

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

of writing Report 19 When handed in at Local Office 29. 1929 Port of Newcastle - on - Tyne 12 SEP 1929  
 in Survey held at Newcastle. Date, First Survey 4 March Last Survey 1 Sept. 1929  
 on the Swan Hunter Triple Expansion engine for the "VIKINGEN." (Number of Visits 45)  
 Tons { Gross 12639  
 Net 8884  
 When built 1929.  
 By whom built Swan Hunter, Wigham R. Sm. Hard No. 1344. Engine No. 1332 when made 1929.  
 By whom made do. Boiler No. 1332 when made 1929.  
 Owners Viking Whaling Co. Ltd. Port belonging to  
 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes  
 Intended for which Vessel is intended Whaling.

**ENGINES, &c.**—Description of Engines Swan Hunter Triple expansion Revs. per minute 103  
 of Cylinders 22 1/2 x 36 1/2 x 61 Length of Stroke 39 No. of Cylinders 3 No. of Cranks 3  
 Crank shaft, dia. of journals as per Rule 12.06 Crank pin dia. 12.25 Crank webs Mid. length breadth 19 Thickness parallel to axis 4 3/4  
 as fitted 12.25 Crank webs Mid. length thickness 4 3/4 shrunk Thickness around eye-hole 5 1/16  
 Intermediate Shafts, diameter as per Rule 11.49 Thrust shaft, diameter at collars as per Rule 12.06  
 as fitted 11.5 shaft fitted with a continuous liner { as fitted 12.25  
 Main Shafts, diameter as per Rule - Screw Shaft, diameter as per Rule 13.24 Is the tube }  
 as fitted - as fitted 14.22 screw } shaft fitted with a continuous liner { yes  
 Liners, thickness in way of bushes as per Rule .404 Thickness between bushes as per Rule 5.3  
 as fitted 25/32 as fitted 3/4 Is the after end of the liner made watertight in the  
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner -  
 Is an approved Oil Gland or other appliance fitted at the after  
 propeller, dia. 14-3 Pitch 13-0 No. of Blades 4 Material 8. Steel whether Moveable No Total Developed Surface 68 sq. feet  
 Pumps worked from the Main Engines, No. 2 Diameter - Stroke - Can one be overhauled while the other is at work  
 Pumps worked from the Main Engines, No. 4 Diameter 3 1/2 Stroke 22 Can one be overhauled while the other is at work Yes  
 Pumps connected to the Main Bilge Line { No. and size 6 x 9 x 11 x 10 How driven Steam  
 Last Pumps, No. and size 6 x 9 x 11 x 10 Lubricating Oil Pumps, including Spare Pump, No. and size -  
 Are there independent means arranged for circulating water through the Oil Cooler -  
 Suctions, connected to both Main Bilge Pumps and Auxiliary  
 Pumps;—In Engine and Boiler Room 3 x 3 1/2 dia. ✓  
 folds, &c. 2 x 2.

**WATER CIRCULATING PUMP** Direct Bilge Suctions, No. and size 2 x 8 dia Independent Power Pump Direct Suctions to the Engine Room Bilges,  
 and size 6" dia 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  
**SEA CONNECTIONS** fitted direct on the skin of the ship Yes Are they fitted with Valves or Cocks Values  
 Are they fitted 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  
 How are they protected -  
 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 Yes  
 Is the Shaft Tunnel watertight Yes Is it fitted with a watertight door - worked from -

**MAIN BOILERS, &c.**—(Letter for record S. ✓) Total Heating Surface of Boilers 11210 sq ft.  
 No. and Description of Boilers 4 x single ended water tubes Working Pressure 210 lbs sq  
**REPORT ON MAIN BOILERS NOW FORWARDED?** Yes  
**DONKEY BOILER FITTED?** Yes 2 DG 1000 If so, is a report now forwarded? Yes

**PLANS.** Are approved plans forwarded herewith for Shafting Yes Main Boilers Yes Auxiliary Boilers - Donkey Boilers Yes  
 (If not state date of approval)  
 General Pumping Arrangements Yes Oil fuel Burning Piping Arrangements Yes

**RE GEAR.** State the articles supplied:—  
 as per attached list.

The foregoing is a correct description,

FOR SWAN, HUNTER & WIGHAM RICHARDSON, LTD.

G. J. Stewart  
DIRECTOR, Manufacturer.



1929

During progress of work in shops - Mar 4, Apr 10, 11, 23, 26, May 9, 10, 24, 29, 30, June 3, 11, 19, 20, 21, July 1, 2, 3, 4, 6, 8, 11, 12, 15, 17, 19, 22, 23, 24, 26, 29, 30, 31, Aug 2, 6, 8, 9, 14, 15, 21, 23, 28, 31, Sep 1.

Dates of Survey while building -

Total No. of visits 45.

Dates of Examination of principal parts - Cylinders 11. 6. 29. Slides 11. 6. 29. Covers 11. 6. 29.

Pistons 11. 6. 29. Piston Rods 11. 6. 29. Connecting rods 11. 6. 29.

Crank shaft 20. 6. 29. Thrust shaft 20. 6. 29. Intermediate shafts 4. 4. 29.

Tube shaft - Screw shaft 20. 6. 29. Propeller 4. 4. 29.

Stern tube 4. 4. 29. Engine and boiler seatings 24. 4. 29. Engines holding down bolts 31. 4. 29.

Completion of fitting sea connections 4. 4. 29.

Completion of pumping arrangements 23. 8. 29. Boilers fixed 23. 8. 29. Engines tried under steam 31. 8. 29.

Main boiler safety valves adjusted 23. 8. 29. Thickness of adjusting washers 2 1/2" - 3/16" / 2 3/4" - 3/8" ap. 7/16" - 25/64"

Crank shaft material Steel Identification Mark 20. 6. 29 Thrust shaft material Steel Identification Mark 20. 6. 29

Intermediate shafts, material 7me. Identification Marks - Tube shaft, material - Identification Mark

Screw shaft, material Steel Identification Mark 20. 6. 29 Steam Pipes, material Steel Test pressure 630 lbs Date of Test 23/29

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

Have the requirements of the Rules for carrying and burning oil fuel been complied with Yes.

Is this machinery duplicate of a previous case No If so, state name of vessel -

General Remarks (State quality of workmanship, opinions as to class, &c.) The machinery of this vessel has been built under special survey in accordance with the approved plans & the Rules of the Society & has now been securely fitted on board the vessel, tried under full working conditions & found satisfactory. The machinery of this vessel is eligible, in my opinion, to have record of T.L.M.C. 9. 29.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 9. 29. Cl. F.D. Fitted for oil fuel. F. Pabon

13/9/29  
F. Pabon

NEWCASTLE-ON-TYNE

The amount of Entry Fee ... £ 6 : - : When applied for, Special ... £ 103 : 13 : 9. SEP 1929 Donkey Boiler Fee ... £ : : When received, Travelling Expenses (if any) £ : : 11. 9. 29

Eng. A. Gagnon, Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute TUL 17 SEP 1929 Assigned + L.M.C. 9. 29 F. Pabon Fitted for Oil Fuel 9. 29, F. Pabon 150°F



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