

Nov. 27. 1916

WED. 20 DEC. 1916

Received at London Office

## REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 14

Port of PORT ARTHUR Date of First Survey OCT. 23/16 Date of Last Survey NOV. 22/16 No. of Visits 20  
 No. in on the Iron or Steel SCREW STEAMER "BLAAMYRA" Port belonging to KRISTIANIA  
 Reg. Book Built at PORT ARTHUR, ONTARIO By whom WESTERN DRY DOCK & SHIPBUILD-  
ING CO. LIMITED When built 11/16  
 Own GREAT LAKES TRANSPORTATION COMPANY Owners' Address MIDLAND, ONTARIO  
 Yard No. 15 Electric Light Installation fitted by W.D.D. & S.B. CO. LIMITED. When fitted 11/16

## DESCRIPTION OF DYNAMO, ENGINE, ETC.

1-ENBERG 7 1/2 K.W. GENERATOR DIRECT CONNECTED TO AN ENBERG VERTICAL ENGINE SPEED 525 R.P.W.

Capacity of Dynamo 68 Amperes at 110 Volts, whether continuous or alternating current CONTINUOUS  
 Where is Dynamo fixed LOWER STARBOARD ENGINE ROOM ON STAND Whether single or double wire system is used DOUBLE  
 Position of Main Switch Board LOWER STARBOARD ENGINE ROOM having switches to groups 16 of lights, &c., as below  
 Positions of auxiliary switch boards and numbers of switches on each 4 CIRCUIT TELL-TALE BOARD IN PILOT HOUSE, 1-5  
CIRCUIT BOARD IN CREWS QUARTERS AFT, 1-5 CIRCUIT BOARD IN PORT HALL MIDSHIP CABIN, 1-5 CIR-  
CUIT BOARD IN STARBOARD HALL MIDSHIP CABIN.  
 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 NO WIRE FUSES  
 Are all switches and fuses constructed of incombustible materials and fitted on incombustible bases YES  
 Total number of lights provided for 125 arranged in the following groups:—  

A	20	lights each of	16	candle power requiring a total current of	10	Amperes
B	51	lights each of	16	candle power requiring a total current of	15 1/2	Amperes
C	23	lights each of	16	candle power requiring a total current of	11 1/2	Amperes
D	5	lights each of	16	candle power requiring a total current of	2 1/2	Amperes
E	45	lights each of	16	candle power requiring a total current of	22 1/2	Amperes
2	Mast head light with	2	lamps each of	32	candle power requiring a total current of	4
2	Side light with	2	lamps each of	32	candle power requiring a total current of	4
TOTAL						
4	PORTABLE	Cargo lights of	4-16 C.P. LIGHTS EACH	512	candle power, whether incandescent or arc lights	INCANDESCENT

  
 If arc lights, what protection is provided against fire, sparks, &c. NO ARC LAMPS

Where are the switches controlling the masthead and side lights placed IN PILOT HOUSE ON TELL TALE BOARD

## DESCRIPTION OF CABLES.

Main cable carrying	62 1/2	Amperes, comprised of	NO. 4	CABLE	wires, each	S.W.G. diameter,	square inches total sectional area
Branch cables carrying	11 1/2	Amperes, comprised of	NO. 10	CABLE	wires, each	S.W.G. diameter,	square inches total sectional area
Branch cables carrying	15 1/2	Amperes, comprised of	NO. 10	CABLE	wires, each	S.W.G. diameter,	square inches total sectional area
Leads to lamps carrying	10	Amperes, comprised of	#14	CABLE	wires, each	S.W.G. diameter,	square inches total sectional area
Cargo light cables carrying	2	Amperes, comprised of	14	DK. CABLE	wires, each	S.W.G. diameter,	square inches total sectional area

## DESCRIPTION OF INSULATION, PROTECTION, ETC.

WIRES AND CABLE ARE 3/32" RUBBER COVERED AND DOUBLE BRAID. ALL WIRES RUN IN METAL CON-  
DUITS.Joints in cables, how made, insulated, and protected MADE IN JUNCTION BOXES, MECHANICALLY SECURE, SOLDERED, RUBBER  
AND FRICTION TAPE, PAINTED WITH INSULATING PAINT.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 YESAre there any joints in or branches from the cable leading from dynamo to main switch board NOHow are the cables led through the ship, and how protected METAL CONDUIT.

© 2020

Lloyd's Register  
Foundation

W1268-0079



**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 METAL CONDUIT

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat METAL CONDUIT

What special protection has been provided for the cables near boiler casings METAL CONDUIT

What special protection has been provided for the cables in engine room METAL CONDUIT

How are cables carried through beams METAL CONDUIT through bulkheads, &c. METAL CONDUIT

How are cables carried through decks METAL CONDUIT

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 METAL CONDUIT

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

If so, how are the lamp fittings and cable terminals specially protected NONE

Where are the main switches and fuses for these lights fitted NONE

If in the spaces, how are they specially protected NONE

Are any switches or fuses fitted in bunkers NO

Cargo light cables, whether portable or permanently fixed PORTABLE How fixed SO AS TO DROP IN HATCHWAYS

In vessels fitted on the single wire system, how is the dynamo terminal fixed to the hull of vessel NONE

How are the returns from the lamps connected to the hull NONE

Are all the joints with the hull in accessible positions NONE

Is the installation supplied with a voltmeter YES and with an amperemeter YES fixed ON MAIN 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

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 \_\_\_\_\_ 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.

*W. Wallace for Western Dry Dock & Ship Bldg Co. Electrical Engineers*

Date 22/11/16

**COMPASSES.**

Distance between dynamo or electric motors and standard compass 45 Feet

Distance between dynamo or electric motors and steering compass 35 Feet

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
<u>1/2</u>	<u>2</u>	<u>2</u>	<u>2</u>
<u>4</u>	<u>6</u>	<u>4</u>	<u>4</u>
<u>4</u>	<u>6</u>	<u>4</u>	<u>4</u>

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 0 degrees on 0 course in the case of the standard compass and 0 degrees on 0 course in the case of the steering compass.

*W. Wallace for Western Dry Dock & Ship Bldg Co. Builder's Signature.*

Date 22/11/16

**GENERAL REMARKS.**

INSTALLATION COMPLETED ON THE 22nd day of NOVEMBER, 1916, AND TESTED CLEAR AFTER TWENTY-FOUR HOURS RUNNING TEST. THE WORKMANSHIP AND MATERIALS ARE OF GOOD QUALITY.

PORT ARTHUR, ONTARIO, NOVEMBER 22nd, 1916.

*Robert Lewis*

Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute TUE 20 FEB 1917

FRI 28 DEC 1917

TUE 8 JAN 1918

TUE 23 MAY 1918

TUE AUG 13 1918

TUE SEP 24 1918

TUE 22 OCT 1918

TUE AUG 13 1918

FRI 7 FEB 1919

© 2020

Lloyd's Register Foundation