

## REPORT ON OIL ENGINE MACHINERY.

No. 8754  
12 MAY 1931

Date of writing Report 7<sup>th</sup> May 1931 When handed in at Local Office 7<sup>th</sup> May 1931 Port of Lundee  
No. in Survey held at Lundee Date, First Survey 13<sup>th</sup> Jan 1931 Last Survey 28<sup>th</sup> April 1931  
Reg. Book. Single on the Twin Triple Quadruple Screw vessel Oil Tank Vessel "BRALANTA" Tons Gross Net  
Built at Lundee By whom built Caldon. S. & E. Co. Ltd. Yard No. 336 When built 1931  
Engines made at Gothenburg By whom made Gotaverken Engine No. ✓ When made 1931  
Donkey Boilers made at Lundee By whom made Caldon S. & E. Co. Ltd. Boiler No. 540 When made 1931  
Brake Horse Power \_\_\_\_\_ Owners \_\_\_\_\_ Port belonging to \_\_\_\_\_  
Nom. Horse Power as per Rule \_\_\_\_\_ Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted ✓  
Trade for which vessel is intended Carrying Petroleum in Bulk

OIL ENGINES, &c.—Type of Engines ✓ 2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders ✓ Diameter of cylinders ✓ Length of stroke ✓ No. of cylinders ✓ No. of cranks ✓  
Span of bearings, adjacent to the Crank, measured from inner edge to inner edge ✓ Is there a bearing between each crank ✓  
Revolutions per minute ✓ Flywheel dia. ✓ Weight ✓ Means of ignition ✓ Kind of fuel used ✓  
Crank Shaft, dia. of journals as per Rule ✓ Crank pin dia. ✓ Crank Webs Mid. length breadth ✓ Thickness parallel to axis ✓  
as fitted ✓ Mid. length thickness ✓ shrunk ✓ Thickness around eyehole ✓  
Flywheel Shaft, diameter as per Rule ✓ Intermediate Shafts, diameter as per Rule ✓ Thrust Shaft, diameter at collars as per Rule ✓  
as fitted ✓ as fitted ✓ as fitted ✓  
Tube Shaft, diameter as per Rule ✓ Screw Shaft, diameter as per Rule ✓ Is the { tube } shaft fitted with a continuous liner { ✓  
as fitted ✓ as fitted ✓ { screw } ✓  
Bronze Liners, thickness in way of bushes as per Rule ✓ Thickness between bushes as per rule ✓ Is the after end of the liner made watertight in the  
as fitted ✓ as fitted ✓ 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 ✓ If so, state type ✓ Length of Bearing in Stern Bush next to and supporting propeller ✓

Propeller, dia. ✓ Pitch ✓ No. of blades ✓ Material ✓ whether Moveable ✓ Total Developed Surface ✓ sq. feet ✓

Method of reversing Engines ✓ Is a governor or other arrangement fitted to prevent racing of the engine when declutched ✓ Means of lubrication ✓

Thickness of cylinder liners ✓ Are the cylinders fitted with safety valves ✓ Are the exhaust pipes and silencers water cooled or lagged with  
non-conducting material ✓ 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. ✓ Is the sea suction provided with an efficient strainer which can be cleared within the vessel ✓

Bilge Pumps worked from the Main Engines, No. ✓ Diameter ✓ Stroke ✓ Can one be overhauled while the other is at work ✓

Pumps connected to the Main Bilge Line { No. and Size ✓  
How driven ✓

Ballast Pumps, No. and size ✓ Lubricating Oil Pumps, including Spare Pump, No. and size ✓

Are two independent means arranged for circulating water through the Oil Cooler ✓ Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge  
Pumps, No. and size:—In Machinery Spaces ✓ In Pump Room ✓

In Holds, &c. ✓

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size ✓

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes ✓ Are the Bilge Suctions in the Machinery Spaces ✓

led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges ✓

Are all Sea Connections fitted direct on the skin of the ship Yes Are they fitted with Valves or Cocks 18.0th

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 ✓

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel ✓ Are the Blow Off Cocks fitted with a spigot and brass covering plate Yes

What pipes pass through the bunkers ✓ How are they protected ✓

What 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 ✓

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 ✓ Is the Shaft Tunnel watertight ✓ 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 ✓

Main Air Compressors, No. ✓ No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓

Auxiliary Air Compressors, No. ✓ No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓

Small Auxiliary Air Compressors, No. ✓ No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓

Scavenging Air Pumps, No. ✓ Diameter ✓ Stroke ✓ Driven by ✓

Auxiliary Engines crank shafts, diameter as per Rule ✓ No. ✓  
as fitted ✓ Position ✓

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule ✓

Can the internal surfaces of the receivers be examined and cleaned ✓ Is a drain fitted at the lowest part of each receiver ✓

High Pressure Air Receivers, No. ✓ Cubic capacity of each ✓ Internal diameter ✓ thickness ✓

Seamless, lap welded or riveted longitudinal joint ✓ Material ✓ Range of tensile strength ✓ Working pressure by Rules Actual ✓

Starting Air Receivers, No. ✓ Total cubic capacity ✓ Internal diameter ✓ thickness ✓

Seamless, lap welded or riveted longitudinal joint ✓ Material ✓ Range of tensile strength ✓ Working pressure by Rules Actual ✓



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

PLANS. Are approved plans forwarded herewith for Shafting *✓* Receivers *✓* Separate Tanks *✓*  
(If not, state date of approval)  
Donkey Boilers *yes.* General Pumping Arrangements *✓* Oil Fuel Burning Arrangements *✓*

SPARE GEAR.

Has the spare gear required by the Rules been supplied *✓*  
State the principal additional spare gear supplied *✓*

The foregoing is a correct description,

For THE CALEDON SHIPBUILDING CO. LTD.  
*W. S. Thompson* Manufacturer.

Dates of Survey while building { During progress of work in shops - - Jan 13. Feb 11. 16. 24. MARCH 5. 6. 12. 23 = 8  
{ During erection on board vessel - - MARCH 24. 25. 26. 27. APRIL 6. 7. 9. 10. 14. 16. 20. 28 = 12  
Total No. of visits 20

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>	Flywheel shaft <i>✓</i>	Thrust shaft <i>✓</i>	Intermediate shafts <i>✓</i>	Tube shaft <i>✓</i>
Screw shaft <i>✓</i>	Propeller <i>✓</i>	Stern tube <i>✓</i>	Engine seatings 10. 4. 31 <i>✓</i>	Engines holding down bolts <i>✓</i>
Completion of fitting sea connections 10. 4. 31 <i>✓</i>	Completion of pumping arrangements <i>✓</i>	Engines tried under working conditions <i>✓</i>		
Crank shaft, Material <i>✓</i>	Identification Mark <i>✓</i>	Flywheel shaft, Material <i>✓</i>	Identification Mark <i>✓</i>	
Thrust shaft, Material <i>✓</i>	Identification Mark <i>✓</i>	Intermediate shafts, Material <i>✓</i>	Identification Marks <i>✓</i>	
Tube shaft, Material <i>✓</i>	Identification Mark <i>✓</i>	Screw shaft, Material <i>✓</i>	Identification Mark <i>✓</i>	

Is the flash point of the oil to be used over 150° F. *✓*  
Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with *✓*  
Is the vessel (not being an oil tanker) fitted for carrying oil as cargo *✓* 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 No. 334. Dundee Report No. 844

General Remarks (State quality of workmanship, opinions as to class, &c. *The machinery, as under, of this vessel has been constructed under Special Survey in accordance with the approved Plans & the Rules of this Society, the materials & workmanship are good. The Donkey Boilers have been satisfactorily fitted on board the vessel the safety valves adjusted under steam & tried for accumulation. The boilers examined under working condition found satisfactory. The cargo heating pipes in all cargo tanks, 1st Deck Tank, Side Bunker Tank & aft Peak, tested by hydraulic pressure. The bunker oil transfer pipes on deck & pump room tested by hydraulic pressure. The sea connection examined found satisfactory. The machinery is eligible to have the record of +1 MC when the survey is complete.*

*Adm  
to go*

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

The amount of Entry Fee .. £ <i>✓</i> :	When applied for, <i>See Smith 27. 4. 31. 19</i>
Special ... .. £ 11 : 6 :	
Donkey Boiler Fee ... .. £ <i>✓</i> :	When received by <i>La. be credited by</i>
Travelling Expenses (if any) £ <i>✓</i> :	<i>La. be credited by</i>

*W. S. Thompson*  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute *FRI. 24 JUL 1931*

Assigned *See F. B. Rpt.*

*FRI. 12 FEB. 1932*

