

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 23,034

29 APR 1949

Received at London Office

Date of writing Report 23<sup>rd</sup> March 1949 When handed in at Local Office 23<sup>rd</sup> March 1949 Port of Sydney N.S.W.  
 No. in Survey held at Sydney N.S.W. Date: First Survey 14<sup>th</sup> May 1948 Last Survey 16<sup>th</sup> February 1949  
 Reg. Book Number of Visits 5

70040 on the Single Screw vessel "NYORA" Tons Gross 1356  
Triple Net 676  
Quadruple  
 Built at Baden, Germany By whom built Nordsee Werke GmbH Yard No. 175 When built 1935  
 Owners Commonwealth of Australia (Dept. Shipping & Fuel) Port belonging to Sydney N.S.W.  
 Oil Engines made at Toowoomba, Qld. By whom made Toowoomba Foundry Pty. Ltd. Contract No. 22483 When made 1945  
 Generators made at Sydney N.S.W. By whom made Mach. & Electric Co. Contract No. 3759 When made 1945  
 No. of Sets 1 Engine Brake Horse Power 42.2 Nom. Horse Power as per Rule 7.8 Total Capacity of Generator 20 Kilowatts.

**OIL ENGINES, &c.**—Type of Engines Southern Cross BGC 2 or 4 stroke cycle 4 Single or double acting Single  
 Maximum pressure in cylinders 730 lbs. p.s.i. Diameter of cylinders 4 1/2" Length of stroke 5 1/2" No. of cylinders 4 No. of cranks 4  
 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 6 1/4" Is there a bearing between each crank Yes  
 Revolutions per minute 1200 Flywheel dia. 22" Weight 350 lb. Means of ignition Compression Kind of fuel used Distillate  
 Crank Shaft, dia. of journals as per Rule 3" Crank pin. dia. 2 1/8" Crank Webs Mid. length breadth 3 1/2" Thickness parallel to axis -  
as fitted 3" 2 1/8" Mid. length thickness 1 5/8" sbrunk Thickness around eye-hole -  
 Flywheel Shaft, diameter as per Rule 3" Intermediary Shafts, diameter as per Rule 3" Thickness of cylinder liners  
as fitted 3" as fitted 3"  
 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 centrifugal 3/4" Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes  
 Lubricating Oil Pumps, No. and size One  
 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 575749  
 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  
 Pressure of supply 110 volts. Full Load Current 181.8 Amperes. Direct or Alternating Current Direct  
 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 ✓ and do the results comply with the requirements ✓  
 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) similar type of set as that fitted in "BUCKIE" & "PANT"

**SPARE GEAR** See list attached hereto.

The foregoing is a correct description,

A. Gervard.

Manufacturer.



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4c / 23034

Dates of Survey while building: During progress of work in shops - - } ✓  
During erection on board vessel - - - } 14, 21/5/48. 19/1/49. 16/2/49  
Total No. of visits 5

Dates of Examination of principal parts—Cylinders 19/1/49 Covers " Pistons " Piston rods ✓

Connecting rods, " Crank and Flywheel shafts " Intermediate shafts ✓

Crank and Flywheel shafts, Material M.S. Identification Marks

Intermediate shafts, Material ✓ Identification Marks ✓

Identification marks on Air Receivers No air receiver, electric and hand starting used.

Is this machinery duplicate of a previous case Yes If so, state name of vessel "BUCKIE", "PANT,"

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 examined under working conditions, found satisfactory and in my opinion the machinery of this vessel is eligible to be classed as recommended in Report on main engines forwarded herewith.

100-8/42-J. B. O. B. P.V.K. LTD. - TRANSFER (PRINTED IN AUSTRALIA)  
(The Surveyors are requested not to write on or below the space for Committee Minute.)

The amount of Fee £ Charged on Main Engine } When applied for, 19  
Travelling Expenses (if any) £ Report 4 b. } When received, 19

A. Gessard  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI, 27 MAY 1949  
Assigned All minute on fee opt

