

REPORT ON OIL ENGINE MACHINERY.

No. 46022

Date of writing Report 6th Oct. 1926 When handed in at Local Office 6th Oct. 1926 Port of GLASGOW Received at London Office 13 Oct 1926

No. in Survey held at GLASGOW Date, First Survey 18th Feby. 1926 Last Survey 2nd Oct. 1926

Reg. Book. Single on the Twin Screw vessels "DOLORES DE URQUIZA" Tons Gross 2218
Triple Net 1458

Built at GLASGOW By whom built A. J. INGLIS LTD. Yard No. 725A When built 1926

Engines made at GLASGOW By whom made HARLAND & WOLFF LTD. Engine No. 725 When made 1926

Donkey Boilers made at ✓ By whom made ✓ Boiler No. ✓ When made ✓

Brake Horse Power 1400 Owners ENTRE RIOS RAILWAYS Port belonging to Shimny

Nom. Horse Power as per Rule 287 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted YES

OIL ENGINES, &c.—Type of Engines DIESEL2 or 4 stroke cycle 4 Single or double acting SINGLEMaximum pressure in cylinders 500 LBS/SQ IN No. of cylinders 12 Diameter of cylinders 400 mm No. of cranks 12 Length of stroke 750 mmPitch of bearings, adjacent to the Crank, measured from inner edge to inner edge 556 mm Is there a bearing between each crank YESRevolutions per minute 200 Flywheel dia. 1720 mm Weight 2480 KGS. Means of ignition COMPRESSION Kind of fuel used ABOVE 150°FCrank Shaft, dia. of journals as per Rule 250.2 mm Crank pin dia. 252 mm Crank Webs 490 Mid. length breadth 153 Thickness parallel to axis 153 mm
as fitted 252 mm Mid. length thickness 153 Thickness around eye hole 117 mmFlywheel Shafts, diameter as per Rule 250.2 mm Intermediate Shafts, diameter as per Rule 6 9/16" Thrust Shaft, diameter at collars as per Rule 175 mm
as fitted 252 mm as fitted 6 9/16" as fitted 240 mmPropeller Shafts, diameter as per Rule 6.9" Screw Shaft, diameter as per Rule 7 1/4" Is the tube YES shaft fitted with a continuous liner YES
as fitted 7" as fitted 7 5/8" as fitted 25 1/4"Liner thickness in way of bushes as per Rule 33/64" Thickness between bushes as per rule 25/64" Is the after end of the liner made watertight in the
as fitted 9/16" as fitted 7/16"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 no liners are fitted, is the shaft lapped or protected between the liners ✓ Is an approved Oil Gland or other appliance fitted at the afterEnd of the tube, shafts YES VICKERS "VISTA" SYSTEM Length of Bearing in Stern Bush next to and supporting propeller 3'-0"Propeller, dia. 7'-9" Pitch 7'-0" No. of blades 3 EACH Material BRONZE whether Movable SOLID Total Developed Surface 225 sq. ft. EACHMethod of reversing Engines COMPRESSED AIR Is a governor or other arrangement fitted to prevent racing of the engine when disengaged YES Means of lubricationUSED Thickness of cylinder liners 32 to 25 mm Are the cylinders fitted with safety valves YES Are the exhaust pipes and silencers water cooled or lagged withinsulating material YES If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine ✓Suction Water Pumps, No. ONE Is the sea suction provided with an efficient strainer which can be cleared within the vessel YESPumps fitted to the Main Engines, No. TWO Diameter 120 mm Stroke 55 mm Can one be overhauled while the other is at work YESIs connected to the Main Bilge Line { No. and Size THREE, MAIN ENGINE 120 mm x 55 mm x FIRE & GENERAL SERVICE 7" DIA x 8" STROKE DUPLEX
How driven MAIN ENGINE (2) x F.F.G.S. MOTORService Pumps, No. and size ONE - 40 TON Lubricating Oil Pumps, including Spare Pump, No. and size TWO - 30 TONIndependent means arranged for circulating water through the Oil Cooler YES Suctions, connected to both Main Bilge Pumps and Auxiliary BilgePumps, No. and size: In Engine Room 2 @ 2 1/2" and 1 @ 1 1/2"Suctions, No. and size: Waste Sunk 1 @ 2" Compartments 2 @ 2 1/4" and 6 @ 3"Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size ONE 4 1/2" DIA.Are the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes YES Are the Bilge Suctions in the Machinery Spaceeasily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges YESSea Connections fitted direct on the skin of the ship YES Are they fitted with Valves or Cocks YESAre 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 aboveeach 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 ✓How are they protected Steel Oil-tight thro' tubesHow are they protected Steel Oil-tight thro' tubesHave they been tested as per Rule ✓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

space to another YES Is the Shaft Tunnel watertight YES Is it fitted with a watertight door YES worked from upper deck level

In a vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

Air Compressors, No. TWO 60 cfm No. of stages 3 Diameters 453 x 408 x 92 mm Stroke 230 mm Driven by MAIN ENGINEAuxiliary Air Compressors, No. TWO 60 cfm No. of stages 3 Diameters 270 x 235 x 65 mm Stroke 165 mm Driven by AUX. ENGINEAuxiliary Air Compressors, No. ONE 60 cfm No. of stages 2 Diameters 80 x 32 mm Stroke 150 mm Driven by HANDSuction Air Pumps, No. ✓ Diameter ✓ Stroke ✓ Driven by ✓Main Engines crank shafts, diameter as per Rule 138 mm OR 5% LESS 131 mmas fitted 145 mmRECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule YESInternal surfaces of the receivers be examined YES What means are provided for cleaning their inner surfaces LOOSE ENDS & MANHOLE DOORSDrain arrangement fitted at the lowest part of each receiver YESPressure Air Receivers, No. 7 Cubic capacity of each 5 @ 58 LITRES Internal diameter 295 mm thickness 5/8"Welded or riveted longitudinal joint SEAMLESS Material STEEL Range of tensile strength 28/32 TONS Working pressure by Rules 1375 LBS/SQ INAir Receivers, No. One Total cubic capacity 260 ft.³ Internal diameter 5 ft. 0 ins. thickness 27/32Welded or riveted longitudinal joint Riveted Material steel Range of tensile strength 28-32 tons Working pressure by Rules 364 LBS/SQ IN

IS A DONKEY BOILER FITTED? No
HYDRAULIC TESTS:-

If so, is a report now forwarded? ✓

DESCRIPTION.	DATE OF TEST.	WORKING PRESSURE.	TEST PRESSURE.	STAMPED.	REMARKS.
ENGINE CYLINDERS	✓	✓	✓	✓	
" " COVERS	22-3-26 to 9-4-26	15 LBS/□	50 LBS/□	Nmb	
" " JACKETS	22-3-26 to 9-4-26	15 LBS/□	50 LBS/□	Nmb	
" PISTON WATER PASSAGES	23-3-26 to 14-4-26	10 LBS/□	30 LBS/□	Nmb	
MAIN COMPRESSORS—1st STAGE L.P.	19-3-26 to 29-3-26	71 LBS/□	500 LBS/□	Nmb	
" 2nd " M.P.		220 LBS/□	500 LBS/□	Nmb	
" 3rd " H.P.		1000 LBS/□	2000 LBS/□	Nmb	
AIR RECEIVERS—STARTING	29-6-26	356 lb./sq. in.	585 lb./sq. in.	W.B.	Refert Rpt. 9579.
" INJECTION	25-3-26 & 1-4-26	1000 LBS/□	2000 LBS/□	Nmb	A.V. N ^o 845/6/7/8/9/50
AIR PIPES ETC. STARTING	25-2-26 to		712 LBS/□	Nmb	
FUEL PIPES ETC. STARTING	✓	✓	✓	✓	
FUEL PUMPS FILLING & SUCTION PIPES	✓	✓	30 LBS/□	✓	
SILENCER	✓	✓	✓	✓	
" WATER JACKET	✓	✓	✓	✓	
SEPARATE FUEL TANKS		✓		Nmb	

