

REPORT OF SURVEY FOR REPAIRS, &c., OF ENGINES AND BOILERS

(Received at London Office

2 APR 1951

Date of writing Report 20th March 1951 When handed in at Local Office 19 Port of Amsterdam

No in Reg. Book. Survey held at Amsterdam Date. First Survey 22nd Febr. Last Survey 13th March 1951 (No. of Visits 7)

55206 on the Machinery of the Motor Vessel Steel "Member" "CERONIA"

Gross Tonnage 8096 Vessel built at Schiedam By whom N.T. Wilton, Friesland When 1939 Month 4
 Net Tonnage 4210 Engines made at Rotterdam By whom N.T. Wilton When 1939 Month -
 Nominal Horse Power 502 Boilers, when made (Main) (Donkey) 1939
 Owners N.T. Petroleum B.V. "La Cerona" Owners' Address (if not already recorded in Appendix to Register Book.)
 Managers / Port The Hague Voyage /
 No. of Main Boilers / # Surveyed Afloat ⁸ in Dry Dock N.D.S.M. (State name of Dock.)
 No. of Donkey Boilers 1
 Steam Pressure in Main Boilers /
 in Donkey Boilers 180 lb

Particulars of Classification (which must be inserted precisely as in Register Book & Supplements).

CHARACTER * for Special Survey. Date of last Survey and of Periodical Surveys.	Years assigned now expired.	Machinery and Boiler Surveys (including date of N.B., if any)
+ 100 A1		+ LMC. CS. 7.48
Rob. 4.50		6.49
S.S. Feb. 6.49		D.B.S. 4.50
		C.L. 6.49
Carrying petroleum in bulk		

Particulars of Examination and Repairs (if any) Port ME conversion from Diesel oil to High Viscosity Fuel
DBS and part MS

Periodical Surveys, when held, must be reported in detail and seriatim in the terms of the Rules. State clearly the cause of Repairs, if any, and, in detail, the nature and extent of Examinations and subsequent Repairs. Repairs on account of Damage (the cause of which must be stated) should be separated from Repairs due to other causes; and besides being detailed in the body of the report, should be briefly summarised at the end of the report. State also the dates and initials of any letters respecting this case

Where damage cases where the Surveyor has not made a special damage report he is required to state whether he offered his services for this purpose, and why they were declined

Was a damage report made by anyone else? If so, by whom?

Did the Surveyor personally go inside each Main Boiler separately and make a through examination at this time?

Did the Surveyor personally go inside the Donkey Boiler separately and make a through examination at this time? Yes

What parts of the Boilers could not be thus thoroughly examined?

What special means, in the absence of internal examination, were adopted by the Surveyor to assure himself of the thorough efficiency of those parts of each Boiler?

State latest date of internal examination of each boiler 23/2 Donkey boiler Present condition of funnel(s) Good

Did the Surveyor examine the Safety Valves of the Main Boilers? Yes To what pressure were they afterwards adjusted under steam? 180 lb

Did the Surveyor examine the Safety Valves of the Donkey Boilers? Yes To what pressure were they afterwards adjusted under steam? 180 lb

Did the Surveyor examine all the manholes, doors and their fastenings of the Main Boilers? Yes and of the Donkey Boilers? Yes

Did the Surveyor examine the drain plugs of the Main Boilers? Yes and of the Donkey Boilers? Yes

Did the Surveyor examine all the mountings of the Main Boilers? Yes and of the Donkey Boilers? Yes

Has the screw shaft now been drawn and examined? no Has it a continuous liner? Yes Is an approved oil retaining appliance fitted at the after end? no

Has the shaft now been changed? Yes If so, state reasons Yes Has the shaft now fitted been previously used? Yes Has it a continuous liner? Yes

Is an approved oil retaining appliance fitted at the after end? Yes State date of examination of Screw Shaft Yes State the wear down in the stern bush 5,5 mm

Is electric light and/or power fitted? Yes If so, did the Surveyor examine the generators, motors, switchgear, cables and fuses? Yes

Has the insulation resistance of the generators, circuits and apparatus been tested and found to be not less than 100,000 ohms? Yes

Engine parts, when referred to by numbers, should be counted from forward.

If the Survey is not complete, state what arrangements have been made for its completion and what remains to be done.

Vessel placed in dry dock; propeller and outside fastenings examined and found in order.

MAIN ENGINE

No 3 & 7 crankpins examined and found with bottom end bearings in satisfactory condition.
Supercharge valve chests of all cylinders opened out, cleaned, examined and found with valves in satisfactory condition.

