

# REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 2940

Port of *Melford* Date of First Survey *2 Aug* Date of Last Survey *16 Oct* No. of Visits *9*  
 No. in Reg. Book *61.747* on the *Trawler James Caple* Post belonging to *Geo Brown, & Co*  
 Built at *Greenwich* By whom *Geo Brown, & Co* When built *1918*  
 Owners' Address \_\_\_\_\_  
 Yard No. \_\_\_\_\_ Electric Light Installation fitted by \_\_\_\_\_ When fitted \_\_\_\_\_

## DESCRIPTION OF DYNAMO, ENGINE, ETC.

*Single Cylinder Robey Engine, & Dynamo*

Capacity of Dynamo *1 RD 10* Amperes at *100* 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 *Ordinary & hazardous lights, &c., as below*  
 Positions of auxiliary switch boards and numbers of switches on each *none*

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 *Yes*

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

Total number of lights provided for *32* arranged in the following groups:—

Group	Number of lights	Candle power	Current (Amperes)
A	<i>14</i>	<i>16</i>	<i>1.5 · 2</i>
B	<i>18</i>	<i>16</i>	<i>2</i>
C			
D			
E			
Mast head light			
Side light			
Cargo lights			

If arc lights, what protection is provided against fire, sparks, &c. *no Arc Lights fitted*

Where are the switches controlling the masthead and side lights placed *Wheel house*

## DESCRIPTION OF CABLES.

Cable Type	Amperes	Wires	W.G. diameter	Sectional area
Main cable carrying	<i>15</i>	<i>3</i>	<i>20</i>	<i>.00553</i>
Branch cables carrying	<i>5</i>	<i>1</i>	<i>17</i>	<i>.00345</i>
Leads to lamps carrying				
Cargo light cables carrying				

## DESCRIPTION OF INSULATION, PROTECTION, ETC.

*Vulcanised Rubber insulation, Lead sheathed*

Joints in cables, how made, insulated, and protected *None bones used in every instance*

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 *None*

How are the cables led through the ship, and how protected *Bunkers all in heavy gauged galvanised conduit other parts of vessel clipped direct*



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DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.

Are they in places always accessible *Yes except in bunkers when full*  
 What special protection has been provided for the cables in open alleyways or where exposed to weather or moisture *Lead sheathing*  
 What special protection has been provided for the cables near galleys or oil lamps or other sources of heat *Channel plates*  
 What special protection has been provided for the cables near boiler casings *None near*  
 What special protection has been provided for the cables in engine room *Lead sheathing*  
 How are cables carried through beams *Backed leaded holes* through bulkheads, &c. *Water tight glands*  
 How are cables carried through decks *Water tight deck pipes*  
 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 *Cable run in Conduit pipe through bunkers, otherwise*  
 Are any lamps fitted in coal bunkers or spaces which may at times be used for cargo, coals, or baggage *Yes* *Lead sheathing*  
 If so, how are the lamp fittings and cable terminals specially protected *Water tight fittings with guards*  
 Where are the main switches and fuses for these lights fitted *In distribution box in Gallery*  
 If in the spaces, how are they specially protected *No*  
 Are any switches or fuses fitted in bunkers *None*  
 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 *Engine room*

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. *Yes*  
 Insulation of cables is guaranteed to have a resistance of not less than *1600* 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

COMPASSES.

Distance between dynamo ~~electric motor~~ and standard compass

*43 feet*  
*38 "*

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>2</i>	<i>10</i>	<i>6</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.

*All wiring, switches, fuses, guards, and fittings are Admiralty Standard pattern*

*It is submitted that this vessel is fit for service for*

*Electric Light.*

*Not completed. See Correspondence.*

*J. W. Johnston*

Surveyor to Lloyd's Register of Shipping.

Committee's Minute *FRI. NOV. 19 1920*

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN