

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

31 JAN 1940

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Writing Report 19 When handed in at Local Office 19 Port of **HULL**

Survey held at *Ship* Date, First Survey *5.9.39* Last Survey *9.1.1940*  
 Book. on the *S/S. "WATE" (Steam Trawler)* (Number of Visits *25*) Tons { Gross *314*  
 Net *116*  
 at *Leeds* By whom built *Robson & Sons, Ltd.* Yard No. *1210* When built *1940*  
 Engines made at *Leeds* By whom made *Robson & Smith, Ltd.* Engine No. *672* When made *1940*  
 Boilers made at *Leeds* By whom made *Robson & Smith, Ltd.* Boiler No. *672* When made *1940*  
 Registered Horse Power Owners *Messrs. Robson & Smith, Ltd.* Port belonging to *Cardiff*  
 Horse Power as per Rule *124.5* Is Refrigerating Machinery fitted for cargo purposes *No* Is Electric Light fitted *Yes*  
 for which Vessel is intended *Steam Trawler*

**LINE S, & C.**—Description of Engines *Triple expansion reciprocating, S.A.* Revs. per minute *116*  
 of Cylinders *13* Length of Stroke *26* No. of Cylinders *3* No. of Cranks *3*  
 shaft, dia. of journals as per Rule *7.38* Crank pin dia. *7.5* Crank webs Mid. length breadth *14.34* Thickness parallel to axis *4.3/4*  
 as fitted *7.5* Mid. length thickness *4.3/4* shrunk Thickness around eye-hole *2.5/8*  
 Intermediate Shafts, diameter as per Rule *7.34* Thrust shaft, diameter at collars as per Rule *7.38*  
 as fitted *7.34* as fitted *7.12*  
 Shafts, diameter as per Rule *7.89* Is the { tube } shaft fitted with a continuous liner { *Yes* }  
 as fitted *7.89* { screw }  
 Liners, thickness in way of bushes as per Rule *5.4* Thickness between bushes as per Rule *4* Is the after end of the liner made watertight in the  
 as fitted *4.1/8* as fitted *4.1/8*  
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner *Yes*  
 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*  
 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  
 If so, state type *No* Length of Bearing in Stern Bush next to and supporting propeller *36"*  
 Propeller, dia. *10'-3"* Pitch *10'-9"* No. of Blades *4* Material *C.I.* whether Moveable *No* Total Developed Surface *37* sq. feet  
 Pumps worked from the Main Engines, No. *One* Diameter *27"* Stroke *13"* Can one be overhauled while the other is at work *Yes*  
 Pumps worked from the Main Engines, No. *One* Diameter *27"* Stroke *13"* Can one be overhauled while the other is at work *Yes*  
 No. and size *One duplex donkey* Pumps connected to the { No. and size *One duplex donkey* }  
 How driven *Steam pump 6x4 3/4 x 6* Main Bilge Line { How driven *pump 6x4 3/4 x 6* }  
 Main Bilge Line { Lubricating Oil Pumps, including Spare Pump, No. and size *One* }

Oil Cooler *One 2" dia. 10' long* Suctions, connected to both Main Bilge Pumps and Auxiliary  
 Pumps;—In Engine and Boiler Room *One 2" dia. 10' long*  
 In Holds, &c. *One 2" dia. 10' long*  
 Water Circulating Pump Direct Bilge Suctions, No. and size *One 4"* Independent Power Pump Direct Suctions to the Engine Room Bilges,  
 size *One 3" dia.* Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes *Yes*  
 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 *Yes*  
 sized 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*  
 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*  
 Pipes pass through the bunkers *Skating, pipe only* How are they protected *Yes*  
 pipes pass through the deep tanks *None* Have they been tested as per Rule *Yes*  
 Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times *Yes*  
 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 *No* Is it fitted with a watertight door *Yes* worked from *Yes*

