

# REPORT ON OIL ENGINE MACHINERY.

No. 93065  
31 DEC 1927

Received at London Office

Date of writing Report Dec 20<sup>th</sup> 1927 When handed in at Local Office Dec 28<sup>th</sup> 1927 Port of Liverpool

No. in Survey held at Saltney, Chester. Date, First Survey 28<sup>th</sup> Sept 1927 Last Survey Dec 28<sup>th</sup> 1927  
Reg. Book. 1454 on the Single } Screw vessel 'Quitador' Tons { Gross 183.25  
Twin } Net 8.87  
Triple }

Master By whom built Messrs J. Crickton & Co Yard No. 448 When built 1927  
Engines made at Stockholm By whom made J. C. G. Bolinder & Co Engine No. 14004-07 When made 1927

Donkey Boilers made at By whom made Boiler No. ✓ When made ✓  
Brake Horse Power 300 each Eng. Owners Argentine Frig. Co Port belonging to Buenos Aires

Nom. Horse Power as per Rule 86 = 172 Is Refrigerating Machinery fitted for cargo purposes ✓ Is Electric Light fitted yes

II. ENGINES, &c. — Type of Engines Bolinder oil Engines 2 or 4 stroke cycle yes Single or double acting Single  
Maximum pressure in cylinders 2 kg/cm<sup>2</sup> No. of cylinders 4 No. of cranks ✓ Diameter of cylinders 380 mm

Length of stroke ✓ Revolutions per minute ✓ Means of ignition Report 12861 Kind of fuel used ✓  
Is there a bearing between each crank ✓ Span of bearings (Part 9 of Section 2, par. 7 of Rules) ✓

Distance between centres of main bearings ✓ Diameter of crank shaft journals as per Rule  
Diameter of crank pins ✓ Breadth of crank webs as per Rule Thickness of ditto as per Rule

Diameter of flywheel shaft as per Rule Diameter of tunnel shaft as per Rule 4"6" Diameter of thrust shaft as per Rule  
Diameter of screw shaft as per Rule 5.5" Is the screw shaft fitted with a continuous liner the whole length of the stern tube no

Is the after end of the liner made watertight in the propeller boss ✓ If the liner is in more than one length are the joints burned ✓  
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 no liners If without liners, is the shaft arranged to run in oil no  
Type of outer gland fitted to stern tube none Length of stern bush 2-1" Diameter of propeller 5-0"

Pitch of propeller 4-8" No. of blades 3 state whether moveable no Total surface 12 1/2 each square feet  
Method of reversing Timing Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Thickness of cylinder liners ✓

Are the cylinders fitted with safety valves ✓ Means of lubrication ✓ Are the exhaust pipes and silencers water cooled or lagged with non-conducting 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 Exhaust up funnel

within the vessel yes No. of cooling water pumps 2 Is the sea suction provided with an efficient strainer which can be cleared ✓  
No. of bilge pumps fitted to the main engines one on stern engine Diameter of ditto Rotary 2 1/2" Stroke ✓

Can one be overhauled while the other is at work ✓ No. of auxiliary pumps connected to the main bilge lines one How driven Indep Semi-Diesel  
Sizes of pumps Rotary 2 1/2" No. and sizes of suction connected to both main bilge pumps and auxiliary bilge pumps:—In engine room one 2"

and in holds, etc. For Comp 2-2" aft-1-2" No. of ballast pumps one How driven Indep Semi-Diesel Sizes of pumps Rotary 2 1/2"  
Is the ballast pump fitted with a direct suction from the engine room bilges yes State size 2 1/2" Is a separate auxiliary pump suction fitted in Engine Room and size yes as above

Are all the bilge suction pipes fitted with roses yes Are the roses in Engine Room always accessible yes  
Are the sluices on Engine Room bulkheads always accessible ✓ Are all connections with the sea direct on the skin of the ship yes

Are they valves or cocks valves Are they fixed sufficiently high on the ship's side to be seen without lifting the floor plates yes  
Are the discharge pipes 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 all pipes, cocks, valves and pumps in connection with the machinery accessible at all times yes Are the bilge suction pipes, cocks and valves arranged so as to prevent any communication between the sea and the bilges yes  
Is the screw shaft tunnel watertight yes Is it fitted with a watertight door ✓

worked from ✓ If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork ✓  
No. of main air compressors one 2 cylinder No. of stages one Diameters 6" Stroke 5" 4" Driven by port main engine

No. of auxiliary air compressors one No. of stages one Diameters 6" Stroke 4 1/2" Driven by Semi-Diesel engine  
No. of small auxiliary air compressors none No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓

