

REPORT ON OIL ENGINE MACHINERY.

No. 112733

15 SEP 1955

Date of writing Report 27. 9 1955 When handed in at Local Office 6-9-1955 Port of

Received at London Office NEWCASTLE-ON-TYNE.

Survey held at WALLSEND-ON-TYNE

Date, First Survey 6-6-55

Last Survey 12-8-1955

Number of Visits 10

Single on the Twin Triple Quadruple

Screw vessel

"GEBOSO"

Tons Gross 210 Net 70

built at WALLSEND-ON-TYNE

By whom built MESSRS CLELANDS (SUCCESSORS) LTD

Yard No. 207

When built 1955

Engines made at PATRICKROFT

By whom made L. GARDNER & SONS LTD

Engine No. P. 108204

When made 1955

Monkey Boilers made at

By whom made

Boiler No. S. 108208

When made

Indicated Horse Power

Maximum 288 Service

Owners AUSTRALASIAN PETROLEUM CO. LTD.

Port belonging to

PORT MORESBY

As per Rule

58

Is Refrigerating Machinery fitted for cargo purposes NO

Is Electric Light fitted YES

Trade for which vessel is intended FOR RIVER AND HARBOUR SERVICE AT PAPUA.

Vertical Engines, &c. Type of Engines BL3 VERTICAL SOLID INJECTION

2 or 4 stroke cycle 4 Single or double acting SINGLE

Maximum pressure in cylinders 850 lb/sq in

Diameter of cylinders 5 1/2

Length of stroke 4 3/4

No. of cylinders 8

No. of cranks 8

Mean Indicated Pressure 120 lb/sq in

Span of bearings (i.e., distance between inner edges of bearings in

of a crank) 6 15/16

Is there a bearing between each crank YES

Revolutions per minute

Maximum 900 Service 200-700

Flywheel dia. 29 1/2

Weight 596 lbs

Moment of inertia of flywheel (lbs. in² or Kg. cm²) 89000

Means of ignition COMPRESSION

Kind of fuel used DIESEL

Crankshaft

(Solid forged Semi built All built)

dia. of journals as per Rule APPROVED as fitted 4 1/8

Crank pin dia. 3 5/8

Mid. length breadth 5 1/2

Thickness parallel to axis

Flywheel Shaft, diameter MOUNTED ON CRANKSHAFT

Intermediate Shafts, diameter as per Rule APPROVED as fitted 2 3/8

Thrust Shaft, diameter at collars as per Rule IN MAIN ENGINE as fitted GEARING

Shaft, diameter

Screw Shaft, diameter as per Rule APPROVED as fitted 3 3/8

Is the (tube screw) shaft fitted with a continuous liner NO (Bronze)

Bronze Liners, thickness in way of bushes as per Rule as fitted

Thickness between bushes as per Rule as fitted

Is the after end of the liner made watertight in the

propeller boss. If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner

the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-

corrosive. If two liners are fitted, is the shaft lapped or protected between the liners. Is an approved Oil Gland fitted at the after

end of stern tube. NO If so, state type. Length of bearing in Stern Bush next to and supporting propeller 14"

Propeller, dia. 42" Pitch 31" No. of blades 4 Material BRONZE whether moveable NO Total developed surface 650 sq. feet

Moment of inertia of propeller including entrained water (lbs. in² or Kg. cm²) 13245 Kind of damper, if fitted SPRING LOADED TYPE

Method of reversing Engines REVERSE/REDUCTION GEAR Is a governor or other arrangement fitted to prevent racing of the engine YES Means of

lubrication FORCED Thickness of cylinder liners .110" Are the cylinders fitted with safety valves NO Are the exhaust pipes and silencers water cooled

lagged with non-conducting material LAGGED If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned

back to the engine. Cooling Water Pumps, No. and how driven 2 BY EACH MAIN ENGINE (1 SW 1 FW) Working F.W. 840 GPH

W. 3100 GPH Spare F.W. S.W. Is the sea suction provided with an efficient strainer which can be cleared within the vessel YES

Bilge Pumps worked from the Main Engines, No. and capacity ONE EACH ENGINE 430 GPH Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line (No. and capacity of each) TWO 40 TONS/HR How driven BOTH BY ELECTRIC MOTORS

Is the cooling water led to the bilges NO If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping

arrangements. Ballast Pumps, No. and capacity 2 40 TONS/HR Power Driven Lubricating Oil Pumps, including spare pump, No. and size 2 BY EACH MAIN ENGINE 5 GALL/MIN EACH

Are two independent means arranged for circulating water through the Oil Cooler YES Branch Bilge Suctions

No. and size:—In machinery spaces ONE PORT SIDE 2 1/2" ONE CENTRE 2" In pump room

BY COMPARTMENTS holds, &c. ONE 2" IN EACH OF:—PTS INBOARD & OUTBOARD; PTS FORWARD; AFTER; WATER BALLAST; FORE & AFTER CHAIN LOCKERS

Direct Bilge Suctions to the engine room bilges, No. and size TWO: ONE 2" TO BALLAST PUMPS; ONE 1" PORT ME.; EMERGENCY 3"

Are all the bilge suction pipes in holds and tunnel well fitted with strum-boxes. LOCATION CENTRE; CENTRE FORWARD STARBOARD.

Are the bilge suction pipes in holds and tunnel well fitted with strum-boxes. Are the bilge suction pipes in the machinery spaces led from easily

accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges YES

Are all Sea Connections fitted direct on the skin of the Ship FABRICATED Are they fitted with valves or cocks VALVES Are they fixed

efficiently high on the ship's side to be seen without lifting the platform plates YES Are the overboard discharges above or below the deep water line ABOVE

Are they each fitted with a discharge valve always accessible on the plating of the vessel YES Are the blow off cocks fitted with a spigot and brass covering plate

That pipes pass through the bunkers. How are they protected

That pipes pass through the deep tanks. Have they been tested as per Rule

Are all pipes, cocks, valves and pumps in connection with the machinery and all boiler mountings accessible at all times YES

Is the arrangement of valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery

spaces, or from one compartment to another YES Is the shaft tunnel watertight Is it fitted with a watertight door worked from

On a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

Main Air Compressors, No. No. of stages diameters stroke driven by

Auxiliary Air Compressors, No. No. of stages diameters stroke driven by

Small Auxiliary Air Compressors, No. No. of stages diameters stroke driven by

Is there provision made for first charging the air receivers

Scavenging Air Pumps or Blowers, No. How driven

Auxiliary Engines Have they been made under survey Engine Nos.

Makers name L. GARDNER & SONS LTD Position of each in engine room PORT FORWARD PORT AFT STARBOARD

PATRICKROFT Report No. MANCHESTER CERT N° 516684 & 16693

AIR RECEIVERS:—Have they been made under survey State No. of report or certificate
 State full details of safety devices
 Can the internal surfaces of the receivers be examined and cleaned Is a drain fitted at the lowest part of each receiver
Injection Air Receivers, No. Cubic capacity of each Internal diameter thickness
 Seamless, welded or riveted longitudinal joint Material Range of tensile strength Working pressure
Starting Air Receivers, No. Total cubic capacity Internal diameter thickness
 Seamless, welded or riveted longitudinal joint Material Range of tensile strength Working pressure

IS A DONKEY BOILER FITTED No If so, is a report now forwarded
 Is the donkey boiler intended to be used for domestic purposes only
PLANS. Are approved plans forwarded herewith for shafting 2.3.55 Receivers Separate fuel tanks 17.3.55
 Donkey boilers General pumping arrangements Pumping arrangements in machinery space 17.3.55
 Oil fuel burning arrangements
 Have Torsional Vibration characteristics been approved YES Date and particulars of approval 1.3.55

SPARE GEAR.

Has the spare gear required by the Rules been supplied YES State if for "short voyages" only SHORT
 State the principal additional spare gear supplied

FOR AND ON BEHALF OF
GLELANDS (SUCCESSORS) LIMITED

The foregoing is a correct description Dave
 SECRETARY/Manufacturer.

Dates of Survey while building
 During progress of work in shops - -
 During erection on board vessel - - JUNE 6, 8, 9, 10, 15, 16, 18, JULY 15TH AUGUST 10TH 12TH
 Total No. of visits 10
 Dates of examination of principal parts—Cylinders Covers Pistons Rods Connecting rods
 Crank shaft Flywheel shaft Thrust shaft Intermediate shafts 10-6-55 Tube shaft
 Screw shaft Propellers P. 8.6.55 Stern tube P. 16.6.55 Engine seatings 10.6.55 Engine holding down bolts 15-7-55
 Completion of fitting sea connections 15.6.55 Completion of pumping arrangements 12.9.55 Engines tried under working conditions 10.8.55
 Crank shaft, material O.H. STEEL Identification mark LLOYDS 1090E 18.1.55 DH Flywheel shaft, material, Identification mark 13.1.55 R.J.
 Thrust shaft, material Identification mark S.M. INGOT Identification mark P. LLOYDS SLD 410
 Tube shaft, material Identification mark STEEL Identification mark S. LLOYDS SLD 410
 Identification marks on air receivers Screw shaft, material ROLLED MANGANESE BRONZE Identification mark P. 412 RP. 175. S. 420 RP. 175.

Welded receivers, state Makers' Name
 Is the flash point of the oil to be used over 150°F YES
 Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with YES
 Full description of fire extinguishing apparatus fitted in machinery spaces SEE ATTACHED PLAN
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo NO If so, have the requirements of the Rules been complied with
 What is the special notation desired
 If the notation for ice strengthening is desired, state whether the requirements in this respect have been complied with
 Is this machinery duplicate of a previous case If so, state name of vessel M. V GIMADA

General Remarks (State quality of workmanship, opinions as to class, Speed restrictions, &c.) The machinery (Manchester Report N° 16640) has been constructed and installed under Special Survey in accordance with the Rules of the Society, approved plans and Secretary's letters. The quality of workmanship is good. The machinery was examined under working conditions during basin trials and full load conditions at sea with satisfactory results and is eligible in our opinion for classification with the records of LMC 8.55 TS

Oil Engines
Engines not to be run continuously at less than 290 RPM.
Notice board fitted in engine room

The amount of Entry Fee ... £ 20 : 0 : 0
 Special ... £ : : When applied for 10
 Donkey Boiler Fee... £ : : When received 10
 Travelling Expenses (if any) £

14 SEP 1955

H. Stephenson for self and
 Engineer Surveyor to Lloyd's Register of Shipping.
J. Blakenan

TUESDAY 25 OCT 1955

(The Surveyors are requested not to write on or below this space for Committee's Minute.)
 Committee's Minute
 Assigned See Rpt. 1.

