



## REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 271.

FEB 1948

Received at London Office

pt. 4c.

Date of writing Report 14.5.48 When handed in at Local Office 14.5.48 Port of NOTTINGHAM.

No. in Survey held at Lincoln. T. HEBDEN-ON-TYNE Date, First Survey Last Survey 19

Reg. Book. 1488 on the M.V. LABIOSA Number of Visits

Single Triple Quadruple Screw vessel M.V. LABIOSA Tons Gross 1473.36 Net 3604.00

Built at Newcastle. By whom built Hawthorn Leslie Eng. No. 4047 When built 1948

Owners THE ANGLO-SAXON PETROLEUM CO. LTD. Port belonging to LONDON 12/460284.

Oil Engines made at Lincoln. By whom made Ruston &amp; Hornsby Ltd. Contract No. When made 1947.

Generators made at Sunderland. By whom made Sunderland Forge &amp; Eng. Co. Ltd. Contract No. When made

No. of Sets 1 Engine Brake Horse Power 48 M.N. as per Rule 12 Total Capacity of Generators 30 Kilowatts.

Set intended for essential services No.

OIL ENGINES, &amp;c.—Type of Engines 4VPHZ. Eng. No. 256794. 2 or 4 stroke cycle 4 Single or double acting SA

Maximum pressure in cylinders 1000 lbs. Diameter of cylinders 5.5" Length of stroke 8" No. of cylinders 4 No. of cranks 4

Mean indicated pressure 109 lbs. Firing order in cylinders 1-3-4-2 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 6.25/32"

Is there a bearing between each crank Yes Weight of flywheel 2240 lb. f. r. Revolutions per minute 675

Flywheel dia. 2'-8" Weight 510 lbs. Means of ignition Compression. Kind of fuel used Diesel Oil.

Crank Shaft, dia. of journals 4.3/16" Crank pin dia. 3.1" Crank Webs Mid. length breadth 5.3" Thickness parallel to axis -

Flywheel Shaft, diameter - Intermediate Shafts, diameter - General armature, moment of inertia (16 m<sup>2</sup> or Kg.-cm.<sup>2</sup>) -

Are means provided to prevent racing of the engine when declutched Yes Means of lubrication Forced Kind of damper if fitted -

Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material LAGGED

Cooling Water Pumps, No. ONE ATTACHED TWO INDEPENDANT Is the sea suction provided with an efficient strainer which can be cleared within the vessel YES

Lubricating Oil Pumps, No. and size one, 376 gals. per hour. Engine driven.

Air Compressors, No. No. of stages Diameters Stroke Driven by

Scavenging Air Pumps, No. Diameter Stroke Driven by

AIR RECEIVERS:—Have they been made under Survey State No. of Report or Certificate

Is each receiver, which can be isolated, fitted with a safety valve as per Rule

Can the internal surfaces of the receivers be examined What means are provided for cleaning their inner surfaces

Is there a drain arrangement fitted at the lowest part of each receiver

High Pressure Air Receivers, No. Cubic capacity of each Internal diameter thickness

Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules

Starting Air Receivers, No. ONE (ALSO FOR MAIN ENGINES) Total cubic capacity 462 cu ft Internal diameter thickness

Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules

ELECTRIC GENERATORS:—Type No. G. 7033.

Pressure of supply 110 volts. Full Load Current 273 Amperes. Direct or Alternating Current D.C.

If alternating current system, state the periodicity Has the Automatic Governor been tested and found as per Rule when full load is suddenly thrown

on and off Yes Generators, are they compounded as per Rule Yes is an adjustable regulating resistance fitted in series with each shunt field Yes

Are all terminals accessible, clearly marked, and furnished with sockets Yes Are they so spaced

or shielded that they cannot be accidentally earthed, short circuited, or touched Yes Are the lubricating arrangements of the generators as per Rule Yes

If the generators are under 100 kw. full load rating, have the makers supplied certificates of test Yes and do the results comply with the requirements Yes

If the generators are 100 kw. or over have they been built and tested under survey States Sent to Home

Details of driven machinery other than generator Through clutch. Compressor. Reavell No. 100422.

PLANS.—Are approved plans forwarded herewith for Shafting Standard Approved. Receivers Separate Tanks

Have Torsional Vibration characteristics if applicable been approved Not applicable. Armature shaft Drawing No.

SPARE GEAR To Rule requirements.

Ruston & Hornsby Limited.  
The foregoing is a correct description,

11 hours 28.148 Engineering Divn. Manufacturer.



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Lloyd's Register  
Foundation

005429-005435-0031



Dates of Survey while building  
During progress of work in shops - -  
During erection on board vessel - -  
Total No. of visits

Dates of Examination of principal parts—Cylinders 28.10.47. Covers 28.10.47. Pistons 28.10.47. Piston rods -  
Connecting rods 28.10.47. Crank and Flywheel shafts 28.5.47. 28.10.47. Intermediate shafts -

Crank shaft { Material S.M. Steel. Tensile strength  
Elongation Identification Marks LL.1207. RD.6259. T.D.S.

Flywheel shaft, Material Identification Marks

Identification marks on Air Receivers

Is this machinery duplicate of a previous case Yes If so, state name of vessel Standard Type.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

This engine has been built under Special Survey, in accordance with Approved Plans and regulations of Society, material and workmanship being good.

On completion the set was tried in the Shops under working conditions and found satisfactory.

The set has been forwarded to Newcastle for installation on board the vessel.

### SURVEY OF MACHINERY.

FIRST SURVEY 1<sup>st</sup> NOVEMBER 1946 LAST SURVEY 13<sup>th</sup> MAY 1948

No. OF VISITS 96

The generator has been efficiently installed on board examined under working conditions & is in good working order.

J. A. Orde Newcastle-on-Tyne

SURVEYOR TO LLOYD'S REGISTER,  
NEWCASTLE-ON-TYNE.

The amount of Fee ... £ 4 : 0 : 0

When applied for 4-2- 19 48.

Travelling Expenses (if any) £ :

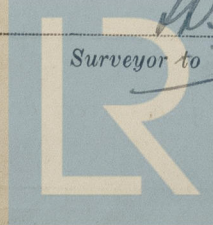
When received 19

Committee's Minute

FRI. 4 JUN 1948

Assigned

Su F.E. mch. rpt.



Surveyor to Lloyd's Register of Shipping.

Lloyd's Register  
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