

# REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 7478

Port of New York Date of First Survey \_\_\_\_\_ Date of Last Survey \_\_\_\_\_ No. of Visits \_\_\_\_\_  
 in \_\_\_\_\_ on the Iron or Steel Ship Name aug Port belonging to \_\_\_\_\_  
 Book \_\_\_\_\_ Built at Groton, Conn By whom Groton Iron Works When built 1919-8  
 Owners M.P. Shipping Board, Queyung Fleet Corp Owners' Address \_\_\_\_\_  
 d. No. 2 Electric Light Installation fitted by Groton Iron Works When fitted 3-19-19

### DESCRIPTION OF DYNAMO, ENGINE, ETC.

Dynamos direct connected each to an upright engine, mfg. by Goldie McCullough Co., Ontario.  
 Capacity of Dynamo 15 KW Amperes at 150 - 115 Volts, whether continuous or alternating current continuous  
 Where is Dynamo fixed platform in engine room Whether single or double wire system is used double wire  
 Position of Main Switch Board platform in engine room having switches to groups 13 of lights, &c., as below  
 Positions of auxiliary switch boards and numbers of switches on each none  
 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  
 Where 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  
 Are all switches and fuses constructed of incombustible materials and fitted on incombustible bases yes

Total number of lights provided for 212 arranged in the following groups:—

|                   |                      |                        |  |   |               |         |
|-------------------|----------------------|------------------------|--|---|---------------|---------|
| Deck 17-40        | lights each of       | <u>30 C P</u>          | candle power requiring a total current of        | <u>6 8/10</u>                             | Amperes       |         |
| Deck 32-40        | lights each of       | <u>30 C P</u>          | candle power requiring a total current of        | <u>12 8/10</u>                            | Amperes       |         |
| Deck 32-40        | lights each of       | <u>30</u>              | candle power requiring a total current of        | <u>12 8/10</u>                            | Amperes       |         |
| Deck 25-40        | lights each of       | <u>30</u>              | candle power requiring a total current of        | <u>10</u>                                 | Amperes       |         |
| Eng. & Fire 29-40 | lights each of       | <u>30</u>              | candle power requiring a total current of        | <u>11 6/10</u>                            | Amperes       |         |
| 1                 | Mast head light with | <u>1</u> lamps each of | <u>30</u>  | candle power requiring a total current of | <u>1 2/10</u> | Amperes |
|                   |                      |                        |  |   |               |         |
| <u>12</u>         | Cargo lights of      | <u>4-30</u>            | candle power, whether incandescent or arc lights | <u>Incandescent 19.2</u>                  |               |         |

Are arc lights, what protection is provided against fire, sparks, &c. 1 search light, arc 30 amp.

Where are the switches controlling the masthead and side lights placed pitot house telltale board

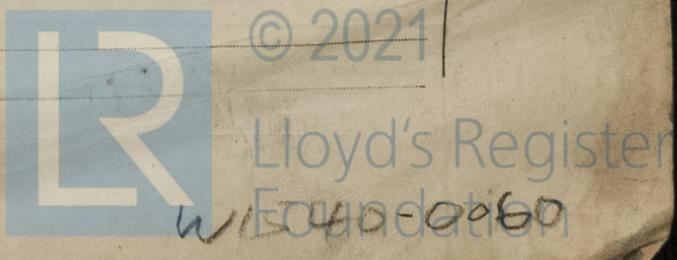
### DESCRIPTION OF CABLES.

|                             |            |                       |          |             |            |     |                  |             |                                    |
|-----------------------------|------------|-----------------------|----------|-------------|------------|-----|------------------|-------------|------------------------------------|
| Main cable carrying         | <u>150</u> | Amperes, comprised of | <u>2</u> | wires, each | <u>00</u>  | P S | S.W.G. diameter, | <u>.102</u> | square inches total sectional area |
| Branch cables carrying      | <u>30</u>  | Amperes, comprised of | <u>2</u> | wires, each | <u>#6</u>  | P S | S.W.G. diameter, | <u>.020</u> | square inches total sectional area |
| Branch cables carrying      | <u>15</u>  | Amperes, comprised of | <u>2</u> | wires, each | <u>#10</u> | P S | S.W.G. diameter, | <u>.008</u> | square inches total sectional area |
| Cables to lamps carrying    | <u>5</u>   | Amperes, comprised of | <u>2</u> | wires, each | <u>#14</u> | P S | S.W.G. diameter, | <u>.003</u> | square inches total sectional area |
| Cargo light cables carrying | <u>10</u>  | Amperes, comprised of | <u>2</u> | wires, each | <u>12</u>  | P S | S.W.G. diameter, | <u>.005</u> | square inches total sectional area |

### DESCRIPTION OF INSULATION, PROTECTION, ETC.

Double braid wire run in iron conduit  
 Joints in cables, how made, insulated, and protected Connection blocks in iron boxes water tight.

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 no yes  
 How are the cables led through the ship, and how protected In and by iron conduit



**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 **Iron Conduit.**

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat **Iron Conduit**

What special protection has been provided for the cables near boiler casings **Iron Conduit**

What special protection has been provided for the cables in engine room **Iron Conduit**

How are cables carried through beams **Iron Conduit** through bulkheads, &c. **Iron Conduit & Stuff Tubes**

How are cables carried through decks **Iron Conduit and Stuffing tubes**

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

If so, how are they protected **Iron Conduit**

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 **Plug recept. on deck**

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

Is the installation supplied with a voltmeter **Yes**, and with an amperemeter **Yes**, fixed **To 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

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

How are the lamps specially protected in places liable to the accumulation of vapour or gas **Vapor light globes**

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.

Electrical Engineers Date **3-31-19.**

**COMPASSES.**

Distance between dynamo or electric motors and standard compass **85 Ft.**

Distance between dynamo or electric motors and steering compass

The nearest cables to the compasses are as follows:—

|                  |           |         |           |                            |           |                            |
|------------------|-----------|---------|-----------|----------------------------|-----------|----------------------------|
| A cable carrying | <b>2</b>  | Amperes | <b>4"</b> | feet from standard compass | <b>4</b>  | feet from steering compass |
| A cable carrying | <b>4</b>  | Amperes | <b>6</b>  | feet from standard compass | <b>6</b>  | feet from steering compass |
| A cable carrying | <b>30</b> | Amperes | <b>10</b> | feet from standard compass | <b>12</b> | feet from steering compass |

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

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

Builder's Signature. Date

**GENERAL REMARKS.**

*The fitting of the wires throughout this vessel is as stated in this report and appears to be in accordance with the Committee's requirements.*

*J. Musson*

Surveyor to Lloyd's Register of Shipping.

Committee's Minute.

*Elec St*

New York OCT - 7

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.



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