

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 29 JAN 1937

Date of writing Report 19... When handed in at Local Office 28 JAN 1937 Port of **HULL**

No. in Survey held at **Hull** Date, First Survey 27/10/36 Last Survey 22/1/37
 Reg. Book. **64055** on the **Steam Trawler "ST NIDAN"** (Number of Visits 23.) Gross 564.50 Tons Net 209.75

Built at **Beverley** By whom built **Cook, Welton & Gemmel Ltd** Yard No. 620 When built 1937-1

Engines made at **Hull** By whom made **S.D. Holmes & Co., Ltd** Engine No. 1514 When made 1937

Boilers made at **Hull** By whom made **S.D. Holmes & Co., Ltd** Boiler No. 1514. When made 1937.

Registered Horse Power Owners **Thomas Hamling & Co., Ltd** Port belonging to **Hull**

Nom. Horse Power as per Rule 157. ✓ 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 **Reciprocating Triple Expansion.** Revs. per minute

Dia. of Cylinders 15"-25"-42" Length of Stroke 27" No. of Cylinders 3 No. of Cranks 3

Crank shaft, dia. of journals as per Rule 8.31" as fitted 8.50" Crank pin dia. 8 1/2" Crank webs Mid. length breadth 16 1/2" Thickness parallel to axis 5 1/2" as fitted 5 1/2" Mid. length thickness 5 1/2" shrunk Thickness around eye-hole 3 3/16"

Intermediate Shafts, diameter as per Rule 7.91" as fitted 8 1/2" Thrust shaft, diameter at collars as per Rule 8.31" as fitted 8.50"

Tube Shafts, diameter as per Rule... as fitted... Screw Shaft, diameter as per Rule 8.96" as fitted 9" Is the { tube / screw } shaft fitted with a continuous liner { Yes }

Bronze Liners, thickness in way of bushes as per Rule 9/16" as fitted 19/32" Thickness between bushes as per Rule 1/2" as fitted 1/2" 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 **No**

If two liners are fitted, is the shaft lapped or protected between the liners **No** Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft **No** If so, state type... Length of Bearing in Stern Bush next to and supporting propeller 42"

Propeller, dia. 10'-9" Pitch 11'-3" No. of Blades 4 Material **M. Bronze** whether Moveable **No** Total Developed Surface 42 sq. feet

Feed Pumps worked from the Main Engines, No. 2 Diameter 2 3/4" Stroke 16" Can one be overhauled while the other is at work **Yes**

Bilge Pumps worked from the Main Engines, No. 2 Diameter 2 3/4" Stroke 16" Can one be overhauled while the other is at work **Yes**

Feed Pumps { No. and size **Two Duplex 7"x5"x6"** / How driven **Steam** } Pumps connected to the Main Bilge Line { No. and size **Two Duplex 7"x5"x6" and Ejector 3" diameter** / How driven **Steam** }

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 **No** Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room **2 at 2" diameter** In Pump Room **5 at 2" diameter.**

Main Water Circulating Pump Direct Bilge Suctions, No. and size **One at 4 3/4" dia.** Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size **One at 3" diameter.** 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 take 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 **Forward suction** How are they protected **Wood casings**

What pipes pass through the deep tanks 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 **Yes** worked from **Yes**

MAIN BOILERS, &c.—(Letter for record "3") Total Heating Surface of Boilers **2402 square feet.**

Is Forced Draft fitted **Yes** No. and Description of Boilers **One single ended return Tube** Working Pressure **220 Lbs/sq"**

IS A REPORT ON MAIN BOILERS NOW FORWARDED? **Yes**

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

Is the donkey boiler intended to be used for domestic purposes only **No**

PLANS. Are approved plans forwarded herewith for Shafting Main Boilers **Yes** Auxiliary Boilers **No** Donkey Boilers **No**

Superheaters **Yes** General Pumping Arrangements **No** Oil fuel Burning Piping Arrangements **No**

SPARE GEAR.

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

State the principal additional spare gear supplied

Centrifugal pump impeller and shaft.
One valve & seat for main and auxiliary check valves.
One set of air pump valves
One auxiliary feed pump plunger
One set of "Duplex" pump valves.

The foregoing is a correct description, FOR CHARLES D. HOLMES & CO., LTD.

Dr. Cooper

Manufacturer.

W450-0077



During progress of work in shops -- 1936: - Oct 27. Nov 2. 11. 12. 18. 26. 30.
 Dec. 10. 16. 18. 22. 24. 29. 30. 31.
 During erection on board vessel --- 1937: - Jan 4. 7. 8. 9. 14. 18. 22.
 Total No. of visits 23.

Dates of Examination of principal parts—Cylinders 11. 11. 36. Slides 16. 12. 36. Covers 16. 12. 36.
 Pistons 16. 12. 36. Piston Rods 16. 12. 36. Connecting rods 16. 12. 36.
 Crank shaft 16. 12. 36. Thrust shaft 30. 11. 36. Intermediate shafts 11. 11. 36.
 Tube shaft 27. 10. 36 2. 11. 36. Propeller 2. 11. 36.
 Stern tube 2. 11. 36. Engine and boiler seatings 26. 11. 36. Engines holding down bolts 4. 1. 37.
 Completion of fitting sea connections 26. 11. 36.
 Completion of pumping arrangements 14. 1. 37. Boilers fixed 4. 1. 37. Engines tried under steam 18. 1. 37.
 Main boiler safety valves adjusted 14. 1. 37. Thickness of adjusting washers F = 5/16" A = 1/32" SUPERHEATED = 13/32"
 Crank shaft material Steel Identification Mark 1043. Thrust shaft material Steel Identification Mark 1043.
 Intermediate shafts, material Steel Identification Marks 1043. Tube shaft, material Identification Mark
 Screw shaft, material Steel Identification Mark 1043. Steam Pipes, material S. D. Steel. Test pressure 660 lbs/sq. Date of Test 8. 1. 37.
 Is an installation fitted for burning oil fuel No. 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. No. If so, state name of vessel "St Nectan".

General Remarks (State quality of workmanship, opinions as to class, &c. The machinery of this vessel has been built under Special Survey, and the materials & workmanship are sound & good.
 It has been satisfactorily fitted on board, tried under steam, and found good.
 It is eligible in my opinion to have record of L.M.C. 1,37. C.L.

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

The amount of Entry Fee ... £ 3 : 0 :
 Special ... £ 39 : 5 :
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) £ : :
 When applied for, 28 JAN 1937
 When received, 5-2 1937 8/2

J. A. Orde
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE 2 FEB 1937
 Assigned + L.M.C. 1-37 J.A.O. C.L.
 S.P.