ME driven Bilge pump (Houttuin) opened out, examined and found in good condition.

Piston cooling water cooler and Main lubricating oil cooler transported to workshop, opened out, cleaned, hydro. tested, examined and found in good condition.

General Observations, Opinion, and Recommendation. — Please see Continuation sheet.

(State clearly what alteration, if any, is suggested to be made in the existing classification of the vessel's machinery in the Register Book, consequent upon this survey, and also any alteration required to be made in the records of the vessel's machinery, boilers, working pressures, &c.; thus, for example, BS 9.11, B&MS 9.11, LMC 9.11 or LMC 140 lb., FD, &c.)

The machinery being in a good condition I am of opinion that this vessel is eligible to remain as classed with fresh record of DBS. 3,51

Survey Fee (per Section 20) £ 230.- Fees applied for 23-3 10.51
 Special Damage or Repair Fee (if any) £ : Received by me, /
 Travelling expenses (if chargeable) £ 7.-

TUES. 24 APR 1951

Assigned DBS 3,51

O. P. L. H. J.
Engineer Surveyor to Lloyd's Register of Shipping.



Lloyd's Register Foundation

002750-002753-0081 1/2

Insert Character of Ship and Machinery precisely as in the Register Book.

OIL ENGINES
CONTINUOUS SURVEY.

Machinery of the M/V "CERONIA"

Main Engine Conversion from Diesel Oil to High Viscosity Fuel (H.V.F.):

Arrangements have been made for running the Main engine on H.V.F.

For this purpose the lifting height of the fuel valve needles has been increased 0.3 mm, this being the only alteration in organic respect to the engine.

The fuel to be used is supposed to have a viscosity of 1350° Redwood at 100°F, while its temperature at the fuel valve needles is to be kept at 180°F.

A plan of the F.O. Heating & Purifying arrangement is forwarded herewith for guidance.

For this arrangement are newly fitted:

A Purifier and a Clarifier, both of the "DE LAVAL" type, with attached transfer pumps

2 F.O. Heaters - Swinney Bros Ever Clean type (being found marked: ^{LLOYDS TEST 450 LBS} LN.22429/30. GWW.22-12-50)

A F.O. suction filter and a Auto-Clean Duplex filter

A Heating system for ME fuel valves (for manoeuvring only) consisting of a freshwater hotwell (the water being heated by steam ejection) and a hot freshwater circulating pump (electric driven MONO-type). At sea, when running full speed, this system is out of action, the fuel valves being cooled as usual from the general cooling system.

Steam heating coils (ϕ 50/60 mm) are fitted in Forward F.O. Deep tanks (P&S) and in the F.O. cross bunkers (P&S). Same by dr. tested after fitting with satisfactory results.

The H.V.F. Settling tanks have their existing heating coils.

NOTE: It will be observed from the plan that the Main engine can be changed over on Diesel oil instantaneously.

Fitting of a new 38 kW steam generator set:

The existing 18 kW steam generator set has been removed and replaced by a new one, made and supplied by Sunderland Forge & Eng. Co, consisting of:

An cyl. steam engine N° 43395 (crankshaft found marked: L.R. 1634. DP. 27-10-50), and

a Dynamo - N° 43396. Compound - 110V - 346 A - 38 kW - 640 r.p.m. A copy Certificate of this set has been requested for and will be forwarded when received.

A belonging new switchboard panel (pyrite), likewise supplied by Sunderland Forge, has been fitted to the existing switchboard, the dynamo being connected thereto with:

Main cables: 2 x 1 x 185 mm² GPLK (armoured paper lead cable)

Shunt cable: 2 x 6 mm² ORLK (steel wire braided rubber lead cable).

The dynamos (the new one and the existing Diesel dynamo) are NOT arranged to run in parallel.

The new dynamo is secured by an Automatic Circuit breaker which has been adjusted thus:

Direct trip = 500 A. Time relay trip = 350 A in 7 seconds.

After fitting the new set was tried under working condition with satisfactory results.

Evaporator opened out, examined and found in good condition; same afterwards tried under steam and safety valves adjusted.

Douley boiler examined internally and externally and found in good condition.

Mountings & safety valves opened out, examined and found or made in order.

Boiler afterwards tried under steam and found with the F.O. burning plant in good working order; its safety valves were adjusted.

On completion of the conversion the Main engine has been tried on H.V.F. for several hours under full load and found working satisfactorily.