

4b.

REPORT ON OIL ENGINE MACHINERY

No. 5028

For Driving Deep Well Turbine Pump Port & Starboard

Received at London Office

112 JAN 1949

Writing Report 25th Oct. 1948 When handed in at Local Office 25th Oct. 1948 Port of Galveston, Texas

Survey held at Galveston, Texas Date, First Survey 26th April Last Survey 20th August 1948

Number of Visits 3

on the Twin Screw vessel M/V "JOBURE" Tons Gross Net

converted at Galveston, Texas By whom built Todd Shipyards Corporation Yard No. Port 914814 When built 1948

Engines made at Beloit, Wisconsin By whom made Fairbanks Morse Engine No. Starb. 915473 When made 1948

Boilers made at By whom made Boiler No. When made

Horse Power 175 Owners The Texas Co. Port belonging to Guiria

Horse Power as per Rule Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted Yes

Use for which Vessel is intended Petroleum in bulk

ENGINES, &c.—Type of Engines Model 31A64S 2 or 4 stroke cycle 2 Single or double acting Single

Maximum pressure in cylinders 1100 Diameter of cylinders 6 1/2" Length of stroke 9" No. of cylinders 5 No. of cranks 9

Indicated Pressure 69.7

Distance of bearings, adjacent to the Crank, measured from inner edge to inner edge 12" Is there a bearing between each crank Yes

Revolutions per minute 720 Flywheel dia. 27" Weight Means of ignition Compression Kind of fuel used Diesel

Crankshaft, Solid forged dia. of journals as per Rule 5.497 Crank pin dia. 5.497 Crank Webs Mid length breadth 10" Thickness parallel to axis 2 1/2"

Crankshaft, dia. of journals as fitted 5.497 Crank Webs Mid length thickness 2 1/2" Thickness around eyehole 2 1/2"

Main Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule Thrust Shaft, diameter at collars as per Rule

Main Shaft, diameter as fitted 5.99" Intermediate Shafts, diameter as fitted Screw Shaft, diameter as per Rule

Main Shaft, diameter as fitted Screw Shaft, diameter as fitted Is the tube shaft fitted with a continuous liner

Size Liners, thickness in way of bushes as per Rule Thickness between bushes as per Rule Is the after end of the liner made watertight in the

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

Does the liner do 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

Are the liners fitted, is the shaft lapped or protected between the liners Is an approved Oil Gland or other appliance fitted at the after end of the tube

If so, state type Length of Bearing in Stern Bush next to and supporting propeller

Propeller, dia. Pitch No. of blades Material whether Moveable Total Developed Surface sq. feet

Method of reversing Engines None Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication

Thickness of cylinder liners 1/2" Are the cylinders fitted with safety valves No Are the exhaust pipes and silencers water cooled or lagged with

conducting material Yes If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine

Drinking Water Pumps, No. 1 F.W. 2" each engine Is the sea suction provided with an efficient strainer which can be cleared within the vessel None

Other Pumps worked from the Main Engines, No. Diameter Stroke Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line No. and Size How driven

Is cooling water led to the bilges If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping

Arrangements

Power Driven Lubricating Oil Pumps including Spare Pump, No. and size

Are there two independent means arranged for circulating water through the Oil Cooler Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

Pumps, No. and size:—In Machinery Spaces In Pump Room

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Are the Bilge Suctions in the Machinery Spaces

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

Are all Sea Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates Are the Overboard Discharges above or below the deep water line

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Are the Blow Off Cocks fitted with a spigot and brass covering plate

Do the pipes pass through the bunkers How are they protected

Do the 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

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 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

Are there Air Compressors, No. No. of Stages Diameters Stroke Driven by

Auxiliary Air Compressors, No. No. of Stages Diameters Stroke Driven by

Are there all Auxiliary Air Compressors, No. No. of Stages Diameters Stroke Driven by

Is a provision made for first Charging the Air Receivers

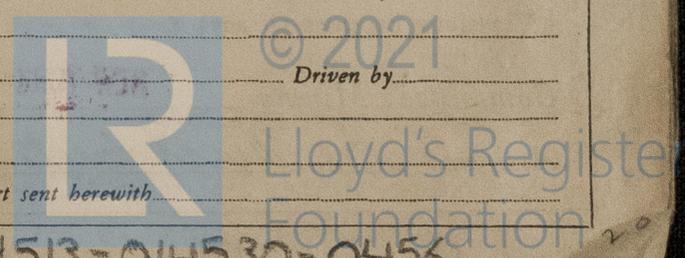
Are there Air Pumps, No. Diameter Stroke Driven by

Are there Auxiliary Engines crank shafts, diameter as per Rule No

Are there Auxiliary Engines crank shafts, diameter as fitted Position

Have the Auxiliary Engines been constructed under special survey Is a report sent herewith

014513-014530-0456



Is each receiver, which can be isolated, fitted with a safety valve as per Rule.....
 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, lap welded or riveted longitudinal joint..... Material..... Range of tensile strength..... Working pressure by Rules.....
 Starting Air Receivers, No..... One..... Total cubic capacity 8.33 cub.ft. Internal diameter 20"..... thickness .25" - .296
 Seamless, lap welded or riveted longitudinal joint Seamless Material Steel Range of tensile strength 63070-64900 Working pressure by Rules.....
 Actual 250

IS A DONKEY BOILER FITTED?..... -..... 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..... - Receivers..... - Separate Fuel Tanks..... -
 (If not, state date of approval)..... -

Donkey Boilers..... - General Pumping Arrangements..... - Pumping Arrangements in Machinery Space..... -

Oil Fuel Burning Arrangements..... -

SPARE GEAR.

Has the spare gear required by the Rules been supplied..... In excess of rule requirements.....

State the principal additional spare gear supplied.....

The foregoing is a correct description

Roberts

Manufacturer.

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..... Rods..... Connecting rods.....

Crank shaft..... Flywheel shaft..... Thrust shaft..... Intermediate shafts..... Tube shaft.....

Screw shaft..... Propeller..... Stern tube..... Engine seatings..... Engines holding down bolts.....

Completion of fitting sea connections..... Completion of pumping arrangements..... Engines tried under working conditions.....

Crank shaft, Material..... Identification Mark..... Flywheel shaft, Material..... Identification Mark.....

Thrust shaft, Material..... Identification Mark..... Intermediate shafts, Material..... Identification Marks.....

Tube shaft, Material..... Identification Mark..... Screw shaft, Material..... Identification Mark.....

Identification Marks on Air Receivers.....

Is the flash point of the oil to be used over 150° F.....

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with.....

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo..... If so, have the requirements of the Rules been complied with.....

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..... Yes..... If so, state name of vessel..... Tucupita

General Remarks (State quality of workmanship, opinions as to class, &c..... Now generally examined (see Galveston Report).....

and found to be efficiently installed and found securely fitted in vessel. Particulars and arrangements verified and so far as seen found in accordance with the particulars shown on this form.....

in general conformity with the Society's Rules. Machinery tried and tested under working conditions.....

found to be in good and safe working condition.....

The amount of Entry Fee See Rpt. 9: } When applied for, -
 - Special £ : : 19 -
 Donkey Boiler Fee £ : : - When received, -
 Travelling Expenses (if any) £ : : 19 -

James L. ...
 Engineer Surveyor to Lloyd's Register of Shipping



Committee's Minute..... NEW YORK DEC 22 1948

Assigned *See first Entry Report attached.*

Certificate (if required) to be sent to.....
 (The Surveyor's fee requested not to write on or below the space for Committee's Minute.)