PLANS. Are approved plans forwarded herewith for Shafting *yes* ✓ Receivers *yes* ✓ Separate Tanks *yes* ✓
Donkey Boilers *NONE* ✓ General Pumping Arrangements *yes* ✓ Oil Fuel Burning Arrangements *yes* ✓

SPARE GEAR

Supplies as per attached list.

The foregoing is a correct description,

J. C. Green

Manufacturer.

Dates of Survey while building
During progress of work in shops-- 1926 Feb. 18-25 Mar 1-3 5-8 16-17 18-19 22-23 25-26 29-30 31 Apr 1-2 6-9 12-13 14-15 16-22 26-27 2
During erection on board vessel-- May 6-11 14-19 24-27 June 2-4 8-10 14-15 25 July 7-12 13 Aug 16 27 Sep 6-13 14-16 28 Oct 1-2
Total No. of visits 55

Dates of Examination of principal parts—Cylinders 22/3/26 to 9/4/26 Covers 22/3/26 to 9/4/26 Pistons 23/3/26 to 14/4/26 Connecting rods 30-3-26
Crank shaft S. 2/4/26 Flywheel shaft S. 2/4/26 Thrust shaft S. 2/4/26 Intermediate shafts 10/6/26 & 25/6/26 Tube shafts 16/4/26 & 24/5/26
Screw shafts 12/4/26 & 5/6/26 Propellers 2/6/26 Stern tube 7/7/26 Engine seatings 13-7-26 Engines holding down bolts 27-8-26
Completion of fitting sea connections 13-7-26 Completion of pumping arrangements 16-9-26 Engines tried under working conditions 2-10-26
Crank shaft, Material STEEL Identification Mark *758 3/771 389* Flywheel shaft, Material STEEL Identification Mark *758 3/771 389*
Thrust shaft, Material STEEL Identification Mark *758 3/771 389* Intermediate shafts, Material STEEL Identification Mark *758 3/771 389*
Tube shaft, Material STEEL Identification Mark *758 3/771 389* Screw shaft, Material STEEL Identification Mark *758 3/771 389*
Is the flash point of the oil to be used over 150° F. *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.)

INTERMEDIATE SHAFTS:—
PORT No 1 758 3/771 389 T.N. 16/3/26 No 2 758 3/771 389 T.N. 19/4/26 No 3 758 3/771 389 T.N. 23/5/26 No 4 758 3/771 389 T.N. 2/3/26 No 5 758 3/771 389 T.N. 13/4/26
STAR No 1 758 3/771 389 T.N. 1/4/26 No 2 758 3/771 389 T.N. 5/3/26 No 3 758 3/771 389 T.N. 23/5/26 No 4 758 3/771 389 T.N. 9/4/26 No 5 758 3/771 389 T.N. 16/4/26

This machinery has been constructed under special survey in accordance with the rules and approved plans. The materials and workmanship are sound and good, it has been fitted on board the vessel in an efficient manner, tried under full power working condition and everything found satisfactory and is in our opinion eligible to be classed with record of L. M. C. 10, 26: T.S. — P. & S. — O.G. & C.L.

The amount of Entry Fee ... 54 : 0 :
Special ... 68 : 1/-
Donkey Boiler Fee ...
Travelling Expenses (if any) ...
When applied for, 11-10-26
When received, 20-10-26

H. M. Cruick & J. D. Boyle
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 12 OCT 1926

Assigned + LMC 10, 26

CERTIFICATE WRITTEN 13-10-26



Lloyd's Register Foundation