

TUE. 22 MAR. 1921

## REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 3462.

Port of SAN FRANCISCO. Date of First Survey 19<sup>th</sup> JAN 1921 Date of Last Survey 12<sup>th</sup> FEB. 1921 No. of Visits 0.  
 No. in on the Iron or Steel S.S. "GARGOYLE" Port belonging to New York  
 Reg. Book Built at Oakland, California. By whom Moore Shipbuilding Co. When built 1921.  
 Owners Vacuum Oil Company Owners' Address New York  
 Yard No. 164 Electric Light Installation fitted by NePage McKenny Company When fitted 1921

## DESCRIPTION OF DYNAMO, ENGINE, ETC.

2 G.E. reciprocating engine driven generator sets. 15 K.W. each.

Capacity of Dynamo 120 Amperes at 125 Volts, whether continuous or alternating current D.C.  
 Where is Dynamo fixed Dynamo flat, Engine Room Whether single or double wire system is used Double  
 Position of Main Switch Board Dynamo flat, Engine Room having switches to groups A-B-C-D. of lights, &c., as below  
 Positions of auxiliary switch boards and numbers of switches on each A-1 12 cir. amidships. B- 4 cir. in forecastle  
C-1 8 cir. after quarters. D. 1-cir. Engine Room.

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

Total number of lights provided for 280 arranged in the following groups :-

A	82	lights each of	25 and 40 W.	candle power requiring a total current of	48	Amperes
B	28	lights each of	25 " 40 W.	candle power requiring a total current of	10	Amperes
C	100	lights each of	25 " 40 W.	candle power requiring a total current of	32	Amperes
D	70	lights each of	40 W.	candle power requiring a total current of	23	Amperes
E		lights each of		candle power requiring a total current of		Amperes
2		Mast head light with	2 lamps each of	32	candle power requiring a total current of	2
2		Side light with	2 lamps each of	32	candle power requiring a total current of	2
3		Cargo lights of	240 Watts	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 Pilot House

## DESCRIPTION OF CABLES.

	Main cable carrying	120	Amperes, comprised of	#19	wires, each	.348	S.W.G. diameter,	.105	square inches total sectional area
A	Branch cables carrying	28	Amperes, comprised of	#7	wires, each	.232	S.W.G. diameter,	.0328	square inches total sectional area
B	Branch cables carrying	10	Amperes, comprised of	#7	wires, each	.192	S.W.G. diameter,	.0206	square inches total sectional area
C	Leads to lamps carrying	32	Amperes, comprised of	#7	wires, each	.192	S.W.G. diameter,	.0206	square inches total sectional area
D	Cargo light cables carrying	23	Amperes, comprised of	#7	wires, each	.165	S.W.G. diameter,	.0130	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, Okonite and friction tape, painted. All joints in junction boxes.

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 NoHow are the cables led through the ship, and how protected Conduit© 2020  
W1031-0141Lloyd'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 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 Conduit

How are cables carried through beams Conduit through bulkheads, &c. Conduit thru stuffing tube.

How are cables carried through decks Conduit thru stuffing tube.

Are any cables run through coal bunkers Yes or cargo spaces Yes or spaces which may be used for carrying cargo, stores, or baggage Yes

If so, how are they protected 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 -

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 Yes

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 Vapour proof 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.

McPage, McTenny Co. Electrical Engineers Date 2-23-21

COMPASSES.

Distance between dynamo or electric motors and standard compass 50

Distance between dynamo or electric motors and steering compass 50

The nearest cables to the compasses are as follows:—

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

Monroe Shipbuilding Co. Builder's Signature. Date

GENERAL REMARKS. This installation has been fitted in accordance with the Rules, tested under working condition 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  
Fee \$225.00 applied for Mar. 1st, 1921. THE RECORD. ELEC LT

Wm. Smith  
 Surveyor to Lloyd's Register of Shipping.  
 Committee's Minute Elec LT New York MAR - 8 1921