

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 17 SEP 1936

16 SEP 1936

Date of writing Report *16 SEP 1936* Port of *FELIX*  
 Date, First Survey *26th May 1936* Last Survey *9th Sept. 1936*  
 (Number of Visits *22*) Gross *430.32*  
 Net *238.01*  
 Survey held at *Hull* Date *12.8.36*  
 on the *Steam trawler "King Sol"*  
 built at *Selly* By whom built *Bochane & Sons Ltd.* Yard No. *1168* When built *1936.9*  
 Engines made at *Hull* By whom made *Amos & Smith Ltd.* Engine No. *650* When made *1936*  
 Boilers made at *Hull* By whom made *Amos & Smith Ltd.* Boiler No. *650* When made *1936*  
 Owners *Rinovia Steam Fishing Co. Ltd.* Port belonging to *Grimshy*  
 Registered Horse Power *130* 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 - Reciprocating* Revs. per minute *3*  
 No. of Cylinders *3*  
 Dia. of Cylinders *14 1/2" 24" 40"* Length of Stroke *27"* No. of Cranks *3*  
 Crank shaft, dia. of journals *8.11"* as per Rule *8.11"* Crank pin dia. *8.25"* Crank webs *13.5" 15.5"* Thickness parallel to axis *5.25"*  
 as fitted *8.25"* Mid. length thickness *5.25"* Thickness around eye-hole *3.594"*  
 Intermediate Shafts, diameter *7.72"* as per Rule *7.72"* Thrust shaft, diameter at collars *8.25"* as per Rule *8.11"*  
 as fitted *8.00"* as fitted *8.25"*  
 Main Shafts, diameter *8.595"* as per Rule *8.595"* Is the *tube* shaft fitted with a continuous liner *yes*  
 as fitted *8.75"* as fitted *8.75"* Is the *screw* shaft fitted with a continuous liner *yes*  
 Bronze Liners, thickness in way of bushes *15/32"* as per Rule *15/32"* Thickness between bushes *20/32"* as fitted *20/32"* 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 *yes*  
 Propeller, dia. *10'6"* Pitch *10.83' mean* No. of Blades *4* Material *Brongze* whether Moveable *no.* Total Developed Surface *39.5* sq. feet  
 Length of Bearing in Stern Bush next to and supporting propeller *36"*  
 Bilge Pumps worked from the Main Engines, No. *1* Diameter *3"* Stroke *15"* Can one be overhauled while the other is at work *yes*  
 Bilge Pumps worked from the Main Engines, No. *2* Diameter *3"* Stroke *15"* Can one be overhauled while the other is at work *yes*  
 Feed Pumps *One Weir's 6x8 1/2 x 13"* Pumps connected to the *One Duplex 6x4 1/4 x 6" + 3" Ejector*  
 Main Bilge Line *Steam*  
 Lubricating Oil Pumps, including Spare Pump, No. and size *Steam*  
 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" dia* In Holds, &c. *6 @ 2" dia*

Main Water Circulating Pump Direct Bilge Suctions, No. and size *One @ 5"* Independent Power Pump Direct Suctions to the Engine Room Bilges, *yes*  
 No. and size *One 3" dia 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 *Boil*  
 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 *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 *yes*

**MAIN BOILERS, &c.—**(Letter for record *"S"*) Total Heating Surface of Boilers *2350 sq. ft.*  
 Is Forced Draft fitted *no* No. and Description of Boilers *One Single Ended R.T.* Working Pressure *250 lb.*  
**IS A REPORT ON MAIN BOILERS NOW FORWARDED?** *yes*  
**IS A DONKEY BOILER FITTED?** *no* If so, is a report now forwarded? *yes*  
 Is the donkey boiler intended to be used for domestic purposes only *yes*  
**PLANS.** Are approved plans forwarded herewith for Shafting *yes* Main Boilers *yes* Auxiliary Boilers *yes* Donkey Boilers *yes*  
 Superheaters *yes* General Pumping Arrangements *yes* Oil fuel Burning Piping Arrangements *yes*

### SPARE GEAR.

Has the spare gear required by the Rules been supplied *yes*  
 State the principal additional spare gear supplied *Valves for Donkey Pumps. Impeller and spindle for centrifugal pumps.*

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

*A. R. Kearney*  
MANAGER.

Manufacturer.



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Lloyd's Register

002956-002969-0299

During progress of work in shops - - 1936: -  
 Dates of Survey while building - - - May 26, June 16, 24, July 3, 6, 10, 13, 21, 28, 29. *Sept*  
 During erection on board vessel - - - Aug 7, 12, 14, 18, 25, 27, 31, Sept. 1, 2, 5, 7, 9. *rebuild mast*  
 Total No. of visits 22. *anal + enclered*

Dates of Examination of principal parts - Cylinders 21-7-36 Slides 10-7-36 Covers 10-7-36  
 Pistons 10-7-36 Piston Rods 10-7-36 Connecting rods 28-7-36  
 Crank shaft 10-7-36 Thrust shaft 16-6-36 Intermediate shafts 16-6-36  
 Tube shaft ✓ Screw shaft 24-6-36 Propeller 6-7-36  
 Stern tube 3-7-36 Engine and boiler seatings 25-8-36 Engines holding down bolts 27-8-36

Completion of fitting sea connections 3-7-36  
 Completion of pumping arrangements 2-9-36 Boilers fixed 27-8-36 Engines tried under steam 5-9-36  
 Main boiler safety valves adjusted 5-9-36 Thickness of adjusting washers F 3/8" A 5/16" Superheater 7/16"

Crank shaft material Steel Identification Mark 764 Thrust shaft material Steel Identification Mark 764  
 Intermediate shafts, material Steel Identification Marks 764 Tube shaft, material ✓ Identification Mark ✓  
 Screw shaft, material Steel Identification Mark 764 Steam Pipes, material S.B. Steel Test pressure 1660# Date of Test 31-8-36

Is an installation fitted for burning oil fuel. *No* Is the flash point of the oil to be used over 150°F. *No*  
 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 *No* ✓ 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 ✓

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 and workmanship are sound and good.  
 It has been satisfactorily fitted on board, tried under steam and found in good condition.  
 It is eligible in my opinion, to have record # L.M.C. 9.36 C.L.

The Surveyors are requested not to write on or before the space for Committee's Minute.

The amount of Entry Fee ... £ 3 : - :  
 Special ... £ 32 : 10 :  
 Donkey Boiler Fee ... £ : :  
 Travelling Expenses (if any) £ : :  
 When applied for, 16 SEP 1936  
 When received, 22.9.36

*B. Moffatt*  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 25 SEP 1936  
 Assigned *Adm. 9.36*



If web, steel, or other material, give nature, and state on the Hull of the ship?

RP  
 Date  
 No. Reg.  
 Mast  
 Engin  
 Boile  
 Nomi  
 MU  
 Manu  
 Total  
 No. a  
 Teste  
 Area  
 Area  
 In ca  
 Small  
 Small  
 Large  
 Thick  
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