

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 742

Port of Vancouver B.C. Date of First Survey 3/3/19 Date of Last Survey June 11/19 No. of Visits 15
 No. in Reg. Book on the ~~Iron~~ or Steel SS Canadian Volunteer Port belonging to Montreal
 Built at Vancouver, B.C. By whom Wallace Shipyard Ltd. When built 1919
 Owners Canadian Government Owners' Address Ottawa, Canada.
 Yard No. 100 Electric Light Installation fitted by Mundy Rowland & Co. When fitted 1919

DESCRIPTION OF DYNAMO, ENGINE, ETC.

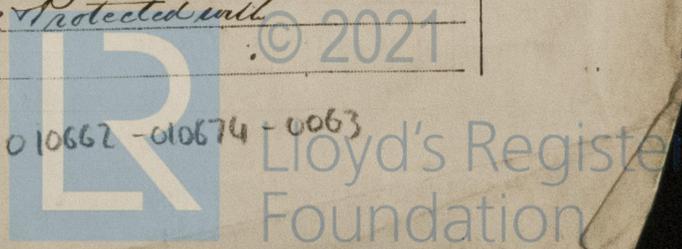
Direct Connected Generator built by General Electric Co
Schenectady Simple Engine + Piston Valve,
 Capacity of Dynamo 80 Amperes at 125 Volts, whether continuous or alternating current Continuous
 Where is Dynamo fixed Starboard Side Engine Room Whether single or double wire system is used Double
 Position of Main Switch Board Near Generator having switches to groups Six, of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each Wireless Engine Room 5 Switches,
After Accommodation 8 Switches Cargo Space + Clusters 6
Switches Navigation Lights 7 Switches,
 If fuses are fitted on main switch board to the cables of main circuit Yes, and on each auxiliary switch board to the cables of auxiliary circuits Yes, and at each position where a cable is branched or reduced in size Yes, and to each lamp circuit Yes.
 If vessel is wired on the double wire system are fuses fitted to both flow and return wires or cables of all circuits including lamp circuits Yes.
 Are the fuses of non-oxidizable metal Yes and constructed to fuse at an excess of 25 per cent over the normal current
 Are all fuses fitted in easily accessible positions Yes Are the fuses of standard dimensions Yes. If wire fuses are used are permanent instructions fitted on or near each switch board giving particulars of proper size of fuse for each circuit None used.
 Are all switches and fuses constructed of incombustible materials and fitted on incombustible bases Yes.
 Total number of lights provided for 172. arranged in the following groups :-
 A Forward Accommod 35 lights each of 40 Watts 32 candle power requiring a total current of 22 Amperes
 B Aft - " - 25 lights each of 40 Watts 32 candle power requiring a total current of 10 Amperes
 C Engine Room 36 lights each of 40 Watts. 32 candle power requiring a total current of 14.40 Amperes
 D Cargo Space. 6 lights each of 32 candle power requiring a total current of 6.00 Amperes
 E ✓ lights each of ✓ candle power requiring a total current of ✓ Amperes
 1 Mast head light with 1 lamps each of 2 1/2 candle power requiring a total current of 10 Amperes
 2 Side light with 1 lamps each of 2 1/2 candle power requiring a total current of 20 Amperes
 5 Cargo lights of 6 lights each 32 candle power, whether incandescent or arc lights Incandescent
 If arc lights, what protection is provided against fire, sparks, &c. None
 Where are the switches controlling the masthead and side lights placed In Wheelhouse,

DESCRIPTION OF CABLES.

Main cable carrying 80 Amperes, comprised of 17 wires, each 14 Br. S.W.G. diameter, .0641 square inches total sectional area
 Branch cables carrying 10 Amperes, comprised of 2 wires, each 10 Br. S.W.G. diameter, .1018 square inches total sectional area
 Branch cables carrying 6 Amperes, comprised of 2 wires, each 14 Br. S.W.G. diameter, .0640 square inches total sectional area
 Leads to lamps carrying 6 Amperes, comprised of 2 wires, each 14 Br. S.W.G. diameter, .0640 square inches total sectional area
 Cargo light cables carrying 6 Amperes, comprised of 2 wires, each 16 Br. S.W.G. diameter, .0508 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

