

30 JUN 1950

Rpt. 13.

No. 107412

**REPORT ON ELECTRICAL EQUIPMENT.**

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

Date of writing Report 26<sup>th</sup> JUNE 1950 When handed in at Local Office 28 JUN 1950 19 Port of NEWCASTLE-ON-TYNENo. in Survey held at WILKINGTON QUAY-ON-TYNE. Date, First Survey 12/5/50 Last Survey 9/6/50 19  
Reg. Book. (No. of Visits 3)36894 on the DUMB BARGE "KANGAR" Tons { Gross 327.56  
Net 327.56

Built at WALLSEND-ON-TYNE. By whom built CLELANDS (SUCCESSORS) LTD. Yard No. 162 When built 1950

Owners PETROLEUM S.S. CO. LD. Port belonging to LONDON.

Installation fitted by NORTHERN ELECTRICAL REWINDS LTD. When fitted 1950

Is vessel equipped for carrying Petroleum in bulk No Is vessel equipped with D.F. — E.S.D. — Gy.C. — Sub. Sig. —

Plans, have they been submitted and approved YES System of Distribution TWO WIRE Voltage of Lighting 12

Heating — Power — D.C. or A.C., Lighting DC Power — If A.C. state frequency —

Prime Movers, has the governing been found as per Rule when full load is thrown on and off — Are turbine emergency governors fitted with a trip switch — Generators, are they compound wound —, and level compounded under working conditions —

if not compound wound state distance between generators — and from switchboard — Are the generators arranged to run in parallel —, are shunt field regulators provided — Is the compound winding connected to the negative or positive pole —

Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing — Have certificates of test for machines under 100 kw. been supplied — and the results found as per Rule —

Position of Generators BATTERY ONLY

is the ventilation in way of generators satisfactory — are they clear of inflammable material and protected from mechanical injury and damage from water, steam and oil — Switchboards, where are main switchboards placed —

are they in accessible positions, free from inflammable gases and acid fumes and protected from mechanical injury and damage from water, steam and oil —, what insulation is used for the panels —, if of synthetic insulating

material is it an Approved Type —, if of semi-insulating material (slate or marble) are all conducting parts insulated therefrom as per Rule — Is the construction as per Rule, including locking of screws and nuts — Description of Main Switchgear

for each generator and arrangement of equaliser switches. —

and the switch and fuse gear (or circuit breakers) for each outgoing circuit DOUBLE POLE SWITCH AND FUSES.

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule — Instruments on main switchboard — ammeters — voltmeters — synchronising devices. For compound machines in parallel are the ammeters and reversed current

protection devices connected on the pole opposite to the equaliser connection — Earth Testing, state means provided —

Switches, Circuit Breakers and Fuses, are they as per Rule YES, are the fuses an Approved Type YES

make of fuses M.E.M., are all fuses labelled YES If circuit breakers are provided for the generators, at what overload do they operate —, and at what current do the reversed current protective devices operate —

Joint Boxes, Section Boards and Distribution Boards, is the construction as per Rule —

Cables, are they insulated and protected as per Rule YES, if otherwise than as per Rule are they of an Approved Type —, state maximum fall of pressure between bus bars and any point under maximum load —, are the ends of all cables having a sectional

area of 0.01 square inch and above provided with soldering sockets — Are all paper insulated and varnished cambric insulated cables sealed at the ends — Are all the cable runs in accessible positions, not exposed to drip or accumulation of water or oil,

high temperatures or risk of mechanical damage YES, are any cables laid under machines or floorplates —, if so, are they adequately protected — Are cables in machinery spaces, galleys, laundries, etc., lead covered — or run in conduit —

or of the "HR" type — State how the cables are supported or protected LEAD COVERED ARMoured AND BRAIDED CLIPPED TO STEEL TRAY.

Are all lead sheaths, armouring and conduits effectually bonded and earthed YES Are all cables passing through decks and watertight bulkheads provided with deck tubes or watertight glands YES, where unarmoured cables pass through beams, etc., are the holes

effectively bushed — Refrigerated chambers, are the cables and fittings as per Rule —

Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule — Emergency Supply, state position —

Lloyd's Register  
Foundation

011251-011258-0069



Navigation Lamps, are they separately wired Yes controlled by separate double pole switches and fuses Yes Are the switches and fuses a position accessible only to the officers on watch Yes is an automatic indicator fitted No Is an alternative supply provided -

*Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, weather-proof.*

*Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, weather-proof.*

Are any fittings installed where readily combustible materials or inflammable or explosive dust or gases are likely to be present. No  
if so, how are they protected \_\_\_\_\_

and where are the controlling switches fitted.

