

RETAIN

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REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 8454.

Port of Middlesbrough Date of First Survey Whale Date of Last Survey building No. of Visits _____
 No. in Reg. Book 903 on the Iron or Steel S.S. "Poseidon" Port belonging to S. Gravenhage
 Built at Middlesbrough By whom Smith's Book Co. Ltd. When built 1914
 Owners Anglo-Saxon Petroleum Co. Ltd. Owners' Address London *Class contemplated*
 Yard No. 574 Electric Light Installation fitted by Smith's Book Co. Ltd. When fitted 1914

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Single Motor Compound Wound Dynamo

Capacity of Dynamo 52 Amperes at 115 Volts, whether continuous or alternating current Continuous
 Where is Dynamo fixed Engine Room Whether single or double wire system is used Double
 Position of Main Switch Board Engine Room having switches to groups Yes ABCD of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each Back light & group of lights provided with switches as required.

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 100 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 Lead fuses
 Are all switches and fuses constructed of incombustible materials and fitted on incombustible bases Yes

Total number of lights provided for 88 arranged in the following groups:—

A	Engine room	16 lights each of	16	candle power requiring a total current of	8	Amperes
B	Aft deck	42 lights each of	16	candle power requiring a total current of	20	Amperes
C	Navigation	14 lights each of	16 + 32	candle power requiring a total current of	9 1/2	Amperes
D	Foremast	10 lights each of	16	candle power requiring a total current of	5	Amperes
E		lights each of		candle power requiring a total current of		Amperes
1	Mast head light with 1 lamp	each of	32	candle power requiring a total current of	1	Amperes
4	Side light with 1 lamp	each of	32	candle power requiring a total current of	4	Amperes
2	Cluster Cargo lights of 6 lights		16	candle power, whether incandescent or arc lights	incandescent	

If arc lights, what protection is provided against fire, sparks, &c. _____

Where are the switches controlling the masthead and side lights placed Chart Room

DESCRIPTION OF CABLES.

Main cable carrying 42 1/2 Amperes, comprised of 19 wires, each 18 S.W.G. diameter, 0.3375 square inches total sectional area
 Branch cables carrying 20 Amperes, comprised of 7 wires, each 16 S.W.G. diameter, 0.221400 square inches total sectional area
 Branch cables carrying 9 1/2 Amperes, comprised of 7 wires, each 16 S.W.G. diameter, 0.221400 square inches total sectional area
 Leads to lamps carrying 1/2 Amperes, comprised of 3 wires, each 22 S.W.G. diameter, 0.018120 square inches total sectional area
 Cargo light cables carrying 3 Amperes, comprised of 3 wires, each 20 S.W.G. diameter, 0.029940 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

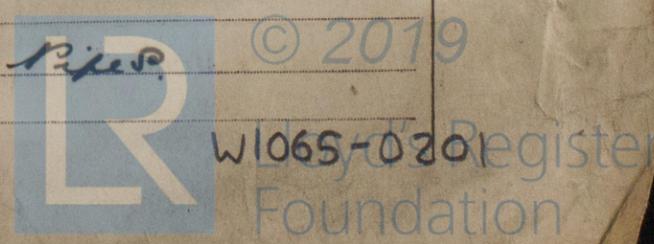
2.500 Megothm Capade Lead Covered and Lead Covered and Armoured Cables

Joints in cables, how made, insulated, and protected None

Are all the joints of cables thoroughly soldered, and the flux used not containing acids or other corrosive substances None 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 None

Are there any joints in or branches from the cable leading from dynamo to main switch board No

How are the cables led through the ship, and how protected Cableway Iron Pipes



DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.

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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 Galvanized Iron Pipes

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat Lead Covered & Armoured Cables

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

What special protection has been provided for the cables in engine room Lead covered & Armoured Cables

How are cables carried through beams Galvanized iron pipes through bulkheads, &c. Galvanized iron pipes

How are cables carried through decks Galvanized iron pipes

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

If so, how are they protected ---

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 ---

Cargo light cables, whether portable or permanently fixed Portable How fixed In C.I. Connection boxes

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

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 Yes

Are any switches, fuses, or joints of cables fitted in the pump room or companion None

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

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. Yes

Insulation of cables is guaranteed to have a resistance of not less than 2500 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.

A Richmond Electrical Engineers Date 21-5-14

COMPASSES.

Distance between dynamo or electric motors and standard compass 65 ft.

Distance between dynamo or electric motors and steering compass 65 ft.

The nearest cables to the compasses are as follows:—

A cable carrying	<u>1/2</u> Amperes	<u>1</u> feet from standard compass	<u>1</u> 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 every course in the case of the standard compass and Nil degrees on every course in the case of the steering compass.

Jwbairns Builder's Signature. Date 22-5-14

GENERAL REMARKS.

This Electric Light Installation has been fitted on board in accordance with the Rules and tried under full working conditions with satisfactory results.

It is submitted that this vessel is eligible for THE RECORD, Elec. light. JWZ Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute



THE SURVIVORS ARE REQUESTED NOT TO WRITE ACROSS THIS PAGE.

Form 812—Transfer.