

and
Rpt. 4b.
D.O.

REPORT ON OIL ENGINE MACHINERY.

No. 1036

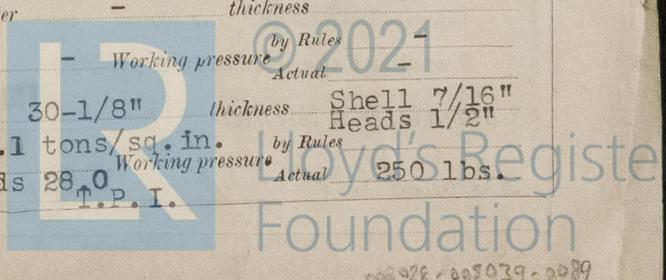
Received at London Office 3 - MAR 1947

Date of writing Report Feb. 15 19 47 When handed in at Local Office 19 47 Port of Saint John, N. B.
No. in Survey held at Saint John, N. B. Date, First Survey Dec. 28/45 Last Survey Jan. 29 19 47
Reg. Book. Number of Visits Continuous attendance

on the ^{Single}~~Deck~~ Screw vessel "MARY SWEENEY" (launched as "Ottawa Maybeech") Tons { Gross 518
Net 233
Built at Saint John, N. B. By whom built St. John Dry Dock and Shipbuilding Co. Ltd. Yard No 23 When built 1947
Engines made at Oakland, Cal., USA. By whom made Atlas Imperial Diesel Engine Co. Engine No 12349 When made 1944
Donkey Boilers made at Amherst, N.S. By whom made Robb Engineering Works Ltd. Boiler No B1814-1 When made 1946
Brake Horse Power 400 Owners W.L. Sweeney, Esq. Port belonging to Saint John, N.B.
Nom. Horse Power as per Rule 98.9 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
Trade for which vessel is intended Coastal Service

IL ENGINES, &c. Type of Engines Full diesel - vertical 2 or 4 stroke cycle 4 Single or double acting Single
Maximum pressure in cylinders 600 lbs/sq. in. Diameter of cylinders 13" Length of stroke 16" No. of cylinders 6 No. of cranks 6
Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 14.969" Is there a bearing between each crank Yes
Revolutions per minute 300 Flywheel dia. 45" Weight 2745 lbs. Means of ignition Solid Injection Kind of fuel used Heavy Oil
Crank Shaft, dia. of journals as per Rule - as fitted 7.5" Crank pin dia. 7.5" Crank Webs Mid. length breadth 10" Thickness parallel to axis -
Mid. length thickness 4-7/32" shrunk Thickness around eyehole -
Flywheel Shaft, diameter as per Rule - as fitted - Intermediate Shafts, diameter as per Rule - as fitted 6" Thrust Shaft, diameter at collars as per Rule - as fitted 7"
Tube Shaft, diameter as per Rule - as fitted - Screw Shaft, diameter as per Rule - as fitted 6" Is the ~~deck~~ screw shaft fitted with a continuous liner { No
Bronze Liners, thickness in way of bushes as per Rule - as fitted - Thickness between bushes as per rule - as fitted - Is the after end of the liner made watertight in the
propeller boss - If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner -
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 -
If two liners are fitted, is the shaft lapped or protected between the liners - Is an approved Oil Gland or other appliance fitted at the after end of the tube
shaft Yes If so, state type Newark Oil Gland Length of Bearing in Stern Bush next to and supporting propeller 25"
Propeller, dia. 70" Pitch 48" No. of blades 4 Material Bronze whether Moveable No Total Developed Surface 10.7 sq. feet
Method of reversing Engine Cam Shaft Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication
Forced Thickness of cylinder liners 1" Air Ram Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with
non-conducting material Lagged If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine -
Cooling Water Pumps, No. 3 { 2-fresh water 1-salt water Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes
Bilge Pumps worked from the Main Engines, No. One Diameter 3 1/2" Stroke 3 1/4" Can one be overhauled while the other is at work -
Pumps connected to the Main Bilge Line { No. and Size Two - 7 1/2" x 5" x 10" One - 3 1/2" x 3 1/4"
How driven Steam Duplex Main engine
Ballast Pumps, No. and size One - 7 1/2" x 5" x 10" Lubricating Oil Pumps, including Spare Pump, No. and size Four-1"; 21.6 G.P.M.
Are two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge
Pumps, No. and size: - In Machinery Spaces Four - 2 1/2" diam. In Pump Room -
in Holds, &c. One each P. & S. 2" diam. in each hold. One 2" diam. each cofferdam.
Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size One 4" diam.
Are all the Bilge Suction pipes in Holds ~~XXXXXXXXXX~~ fitted with strum-boxes Yes Are the Bilge Suctions in the Machinery Spaces
d 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 Yes
Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates Yes Are the Overboard Discharges above or below the deep water line Below
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
That pipes pass through the bunkers - How are they protected -
That pipes pass through the deep tanks - 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 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 None Is it fitted with a watertight door - O worked from -
On a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork -

RECEIVERS: - Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes. Fusible plugs in addition.
Are the internal surfaces of the receivers be examined and cleaned Yes Is a drain fitted at the lowest part of each receiver Yes
High Pressure Air Receivers, No. None Cubic capacity of each - Internal diameter - thickness -
Unless, lap welded or riveted longitudinal joint - Material - Range of tensile strength - Working pressure by Rules Actual
Working Air Receivers, No. Four Total cubic capacity - Internal diameter 30-1/8" thickness Shell 7/16" Heads 1/2"
Unless, lap welded or riveted longitudinal joint Welded Material O.H. Steel Range of tensile strength Heads 28.0 Working pressure by Rules Actual 250 lbs.
T.P.I.



IS A DONKEY BOILER FITTED? Yes If so, is a report now forwarded? Yes

Is the donkey boiler intended to be used for domestic purposes only No. All auxiliary machinery steam driven

PLANS. Are approved plans forwarded herewith for Shafting 22-2-46 New York Receivers - Separate Tanks -
 (If not, state date of approval)
 Donkey Boilers - General Pumping Arrangements - Oil Fuel Burning Arrangements -

SPARE GEAR.

Has the spare gear required by the Rules been supplied for Coastal Service.

State the principal additional spare gear supplied

Installation only.
 For St. John Dry Dock & Shipbuilding Co. Ltd.
Frank Faser General Superintendent

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops - - }
 { During erection on board vessel - - } Continuous attendance.
 Total No. of visits

Dates of Examination of principal parts - Cylinders A.B. Surveyers A.B. Surveyers A.B. Surveyers - Connecting rods AB 4-1-44
 Crank shaft AB 6-22-44 Flywheel shaft - Thrust shaft AB 8-25-44 Intermediate shafts 21-6-46 Tube shaft -
 Screw shaft 3-6-46 Propeller 3-6-46 Stern tube 30-4-46 Engine seatings 29-11-45 Engines holding down bolts 4-7-46
 Completion of fitting sea connections 27-6-46 Completion of pumping arrangements 21-1-47 Engines tried under working conditions 25-1-47
 Crank shaft, Material Steel Identification Mark AB181 2AF297 Flywheel shaft, Material - Identification Mark -
 Thrust shaft, Material Steel Identification Mark 24202 Intermediate shafts, Material O.H. Steel Identification Marks Lloyd's A.15
 Tube shaft, Material - Identification Mark - Screw shaft, Material O.H. Steel Identification Mark R.A.H. 22-3-4
 Lloyd's A.85 H.M. 8-8-47

Is the flash point of the oil to be used over 150° F. Yes
 Have the requirements of the Rules for oil fuel pipes and tank fittings 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 -
 Is this machinery duplicate of a previous case Yes If so, state name of vessel "PATRICIA SWEENEY"

General Remarks (State quality of workmanship, opinions as to class, &c.)
 The main engine of this vessel was constructed under survey of the American Bureau of Shipping (copy of Certificate attached) and has now been satisfactorily installed on board this vessel, opened up, examined and the workmanship and materials found good.
 The main and auxiliary machinery were satisfactorily tried under full working conditions and afterwards opened up and examined and all found in good condition.
 The Donkey Boiler safety valves were adjusted to 200 lbs. /sq. in. under steam, tested for accumulation and the thickness of the washers noted.
 It is recommended for favourable consideration of the Committee that this vessel be classed in Register Book L.M.C. 1,47 (oil engine), TS.(O.G.), and D.B. fitted for oil fuel F.P. above 150

The amount of Entry Fee .. \$10.00 : When applied for,
 Classification of Special .. \$300.00 : 22-25-1947
 Donkey Boiler Fee .. £ : When received,
 Travelling Expenses (if any) \$ 35.00 : 19

Wm Heate
 Engineer Surveyor to Lloyd's Register of Shipping.

FRI. 9 APR 1948

Committee's Minute
 Assigned LMC. 1-47 oil Eng ^ DBS. 1-47 S.(OG) 6-46 E made '44 fitted '47
 W.T.D.B. 200 lbs



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

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