Searchlight Lamps, No. of \_\_\_\_\_, whether fixed or portable \_\_\_\_\_, are they of the carbon arc or of the filament type \_\_\_\_\_

**Heating and Cooking**, is the general construction as per Rule \_\_\_\_\_, are the frames effectually earthed \_\_\_\_\_, are heaters of the convection type \_\_\_\_\_.

compartments in which inflammable gases cannot accumulate and protected from damage from water, steam and oil

Are motors coupled to oil fuel transfer and pressure pumps capable of being stopped from a position accessible in the event of fire in the compartment

Have motors of 100 BHP and over been inspected by the Surveyors during manufacture and testing.....

control Gear and Resistances, are they constructed and fitted as per Rule..... Lightning Conductors, where necessary,.....

rule Yes Ships carrying Oil having a Flash Point less than 150° F. Have all the special requirements of the Rules for such ships complied with Yes Lightning Conductors, where required are they fitted Yes

....., are all fuses of an Approved Cartridge Type....., make of fuse..... Are the fittings for

ons, 'tween deck spaces, etc., in accordance with the special requirements for such ships. — Are the fittings for  
S.D., if fitted state maker. — location of transmitter. — and receiving

are Gear, if the vessel is for open sea service have spares been provided as per Rule and suitably stored in dry situations.....

Insulation Tests, has the insulation resistance of all circuits and apparatus been tested and found satisfactory YES

PARTICULARS OF GENERATING PLANT.							
DESCRIPTION OF GENERATOR.	No. of	MAKER.	RATED AT				PRIME MOVER.
			Kilowatts per Generator.	Volts.	Ampères.	Revs. per Min.	TYPE.
MAIN ... ..							MAKER.
EMERGENCY ...							
ROTARY							
TRANSFORMER							

GENERATOR CABLES.									
DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (feet plus return feet).	INSULATION.	PROTECTIVE COVERING.	
		No. in Parallel per Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.				
MAIN GENERATOR ... ..									
" " EQUALISER ... ..									
EMERGENCY GENERATOR ... ..									
ROTARY TRANSFORMER: MOTOR									
" " GENERATOR...									

DESCRIPTION.

The graph is plotted on a grid with 10 major vertical divisions and 20 major horizontal divisions. A single straight line is drawn, starting at approximately (0.5, 1) and ending at (10, 19.5). The line has a constant positive slope of approximately 1.9.

DESCRIPTION.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULATION.	PROTECTIVE COVERING.
	No. in Parallel per Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
NEW ACCOMMODATION LIGHTING.	1	3/02g.	4	5	7	V.I.R.	L.C.A.B.
NAVIGATION LIGHTS.	1	7/02g.	7	15	2	V.I.R.	L.C.A.B.

[illegible]



The Electrical Equipment is installed in accordance with the approved plans and the requirements of the Rules.

All Insulated Conductors are guaranteed to have been tested at the maker's works as specified in the Rules.

The foregoing is a correct description.

NORTHERN ELECTRICAL REWINDS LTD.  
108 HOWARD STREET,  
NORTH SHIELDS.

*Chandler*

Electrical Contractors.

Date 22 JUN 1950

#### COMPASSES.

Have the compasses been adjusted under working conditions.

No

COMPASSES

FITTED

FOR AND BY  
CLELANDS (NORTH SHIELDS) LIMITED

*R. F. Bragg*

Builder's Signature.

Date

27/6/50

DIRECTOR

Have the foregoing descriptions and schedules been verified and found correct.

YES

Is this installation a duplicate of a previous case.

No

If so, state name of vessel.

Plans. Are approved plans forwarded herewith.

No

If not, state date of approval.

25/5/50

Certificates. Are certificates of test for motors engaged on essential sea services and generators forwarded herewith.

General Remarks. (State quality of workmanship, whether insulation tests, etc., have been made, opinions as to class, etc.)

THE ELECTRICAL EQUIPMENT OF THIS SHIP HAS BEEN INSTALLED IN ACCORDANCE WITH THE SOCIETY'S  
RULES AND REGULATIONS AND THE ARRANGEMENTS ARE IN ACCORDANCE WITH THOSE SHOWN ON THE APPROVED PLANS.

THE MATERIALS USED ARE OF GOOD QUALITY AND THE WORKMANSHIP IS SATISFACTORY.

ON COMPLETION THE INSULATION RESISTANCE OF ALL CIRCUITS WAS ABOVE RULE REQUIREMENTS

THE EQUIPMENT, AS INSTALLED, IS, IN MY OPINION, SUITABLE FOR A CLASSED SHIP.

Noted SW 25/7/50.

Total Capacity of Generators. — Kilowatts.

The amount of Fee ...

£ 5 : 0

When applied for,  
29 JUN 1950

When received,

Travelling Expenses (if any) £

:

:

19

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI. 18 AUG 1950

Assigned

See minute on F.E. Rep.