

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 2 FEB 1929

Date of writing Report *1 FEB 1929* When handed in at Local Office *1 FEB 1929* Port of *HULL*

No. in Survey held at *Hull* Date, First Survey *7 June 1928* Last Survey *28 Jan 1929*  
 Reg. Book. *60771* on the Steam Trawler "CLYNE CASTLE" (Number of Visits *24*)

Gross Tons *306.94*  
 Net Tons *116.69*

Built at *Selby* By whom built *Cochrane & Sons Ltd.* Yard No. *1035* When built

Engines made at *Hull* By whom made *Amos & Smith Ltd* Engine No. *565* when made

Boilers made at *Hull* By whom made *Amos & Smith Ltd* Boiler No. *565* when made

Registered Horse Power Owners *Cochran & Fisher Ltd* Port belonging to *Liverpool*

Nom. Horse Power as per Rule *96 91* Is Refrigerating Machinery fitted for cargo purposes *no* Is Electric Light fitted *Yes*

Trade for which Vessel is intended *Fishing*

**ENGINES, &c.**—Description of Engines *Triple Expansion* Revs. per minute

Dia. of Cylinders *13.22 14.37* Length of Stroke *36* No. of Cylinders *3* No. of Cranks *3*

Crank shaft, dia. of journals as per Rule *7.1* as fitted *7.2* Crank pin dia. *7.2* Crank webs Mid. length breadth *4.2* Mid. length thickness *3.2* Thickness parallel to axis *4.2* Thickness around eye-hole *3.2*

Intermediate Shafts, diameter as per Rule *4.1* as fitted *4.2* Thrust shaft, diameter at collars as per Rule *4.1* as fitted *4.2*

Tube Shafts, diameter as per Rule *7.7* as fitted *8.2* Screw Shaft, diameter as per Rule *7.7* as fitted *8.2* Is the tube screw shaft fitted with a continuous liner *Yes*

Bronze Liners, thickness in way of bushes as per Rule *9.6* as fitted *9.6* Thickness between bushes as per Rule *9.6* as fitted *9.6* Is the after end of the liner made watertight in the propeller boss *Yes* If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner *Yes*

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 *Yes*

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

Length of Bearing in Stern Bush next to and supporting propeller *33*

Propeller, dia. *10.6* Pitch *10.4* No. of Blades *4* Material *Cast Iron* whether Movable *no* Total Developed Surface *41* sq. feet

Feed Pumps worked from the Main Engines, No. *one* Diameter *2 7/8* Stroke *13* Can one be overhauled while the other is at work *Yes*

Bilge Pumps worked from the Main Engines, No. *one* Diameter *2 7/8* Stroke *13* Can one be overhauled while the other is at work *Yes*

Feed Pumps { No. and size *one 5 x 3 1/2 x 6* How driven *Steam* Pumps connected to the Main Bilge Line { No. and size *6 x 4 x 5 + Ejector* How driven *Steam*

Ballast Pumps, No. and size *one 5 x 3 1/2 x 6* Lubricating Oil Pumps, including Space Pump, No. and size *one 6 x 4 x 5 + Ejector*

Are two independent means arranged for circulating water through the Oil Cooler *Yes* Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room *2 @ 2* In Holds, &c. *5 @ 2*

Main Water Circulating Pump Direct Bilge Suctions, No. and size *one 3 1/2* Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size *one 3 Ejector* Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes *Yes*

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 *Yes*

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

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

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

What Pipes pass through the bunkers *Inward Suctions* How are they protected *Wood casing*

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

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

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 *Yes* Is the Shaft Tunnel watertight *Yes* Is it fitted with a watertight door *worked from*

**MAIN BOILERS, &c.**—(Letter for record) Total Heating Surface of Boilers *1546 Sq. ft.*

Is Forced Draft fitted *no* No. and Description of Boilers *one Simple ended* Working Pressure *200 lbs.*

