

10 MAY 1928

## REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 412.

Port of Cleveland, O. Date of First Survey Jan. 31 Date of Last Survey April 8 No. of Visits 12  
 No. in on the ~~Iron or Steel~~ stern wheel Reg. Book Point Pleasant, West Virginia Port belonging to Barranguilla  
 Built at West Virginia By whom Marietta Mfg. Co. When built 1928-3  
 Owners Tropical Oil Company Owners' Address Toronto, Canada  
 Yard No. 210 Electric Light Installation fitted by Builders When fitted 1928

## DESCRIPTION OF DYNAMO, ENGINE, ETC.

4 Pole multi compound 1-10 H.P. direct connected single cylinder engine  
5" x 4 1/2" R.P.M. 500, General Electric Company, Mfg.  
 Capacity of Dynamo 91 Amperes at 110 Volts, whether continuous or alternating current continuous  
 Where is Dynamo fixed main deck Whether single or double wire system is used double  
 Position of Main Switch Board " " having switches to groups 10 of lights, &c., as below  
 Positions of auxiliary switch boards and numbers of switches on each only one switchboard

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 none and at each position where a cable is branched or reduced in size ✓ and to each lamp circuit ✓

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 15-50 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 cartridge fuses

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

Total number of lights provided for 140 arranged in the following groups:—

Group	Description	Lights	Watts	Amperes
A	Eng. & Boiler	40	40	.36
B	Cabins	"	"	"
C	Deck	"	"	"
D	Navigation	"	"	"
E	Search	1000	9	Amperes
2	Mast head light with 2 lamps each of 40	40	.36	Amperes
2	Side light with 2 lamps each of 40	40	.36	Amperes
2	Cargo lights of 6 lamps 40	40	.36	Amperes

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

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

## DESCRIPTION OF CABLES.

Main cable carrying	Amperes	comprised of	wires	each	# B & S.	S.W.G. diameter	Circ. Mils	square inches	total sectional area
91	7	2	14	14	66564	4096	6561	10404	
10	2	14	12	14	4096	6561	10404		
14	2	14	12	14	4096	6561	10404		
36	2	14	12	14	4096	6561	10404		
14	2	12	12	12	6561	10404			

## DESCRIPTION OF INSULATION, PROTECTION, ETC.

Vulcanized rubber single & double braided lead sheathed in galvanized steel conduits. Conforming to the National Board of Fire Underwriters' requirements.

Joints in cables, how made, insulated, and protected soldered rubber & taped & insulating compound. Branch block with screwed connections used where ever possible.

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 no

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 steel conduits & H. T. fittings



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 *H. I. fittings*

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

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

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

How are cables carried through beams *clipped to beams* through bulkheads, &c. *H. I. fittings*

How are cables carried through decks *H. I. fittings*

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 *✓* 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 on switchboard

VESSELS BUILT FOR CARRYING ~~PETROLEUM~~ *crude oil* but 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 *Gas & steam light fixtures*

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.

*Marietta Mfg Co. by J. H. Holmes Ch. Engr.* Electrical Engineers

Date *May 2<sup>nd</sup> 1928.*

COMPASSES.

Distance between dynamo or electric motors and standard compass *no compass used*

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

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>
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

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 above installation has been fitted on board in a satisfactory manner. The qualities of the material & workmanship are good. It has been tried out under working conditions & found efficient.*

*Elec. Light* *May 29<sup>th</sup> 1928*

*G. Drummond*  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

NEW YORK MAY - 9 1928

*"Elec. Light"*

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.