaft, material	-	-	-	-	-	-	-	-	-
Is an installation fitted for burning oil fuel	-	-	-	-	-	-	-	-	-
Have the requirements of the Rules for the use of oil as fuel been complied with	-	-	-	-	-	-	-	-	-
Is the vessel (not being an oil tanker) fitted for carrying oil as cargo	-	-	-	-	-	-	-	-	-
If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with	-	-	-	-	-	-	-	-	-
Is this machinery duplicate of a previous case	Yes	-	-	Yes	-	-	Yes	-	-
General Remarks (State quality of workmanship, opinions as to class, &c.)	The Main Engine was built under the Special								

Completion of fitting sea connections -

Completion of pumping arrangements - Boilers fixed - Engines tried under steam -

Main boiler safety valves adjusted - Thickness of adjusting washers - LLOYDS 8450

Crank shaft material O.H. Steel Identification Mark 16.9.42 J.B.F. Thrust shaft material O.H. Steel Identification Mark A.S.20.8.42

Intermediate shafts, material - Identification Marks 16.9.42 J.B.F. Tube shaft, material - Identification Mark 28.9.42 J.B.F.

Screw shaft, material - Identification Mark - Steam Pipes, material - Test pressure - Date of Test -

Is an installation fitted for burning oil fuel - Is the flash point of the oil to be used over 150°F. -

Have the requirements of the Rules for the use of oil as fuel been complied with -

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo - If so, have the requirements of the Rules been complied with -

If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with -

Is this machinery duplicate of a previous case Yes If so, state name of vessel N.E.M. TYPE

General Remarks (State quality of workmanship, opinions as to class, &amp;c.) The Main Engine was built under the Special

Survey of the Society's Surveyors to the requirements of the Rules and in accordance with the

approved plans.

The workmanship was good and the materials were made at an approved works and tested as required by

the Rules to the satisfaction of the Society's Surveyors.

In my opinion this main engine is eligible to be classed in the Society when satisfactorily

installed and tried under steam to the satisfaction of the Society's Surveyors.

Forging Reports Nos. 3390B, 3865B, 3709C, 8450, 7097, 8346, 8051, 7015, 6944, are attached hereto.

Thrust Shaft LLOYDS 8450 A.S.20.8.42 J.B.F.28.9.42 was examined in finished condition and found

satisfactory.

Certificate to be sent to  
The Surveyors are requested not to write on or below the space for Committee's Minute.

First			
The amount of Entry Fee	£	\$30.00	When applied for,
Special Survey	£	267.00	7. 1. 1943 YCR.
Donkey Boiler Fee	£	:	When received, RR.
Travelling Expenses (if any)	£	10.00	19.

Committee's Minute

FRI. 28 JAN 1944

Assigned

See Ycr. 5862

Jas B. Laidlaw

Engineer Surveyor to Lloyd's Register of Shipping.



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Foundation