

REC'D NEW YORK AUG 16 1920

Rpt. 13.

Received at London Office

# REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 3344

Port of San Francisco Date of First Survey 10<sup>th</sup> JUNE 1920 Date of Last Survey 28<sup>th</sup> JULY 1920 No. of Visits 6  
No. in Reg. Book on the Iron on Steel S/S "SAPULPA" Port belonging to San Francisco  
Built at Oakland, Cal. By whom Moore S.B. Co. When built 1920  
Owners U. S. Shipping Board Owners' Address SAN FRANCISCO  
Yard No. 1030 Electric Light Installation fitted by NePage McKenny Company When fitted 1920

## DESCRIPTION OF DYNAMO, ENGINE, ETC.

2 - 10 H.P. Turbines direct connected to two 15 Kw. - 120 A. - 126 V. - G. R. Generators

Capacity of Dynamo 15 Kw Amperes at 125 Volts, whether continuous or alternating current D.C.

Where is Dynamo fixed Dynamo flat in Engine Room Whether single or double wire system is used double

Position of Main Switch Board 6' from Dynamo having switches to groups Five of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each Amidship panel 12 sw. after panel 8 sw.

Fire Room panel 4 sw. Engine Room 4 sw. Running lights 7 sw.

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-oxidisable metal Yes and constructed to fuse at an excess of 10 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

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

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

A	100	lights each of	25 W	candle power requiring a total current of	21	Amperes
B	60	lights each of	25	candle power requiring a total current of	13	Amperes
C	30	lights each of	40 W	candle power requiring a total current of	10	Amperes
D	30	lights each of	40 W	candle power requiring a total current of	10	Amperes
E	7	lights each of	32 CP	candle power requiring a total current of	7	Amperes
5	Mast head light with	lamps each of	32 CP	candle power requiring a total current of	1	Amperes
2	Side light with	lamps each of	32 CP	candle power requiring a total current of	1	Amperes
3	Cargo lights of	100	candle power, whether incandescent or arc lights	Incandescent		

If arc lights, what protection is provided against fire, sparks, &c. No arc lights

Where are the switches controlling the masthead and side lights placed In Pilot House

## DESCRIPTION OF CABLES.

Main cable carrying	120	Amperes, comprised of	19	wires, each	S.W.G. diameter, .1315	square inches total sectional area
Branch cables carrying	31	Amperes, comprised of	7	wires, each	S.W.G. diameter, .028	square inches total sectional area
Branch cables carrying	12	Amperes, comprised of	7	wires, each	S.W.G. diameter, .018	square inches total sectional area
Leads to lamps carrying	5	Amperes, comprised of	1	wires, each	S.W.G. diameter, .0032	square inches total sectional area
Cargo light cables carrying	2	Amperes, comprised of	31	wires, each	S.W.G. diameter, .0032	square inches total sectional area

## DESCRIPTION OF INSULATION, PROTECTION, ETC.

All Feeders D.B. R.C. stranded. Branch circuits D.B. R.C.

Joints in cables, how made, insulated, and protected Soldered, taped, rubber and friction, painted. All joints in junction boxes and conduits.

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

How are the cables led through the ship, and how protected Conduit



© 2020

Lloyd's Register  
Foundation



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 **Conduit**

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

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

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

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

How are cables carried through decks **Conduit and Tubes**

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 **No**

Cargo light cables, whether portable or permanently fixed **Portable** How fixed **"**

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 **Switch Board**

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 **No**

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

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 **Aug 2-20**

COMPASSES.

Distance between dynamo or electric motors and standard compass **100**

Distance between dynamo or electric motors and steering compass **100**

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
<b>7</b>	<b>50</b>	<b>42</b>	<b>feet from steering compass</b>
<b>1/2</b>	<b>1</b>	<b>1</b>	<b>feet from steering compass</b>
			<b>feet from steering compass</b>

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 **N11** degrees on **every** course in the case of the standard compass and **N11** degrees on **every** course in the case of the steering compass.

**Moore Shipbuilding** Builder's Signature. Date **Aug 2-20**

GENERAL REMARKS. This installation has been fitted in accordance with the Rules, tested under working conditions and found in order and the Vessel is eligible in my opinion to have notation of "Electric Light" in the Register Book.

It is submitted that this vessel is eligible for THE RECORD. **Elec Lt**

**20/9/20**  
**Elec Lt**

Surveyor to Lloyd's Register of Shipping.

Committee's Minute



© 2020

Lloyd's Register Foundation

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.