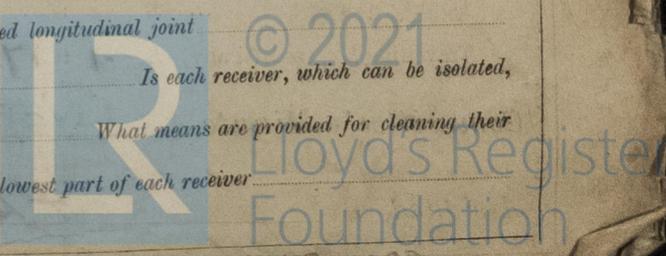
No. of scavenging air pumps none Diameter ✓ Stroke ✓ Driven by ✓  
Diameter of auxiliary Diesel Engine crank shafts as per Rule Are the air compressors and their coolers made so as to be easy of access yes

III. AIR RECEIVERS:—No. of high pressure air receivers Internal diameter Cubic capacity of each ✓  
material Seamless, lap welded or riveted longitudinal joint Range of tensile strength ✓  
thickness working pressure by Rules No. of starting air receivers Internal diameter

Total cubic capacity Material Seamless, lap welded or riveted longitudinal joint ✓  
Range of tensile strength thickness Working pressure by rules Is each receiver, which can be isolated,  
filled with a safety valve as per Rule Can the internal surfaces of the receivers be examined What means are provided for cleaning their inner surfaces Is there a drain arrangement fitted at the lowest part of each receiver

REVIEWERS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

*See Stockholm Report 12861*



005635-005643-0020

IS A DONKEY BOILER FITTED? *no*

If so, is a report now forwarded? *✓*

HYDRAULIC TESTS:—

DESCRIPTION.	DATE OF TEST.	WORKING PRESSURE.	TEST PRESSURE.	STAMPED.	REMARKS.
ENGINE CYLINDERS	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	
COVERS	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	
JACKETS	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	
PISTON WATER PASSAGES	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	
MAIN COMPRESSORS—1st STAGE	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>Supplied by Messrs Reavell</i>
2nd	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	
3rd	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	
AIR RECEIVERS—STARTING	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	
INJECTION	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	
AIR PIPES	22.11.27	170 lb	340 lb	<i>✓</i>	<i>✓</i>
FUEL PIPES	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>pressure pipes supplied</i>
FUEL PUMPS	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>Supplied with engine</i>
SILENCER	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	
WATER JACKET	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	
SEPARATE FUEL TANKS	6.10.27	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>8'0 head</i>

PLANS. Are approved plans forwarded herewith for shafting *Forging City Works Receivers Section Rpt 2801* Separate Tanks *as receivers yes.*

SPARE GEAR *As per Copy attached*

The foregoing is a correct description,

For J. CRICHTON & CO. LTD.

*Dominic W. Bell*  
MANAGING DIRECTOR

Dates of Survey while building	During progress of work in shops	<i>✓</i>											
	During erection on board vessel	1927. Sept 23, Oct 6, 13, Nov 4, 17, 22, 28, 30, Dec 1, 5, 10, 20, 28.											
	Total No. of visits	13.											
Dates of Examination of principal parts	Cylinders	<i>✓</i>	Covers	<i>✓</i>	Pistons	<i>✓</i>	Rods	<i>✓</i>	Connecting rods	<i>✓</i>			
Crank shaft	<i>✓</i>	Thrust shaft	<i>✓</i>	Tunnel shafts	<i>✓</i>	Screw shaft	23.9.27	Propeller	23.9.27	Stern tube	23.9.27	Engine seatings	6.10.27
Engines holding down bolts	4.10.27	Completion of pumping arrangements	22.11.27	Engines tried under working conditions	28.11.27								
Completion of fitting sea connections	23.9.27	Stern tube	23.9.27	Screw shaft and propeller	23.9.27								
Material of crank shaft	<i>✓</i>	Identification Mark on Do.	<i>✓</i>	Material of thrust shaft	<i>✓</i>	Identification Mark on Do.	<i>✓</i>						
Material of tunnel shafts	<i>✓</i>	Identification Marks on Do.	<i>✓</i>	Material of screw shafts	<i>✓</i>	Identification Marks on Do.	<i>✓</i>						

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.) *The Machinery of this vessel has been satisfactorily installed in accordance with the approved plans, and afterwards examined under full working conditions during trial trip. The account of collision which occurred during trial trip, the vessel was afterwards placed in dry dock & propeller & fastenings examined & found in order. Minor repairs effected to fastenings of sea connections, straining sea ties & found satisfactory. The vessel is now eligible in our opinion for classification in Reg. book with record of L.M.C. 12.27.*

The amount of Entry Fee	£ 4 : 6 :	When applied for.
Special	£ :	22/12/27
Donkey Boiler Fee	£ :	When received.
Travelling Expenses (if any)	£ 1 : 17 : 6	4.2.28

Committee's Minute LIVERPOOL 30 DEC. 1927

Assigned Oil Engine + L.M.C. 12.27 Elec. Light

*J.P. Milton & W.S. Shirlas*  
Engineer Surveyor to Lloyd's Register of Shipping.



FRI. 27 JAN 1928

Lloyd's Register Foundation

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