All wires are enclosed in lead covered armoured cables except those in use in accommodation quarters when the armoured sheath is omitted
 Joints in cables, how made, insulated, and protected Regulation Splice soldered and taped with Both rubber friction tape to same resistance as original installation
 Are all the joints of cables thoroughly soldered, and the flux used not containing acids or other corrosive substances Yes. Are all joints in accessible positions, none being made in bunkers, cargo spaces, or spaces which may at any time be used for carrying cargo, stores, or baggage Yes.
 Are there any joints in or branches from the cable leading from dynamo to main switch board Yes.
 How are the cables led through the ship, and how protected Fastened to Steel Girders Protected with Armoured cover,



DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.

Are they in places always accessible Yes.

What special protection has been provided for the cables in open alleyways or where exposed to weather or moisture Enclosed in lead covered Armoured casing & fitted with weatherproof fittings.

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat Avoided hot places

What special protection has been provided for the cables near boiler casings Armoured lead covered cables used and run clear of casings.

How are cables carried through beams through lead thimbles through bulkheads, &c. Metallie Stuffing Box.

How are cables carried through decks By Deck Yubes with rubber Gaskets.

Are any cables run through coal bunkers No or cargo spaces Yes or spaces which may be used for carrying cargo, stores, or baggage Yes.

If so, how are they protected Run in Steel armoured casings.

Are any lamps fitted in coal bunkers or spaces which may at times be used for cargo, coals, or baggage No.

If so, how are the lamp fittings and cable terminals specially protected ✓

Where are the main switches and fuses for these lights fitted ✓

If in the spaces, how are they specially protected ✓

Are any switches or fuses fitted in bunkers No.

Cargo light cables, whether portable or permanently fixed Portable How fixed With Watertight Plug.

In vessels fitted on the single wire system, how is the dynamo terminal fixed to the hull of vessel ✓

How are the returns from the lamps connected to the hull ✓

Are all the joints with the hull in accessible positions Yes.

Is the installation supplied with a voltmeter yes. and with an amperemeter Yes., fixed on Switchboard

VESSELS BUILT FOR CARRYING PETROLEUM.

In vessels built for carrying petroleum, are all switches and fuses fitted in positions not liable to the accumulation of petroleum vapour or gas No.

Are any switches, fuses, or joints of cables fitted in the pump room or companion ✓

How are the lamps specially protected in places liable to the accumulation of vapour or gas ✓

The copper used is guaranteed to have a conductivity of not less than that of the Engineering Standards Committee's standard, and the wires are protected by tinning from the sulphur compounds present in the insulating material.

Insulation of cables is guaranteed to have a resistance of not less than 600 megohms per statute mile at 60° Fahrenheit after 24 hours' immersion in water, the test being made after one minute's electrification at not less than 500 volts and while the cable is still immersed.

The foregoing statements are a correct description of the Electric Light installation fitted by us on this vessel and we declare that it is at this date in good order and safe working condition.

E. G. Mundy Mundy Rowland & Co Electrical Engineers Date June 11/19

COMPASSES.

Distance between dynamo or electric motors and standard compass _____

Distance between dynamo or electric motors and steering compass _____

The nearest cables to the compasses are as follows:—

A cable carrying	$\frac{1}{2}$	Amperes	10	feet from standard compass	10	feet from steering compass
A cable carrying	✓	Amperes	✓	feet from standard compass	✓	feet from steering compass
A cable carrying	✓	Amperes	✓	feet from standard compass	✓	feet from steering compass

Have the compasses been adjusted with and without the electric installation at work at full power Yes

The maximum deviation due to electric currents, etc., was found to be nil degrees on any course in the case of the standard compass and nil degrees on any course in the case of the steering compass.

Kallace Shipyard Builder's Signature. Date _____

GENERAL REMARKS.

The Electric Light Installation is of Good Quality and Workmanship tested under working conditions and found Satisfactory Eligible in my opinion to be noted Electric Light in Register Book.

It is submitted that this vessel is eligible for Red Rel.

Geo. C. McQuinn Surveyor to Lloyd's Register of Shipping.

THE RECORD Elec Light. 9-7-19

Committee's Minute TUE JUL 15 1919

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

