

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 11,403

15 MAR 1943

Date of writing Report \_\_\_\_\_ When handed in at Local Office **11. 3. 1943** Port of **MANCHESTER.** Received at London Office **3 SEP 1943**  
 No. in Survey held at **ASHTON-UNDER-LYNE.** Date, First Survey **27.8. 42.** Last Survey **16. 2. 19 43.**  
 Reg. Book. \_\_\_\_\_ Number of Visits **12.**

Single  
on the Twin } Screw vessel  
Triple }  
Quadruple }

**EMPIRE VICE ROY.**

Tons { Gross  
Net

Built at **BARROW ON FURNESS.** By whom built **Vickers Armstrongs Ltd.** Yard No. **858** When built \_\_\_\_\_

Oil Engines made at **Ashton-u-Lyne.** By whom made **National Gas & O.E.Co.Ld.** Engine No. **54039.** When made **1943.**  
 Generators made at **Birmingham.** By whom made **General Electric Co.Ltd.** Generator No. **55861/1** When made **1942.**  
 No. of Sets **1** Engine Brake Horse Power **300** Nom. Horse Power as per Rule **49** Total Capacity of Generators **180** Kilowatts.

**OIL ENGINES, &c.**—Type of Engines **Heavy Oil Engine Vertical** 2 or 4 stroke cycle **4** Single or double acting **Single.**  
 Maximum pressure in cylinder **800 lbs/sq"** Diameter of cylinders **10"** Length of stroke **13"** No. of cylinders **5** No. of cranks **5**  
 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge **12.3/8"** Is there a bearing between each crank **Yes.**  
 Revolutions per minute **550** Flywheel dia. **3'7"** Weight **2600 lbs.** Means of ignition **Compression** Kind of fuel used **Diesel Oil.**  
 Crank Shaft, dia. of journals as per Rule **Approved.** as fitted **7.25"** Crank pin dia. **7"** Crank Webs Mid. length breadth **2.15/16"** Thickness parallel to axis **-**  
 Flywheel Shaft, diameter as per Rule **Flywheel mounted on Crank-shaft coupling.** Intermediate Shafts, diameter as fitted **-** Mid. length thickness **8 1/2"** Thickness around eyehole **Solid.**  
 Is a governor or other arrangement fitted to prevent racing of the engine when declutched **Yes.** Means of lubrication **Forced Lubrication.**  
 Are the cylinders fitted with safety valves **Yes.** Are the exhaust pipes and silencers water cooled or lagged with non-conducting material **Water cooled.**  
 Cooling Water Pumps, No. **One incorporated with Engine.** Is the sea suction provided with an efficient strainer which can be cleared within the vessel \_\_\_\_\_  
 Lubricating Oil Pumps, No. and size **One incorporated with Engine.**

Air Compressors, No. **-** No. of stages **-** Diameters **-** Stroke **-** Driven by **-**  
 Scavenging Air Pumps, No. **-** Diameter **-** Stroke **-** Driven by **-**

**IR 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.** **-** Total cubic capacity **-** Internal diameter **-** thickness **-**  
 Seamless, lap welded or riveted longitudinal joint **-** Material **-** Range of tensile strength **-** Working pressure by Rules **-**

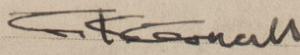
**ELECTRIC GENERATORS:**—Type **Compound wound, continuous rating, fan ventilated.**  
 Pressure of supply **220** volts. Full Load Current **820** Amperes. Direct or Alternating Current **D.C.**  
 If alternating current system, state the periodicity **-** Has the **Automatic Governor** been tested 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  
 hunt field **-** 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 **-** and do the results comply with the requirements **-**  
 If the generators are 100 kw. or over have they been built and tested under survey **Yes.**

**TANKS.** Are approved plans forwarded herewith for Shafting **6.1.42.** Receivers **-** Separate Tanks **-**  
 (If not, state date of approval)

**SHAFTING AS PER RULE REQUIREMENTS.**

The foregoing is a correct description,

THE NATIONAL GAS AND OIL ENGINE Co. Ltd.

 Manufacturer.



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Lloyd's Register Foundation

012019-012026-0243

*J. H. Brown*  
24/3/43

Dates of Survey while building:
 

- During progress of work in shops - 1942. Aug. 27. Sept. 14, 18. Oct. 20. Nov. 4, 11, 19, 26. Dec. 5. 1943. Feb. 1943.
- During erection on board vessel - - -
- Total No. of visits 12.

Dates of Examination of principal parts—Cylinders 16.2.43. Covers 16.2.43. Pistons 16.2.43. Piston rods -

Connecting rods 14.9.42. Crank and Flywheel shafts 16.2.43. Intermediate shafts -

Crank and Flywheel shafts, Material O.H. Steel. Identification Marks LLOYD'S 1289 DRW 27.8.42.

Intermediate shafts, Material - Identification Marks -

Identification marks on Air Receivers 28785/6. LLOYD'S TEST 700 lbs/sq.in. (See Secretary's letter of 11th Jan. 1943). FH.26.2.43.

Is this machinery duplicate of a previous case - If so, state name of vessel -

General Remarks (State quality of workmanship, opinions as to class, &c.) THIS ENGINE HAS BEEN CONSTRUCTED UNDER SPECIAL SURVEY OF TESTED MATERIALS AND IS IN ACCORDANCE WITH THE SECRETARY'S LETTERS, APPROVED PLANS AND RULE REQUIREMENTS. THE MATERIALS AND WORKMANSHIP ARE GOOD AND THE ENGINE WHEN TESTED IN SHOP UNDER FULL LOAD CONDITIONS SHEWED SATISFACTORY RESULTS. IN MY OPINION, THIS ENGINE IS SUITABLE TO BE PLACED ON BOARD A VESSEL CLASSED WITH THIS SOCIETY FOR THE PURPOSE INTENDED.

*Satisfactorily fitted on board*  
*[Signature]*  
 Barrow

To cover Engine N<sup>o</sup> 54037, 8 + 9.  
 The amount of Fee £ 26 : 5 :  
 Travelling Expenses (if any) £ 2 : 5 :  
 When applied for, 11-3-1943.  
 When received, 19.....

*[Signature]*  
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUES. 14 SEP 1943  
 Assigned *See minute on Rev. F.G. Rpt.*

Im. 4.89.—Transfer. (MADE AND PRINTED IN ENGLAND)  
 (The Surveyors are requested not to write on or below the space for Committee Minute.)