**MAIN BOILERS, & C.**—(Letter for record *5"*) Total Heating Surface of Boilers *2000 sq. ft.*  
 Boilers are fitted with Forced Draft *Main bilge* Which Boilers are fitted with Superheaters *None*  
 and Description of Boilers *One S.B.* Working Pressure *200 lbs./sq. in.*  
 A REPORT ON MAIN BOILERS NOW FORWARDED? *Yes*  
 A DONKEY BOILER FITTED? *No* If so, is a report now forwarded? *Yes*  
 donkey boiler be used for domestic purposes only *Yes*  
 Are approved plans forwarded herewith for Shafting *Yes* Main Boilers *Yes* Auxiliary Boilers *Yes* Donkey Boilers *Yes*  
 (If not state date of approval)  
 General Pumping Arrangements *Yes* Oil fuel Burning Piping Arrangements *Yes*

### SPARE GEAR.

Is the spare gear required by the Rules been supplied *Yes*  
 the principal additional spare gear supplied *1 set of valves for air pump, 1 spring for safety valves,  
 1 valve led for main & one for donkey, 1 spare feed or bilge pump  
 1 piston valve for centrifugal pump, 9 reversing engines, 1 pump ring for bilge pump  
 Reversing engine*

The foregoing is a correct description.

FOR AMOS & SMITH LTD.

*A.C. Newley*

Manufacturer.

DIRECTOR



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W300-0236

During progress of work in shops - - 1939. SEPT. 5, 12, 14, 15, 20, 21, 22, 22, 25, 26, OCT. 9, 11, 14, NOV. 1, 6, 10, 11, 21, 29, DEC. 15, 21, 1940. JAN. 2, 5, 9.  
 Dates of Survey while building { During erection on board vessel - - - }  
 Total No. of visits 25.

Dates of Examination of principal parts—Cylinders 21/9/39, 22/9/39, 23/9/39 Slides 20/9/39 Covers 21, 22 + 25/9/39  
 Pistons 14/9/39 Piston Rods 12.9.39. Connecting rods 14/9/39  
 Crank shaft 20.9.39. Thrust shaft 14/9/39. Intermediate shafts None  
 Tube shaft None. Screw shaft 12.9.39 Propeller  
 Stern tube Engine and boiler seatings Engines holding down bolts 15.12.39  
 Completion of fitting sea connections  
 Completion of pumping arrangements 9-1-40 Boilers fixed 15-12-39 Engines tried under steam 9-1-40  
 Main boiler safety valves adjusted 9-1-40. Thickness of adjusting washers 13/32"  
 Crank shaft material Steel Identification Mark 1253 DLHC 20.9.39 Thrust shaft material Steel Identification Mark 1253 J. 1643, 1679, 1680 AEG. 1681 AEG.  
 Intermediate shafts, material None Identification Marks ✓ Tube shaft, material None Identification Mark ✓  
 Screw shaft, material Steel Identification Mark 1253 DLHC 12.9.39 Steam Pipes, material Steel Test pressure 600 lbs/sq Date of Test 29.1.40  
 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 the use of oil as fuel been complied with Yes  
 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 No.  
 Is this machinery duplicate of a previous case Yes. If so, state name of vessel AKITA Gul Rpt 50041

**General Remarks** (State quality of workmanship, opinions as to class, &c.)

The Machinery of this Vessel has been constructed under Special Survey in accordance with the Rules & the approved plans. The workmanship & materials are good. & when tried under working conditions it was found satisfactory in every respect & is eligible, in our opinion, to be closed with the record of S.L.M.C 1.40 C.L. T. 30y 13-22 3/4 -37-200 lb. H.S. 2000 lb. 124 NHP. 1.S.B. 3 cf. F.D. Fitted for oil fuel. 1.40 F.P. above 150°F

The amount of Entry Fee ... £ 3 : 0 :  
 Special ... £ 31 : 0 :  
 Donkey Boiler Fee ... £ : :  
 Travelling Expenses (if any) £ : :  
 When applied for, 31 JAN 1940  
 When received, H. S. 1940

*[Signature]*

Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute TUE, 13 FEB. 1940  
 + Lamb 1.40 J.D.  
 Assigned Fall for 1.40 Ch.  
 21. above 150°F



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