IS A REPORT ON MAIN BOILERS NOW FORWARDED? *no*

IS A DONKEY BOILER FITTED? *no* If so, is a report now forwarded? *Yes*

**PLANS.** Are approved plans forwarded herewith for Shafting *Yes* Main Boilers *Yes* Auxiliary Boilers *Yes* Donkey Boilers *Yes*

(If not state date of approval)

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

**SPARE GEAR.** State the articles supplied: *Two bolts each for top ends, bottom ends + main bearings. Set of coupling bolts + nuts. Fuel, bilge + air pump valves. Main + donkey check valves + seats. Safety valve spring. Fuel pump ram. Circ. pump impeller + shaft. Bolts + iron of various sizes.*

The foregoing is a correct description, FOR AMOS & SMITH LTD.

*[Signature]* Manufacturer.  
MANAGER



NOTE.—The words which do not apply should be deleted.

14298

Dates of Survey while building

During progress of work in shops - - 1928. Jan 7. 17. Aug 29. Sept 11. 20. 24. 28. 30. Nov 8. 9. 12. 16. 20. 23. 27. Dec 3. 5. 11. 28.

During erection on board vessel - - 1929. Jan 15. 25. 26. 28. 28.

Total No. of visits 24.

Dates of Examination of principal parts—Cylinders 20. 11. 28 Slides 3. 12. 28 Covers 20. 11. 28

Pistons 3. 12. 28 Piston Rods 30. 10. 28 Connecting rods 30. 10. 28

Crank shaft 3. 12. 28 Thrust shaft 24. 9. 28 Intermediate shafts 24. 9. 28

Tube shaft ✓ Screw shaft 24. 9. 28 Propeller 24. 9. 28

Stern tube 24. 9. 28 Engine and boiler seatings 25. 1. 29 Engines holding down bolts 25. 1. 29

Completion of fitting sea connections 8. 11. 28

Completion of pumping arrangements 28. 1. 29 Boilers fixed 28. 1. 29 Engines tried under steam 28. 1. 29

Main boiler safety valves adjusted 28. 1. 29 Thickness of adjusting washers 3/8 3/8

Crank shaft material Steel Identification Mark 4895 359 Thrust shaft material Steel Identification Mark 4895 359

Intermediate shafts, material ✓ Identification Marks ✓ Tube shaft, material ✓ Identification Mark ✓

Screw shaft, material Steel Identification Mark 4895 359 Steam Pipes, material S.S. Copper Test pressure 400 lbs Date of Test 26. 1. 29

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 ✓

Is this machinery duplicate of a previous case? No If so, state name of vessel "Tenby Castle"

General Remarks (State quality of workmanship, opinions as to class, &c.) The machinery of this vessel has been built under special survey & the materials & workmanship are sound & good. It has been satisfactorily fitted on board, tried under full working conditions & all found in good order. It is eligible in my opinion to have record of + d.w.c. 1. 29. C.L.

It is submitted that this vessel is eligible for THE RECORD

☒ L.M.C 129 CL

4/24/29 J.S.H.

The amount of Entry Fee ... £ 2 : 0 : When applied for, 1 Feb 1929

Special ... £ 24 : 0 : When received, 5. 2. 29

Donkey Boiler Fee ... £ : :

Travelling Expenses (if any) £ : :

John A. Mackintosh, Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE 5 FEB 1929

Assigned + L.M.C 1:29



For S.S.O.F. please see F.E. "Cicton Castle", Hull Rpt 39317

Rpt. 5

Date of ...

No. in Reg. Book 60712

Master ...

Engines ...

Boilers m ...

Nominal ...

MULTI ...

Manufact ...

Total He ...

No. and ...

Tested by ...

Area of ...

Area of e ...

In case of ...

Smallest ...

Smallest ...

Largest ...

Thickness ...

long. seam ...

Percentag ...

Percentag ...

Thickness ...

Material ...

Length of ...

Dimension ...

End plate ...

How are ...

Tube plate ...

Mean pitc ...

Girders to ...

at centre ...

in each ...

Tensile str ...

Pitch of st ...

Working p ...

Thickness ...

Pitch of s ...

Working ...

Diameter ...

Working p ...

Diameter ...