

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 21,344

16 MAR 1948

Received at London Office

Date of writing Report 12/1/1948 When handed in at Local Office 19 Port of SYDNEY N.S.W.
 No. in Survey held at PORT KEMBLA & SYDNEY N.S.W. Date: First Survey 24/4/47 Last Survey 12/1/1948
 Reg. Book Number of Visits 4

Single
Twin
Triple } Screw vessel
Quadruple } **CHELMER**

Tons } Gross 209.64
Net 112.05

Built at PORT KEMBLA, N.S.W. By whom built A. E. GOODWIN LTD. Yard No. 76 When built 1947

Owners THE ANGLO SAXON PETROLEUM CO. LTD. Port belonging to SYDNEY, N.S.W.

Oil Engines made at SPRINGVALE, VICTORIA. By whom made KELLY & LEWIS LTD. Contract No. 10132 When made 1946

Generators made at SYDNEY, N.S.W. By whom made CHALLENGE ELECTRIC CO. Contract No. 757 When made 1945

No. of Sets 1 Engine Brake Horse Power 10 Nom. Horse Power as per Rule 244 Total Capacity of Generator 4 Kilowatts.

OIL ENGINES, &c.—Type of Engines **KELLY & LEWIS TYPE, V.E.C. 25** 2 or 4 stroke cycle 4 Single or double acting **SINGLE**

Maximum pressure in cylinders **850 LBS/SQ IN.** Diameter of cylinders **3.54** Length of stroke **4.75** No. of cylinders **2** No. of cranks **2**

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge **4 1/8** Is there a bearing between each crank **Yes**

Revolutions per minute **1000** Flywheel dia. **18 1/2** Weight **200 LBS** Means of ignition **COMPRESSION** Kind of fuel used **DIESEL OIL**

Crank Shaft, dia. of journals as per Rule as fitted **2 3/8** Crank pin, dia. **2 1/4** Crank Webs Mid. length breadth **3 1/8** Thickness parallel to axis **✓**
 Mid. length thickness **1 1/8** Thickness around eyebolt **✓**

Flywheel Shaft, diameter as per Rule as fitted **2 1/4** Intermediate Shafts, diameter as per Rule as fitted **✓** Thickness of cylinder liners **✓**

Is a governor or other arrangement fitted to prevent racing of the engine when declutched **YES** Means of lubrication **OIL PUMP INCORPORATED IN ENGINE**

Are the cylinders fitted with safety valves **No** Are the exhaust pipes and silencers water cooled or lagged with non-conducting material **LAGGED**

Cooling Water Pumps, No. **ONE (PLUNGER TYPE)** Is the sea suction provided with an efficient strainer which can be cleared within the vessel **YES**

Lubricating Oil Pumps, No. and size **ONE (GEAR TYPE)**
 THE ABOVE ENGINE DRIVES THE AUXY. GENERATOR, INDEPENDENT BILGE & MAIN CIRCULATING PUMP & MAIN ENGINE STARTING AIR COMPRESSOR.

Air Compressors, No. **1** No. of stages **2** Diameters **2 1/4" & 4"** Stroke **3"** Driven by **ENGINE AS ABOVE**

Scavenging Air Pumps, No. Diameter Stroke Driven by

AIR RECEIVERS:—Have they been made under Survey **NONE FOR AUXY. ENGINE WHICH IS HAND STARTED** 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 **SHUNT WOUND (BATTERY CHARGING GENERATOR)**

Pressure of supply **110** volts Full Load Current **37** 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 **No** is an adjustable regulating resistance fitted in series with each shunt field **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

GENERATOR TYPE TESTED AS PER SYD. RPT. 20830 ON SISTER VESSEL "BUCKIE."

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

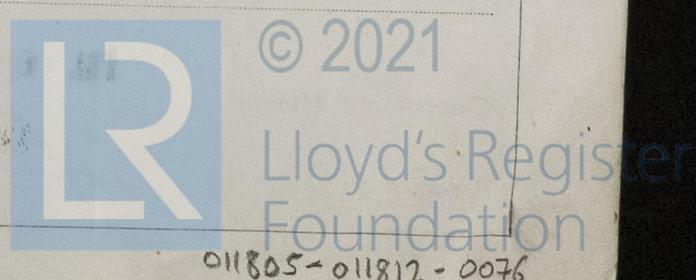
PLANS. Are approved plans forwarded herewith for Shafting Receivers Separate Tanks
 (If not, state date of approval)

SPARE GEAR SAME SPARE GEAR SUPPLIED AS FOR M.S. BUCKIE - SEE SYD. RPT. 20830.

The foregoing is a correct description,

B. P. Ziecken Manufacturer

Surveyor to Lloyds Register of Shipping



011805-011812-0076

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 Covers Pistons Piston rods

Connecting rods Crank and Flywheel shafts Intermediate shafts

Crank and Flywheel shafts, Material Identification Marks

Intermediate shafts, Material Identification Marks

Identification marks on Air Receivers *no air receiver for auxiliary engine. Hand starting.*

Is this machinery duplicate of a previous case *Yes.* If so, state name of vessel *BUCKIE (S/D Rpt. 20830) PANT (S/D Rpt. 21148)*

General Remarks (State quality of workmanship, opinions as to class, &c.)

This engine was not constructed under Special Survey. It has been opened up, examined and found in good condition and the materials and workmanship appear to be good.

The engine has been properly installed under our Survey, tested under working conditions and found satisfactory.

In our opinion the machinery of this vessel is eligible to be classed as recommended in Report on Main Engines forwarded herewith.

100-942-J, R. O. S. PTY. LTD., TRANSFER (PRINTED IN AUSTRALIA)
 (The Surveyors are requested not to write on or below the space for Committee Minute.)

The amount of Fee	£	<i>Included on Rpt 4 b.</i>	When applied for,	19
Travelling Expenses (if any)	£	:	When received,	19

A. G. G. & B. P. Fielden
 Surveyors to Lloyd's Register of Shipping.

FBI. 9 APR 1948

Committee's Minute
 Assigned *See minute on F.E. Rpt*

