

No. 1963

# Report of Survey for Repairs, &c., of Engines and Boilers.

(Received at London Office MON 21 FEB 1921)

Writing Report 9-2-20 When handed in at Local Office 9-2-20 Port of Naples

Survey held at Palermo & Naples Date, First Survey April 14<sup>th</sup> Last Survey 8-2-1921

on the Machinery of the Wood, Iron or Steel S.S. Angela ex River Clyde Master 30

Gross 3913 Vessel built at Pt Glasgow By whom Russell & Co. When 1905 3

Net 2526 Engines made at Greenock By whom T. G. Kincaid & Co. When 1905

ad 360 Boilers, when made (Main) 1905 (Donkey) 1905

in Boilers 2 Owner: Arturo Pardo Port Santander Voyage Tampa

key Boilers 1 If Surveyed Afloat in Dry Dock Palermo & Naples (Particulars of Classification (which must be inserted precisely as in Register Book & Supplements).

Boilers 180 (State name of dock.)

ey Boilers 80

Report No. LMC 401 Port Re. Class

Particulars of Examination and Repairs (if any) Re. Class

When held, must be reported in detail and in the terms of the Rules. State clearly the nature and extent of examinations and subsequent repairs. Repairs on machinery (the cause of which must be stated) should be separated from repairs due to other causes; and being detailed in the body of the report, should be briefly summarised at the end of the report. State also the initials of any letters respecting this case. H. 9-4-20

Where 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 not? Was a damage report made by anyone else? If so, by whom?

Surveyor personally go inside each Main Boiler separately and make a thorough examination at this time? Centre boiler yes (P & S boilers new)

Donkey in hold not being used, not examined

not done, state for what reasons? ✓

Parts of the Boilers could not be thus thoroughly examined? ✓

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? ✓

Surveyor examine the Safety Valves of the Main Boilers? yes To what pressure were they afterwards adjusted under steam? 180 lbs

Surveyor examine the Safety Valves of Donkey Boiler? ✓ To what pressure were they afterwards adjusted under steam? ✓

Surveyor examine all the manholes, doors and their fastenings of the Main Boilers? yes , and of the Donkey Boiler? ✓

Surveyor examine the drain plugs of the Main Boilers? none , and of the Donkey Boiler? ✓

Surveyor examine all the mountings of the Main Boilers? yes , and of the Donkey Boiler? ✓

Shaft now been drawn and examined? yes Is it fitted with continuous liner? yes or two liners? ✓ or is it without liners? ✓

Now been changed? no If so, state reasons ✓

Shaft now fitted new? ✓ Has it a continuous liner? ✓ or two liners? ✓ or is it without liners? ✓

Distance between lignum vitae of stern bush and top of after bearing of screw shaft? 1/8"

Survey is not complete state what arrangements have been made for its completion and what remains to be done? Complete.

Cylinders, pistons, slides, crank, thrust & tunnel lifting, all pumps, Condenser and suction and arrangement, screw shaft, propeller, and sea connections and fastenings examined.

Centre boiler examined throughout, the lower manholes refitted, all mountings on this boiler renewed.

Donkey boiler was taken out of the "Polperro" No 444. 1917-18 R.O. Malta, placed on board this vessel, Mark.

WALLSEND S & E CO. LD.  
No. 5286  
LLOYD'S TEST 360 LBS  
24-5-98, H.C.

Tested by hydraulic pressure 1 1/2 times W.P. found tight & sound.

General Observations, Opinion, and Recommendation:— This vessel's machinery

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, R.S. 9.11, R. & S.S. 9.11, or L.M.C. 9.11, 140 lb., &c.)

Eligible in my opinion for Re. Classification and

have record of + LMC 2.21. Note shaft Cont liner seen H. 20.

to Pt & Stt boiler new 1919 fitted 1921, Centre boiler made 1898,

2 Grate Surface 169 sq. ft. Heating Surface 6200 sq. ft. N.H.P. 370.

Expenses (if chargeable) 2288.00 9.2.20 5500.00 721.00 15/3/21

Committee's Minute TUE. 1 MAR. 1921

Red + LMC 2.21  
+ R.B. (P & S) 2.21  
+ R.B. (C) 98 refused 21

CERTIFICATE WRITTEN 15-3-21  
FRI. 9 MAR. 1923  
TUE. 20 NOV. 1923  
TUE. 13 JUN. 1921  
FRI. 31 AUG. 1923  
FRI. 30 NOV. 1923

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

Owner, Santander.

Is a Certificate required? If so, to be sent to



Naples

Continuation of Report No. 1963 dated 9th Feb. on the

## S.S. "ANGELA" EX "RIVER CLYDE"

Two new boilers placed on board and efficiently secured in position, this makes 3 main boilers instead of two formerly. These new boilers were built by Macoll & Pollock marked (1) 3520 (2) 3545  
 Lloyd's Test 1400 lbs. Lloyd's Test 1400 lbs.  
 G.P.H. 29.1.19 G.P.H. 7.3.19

all new mountings fitted to these boilers  
 easing gear fitted to all boilers.

Set of Safety Valves new boilers (Spring loaded double 3 1/4")  
 " " " " Old Boilers ( " " " " ) 3 1/4"  
 Old Boiler Grate Surface 66 sq ft Heating Surface 2500 sq ft.  
 New Boilers (2) " " 103 sq ft " " 3700 sq ft.  
 Total G.S. 169 sq ft Total 4562.00 sq ft  
 N.H.P. by Rule 370 for R.B. 6150

Tunnel. all tunnel shafting cleaned. bearings cleaned and adjusted. water service pipes taken adrift cleaned. refitted.  
Thrust Block. taken adrift cleaned. shaft placed in lathe collars and bearings trued up. thrust shoes remetalled and refitted to place. water service to same place in order.

Crank Shaft. lifted and taken to shop. placed in lathe. tried for truth. Journals and pins skimmed up. the lower halves of three bearings remetalled. Crank shaft rebedded and shafting lined up. eccentric sleeves and straps cleaned up and adjusted. the lower halves of three crank pin brasses remetalled. Crank pin brasses re-bedded. all eccentric rods taken to shop. cleaned up in lathe and new brasses supplied to fork ends. afterwards taken on board and fitted to place. M.P. & L.P. valve gear taken to shop. cleaned up and new brass parts supplied. H.P. Valve gear entirely renewed. all valve spindle guide brasses renewed. all valve spindles placed in lathe, skimmed up and rebushed. H.P. & L.P. drag rods renewed. new brasses and bolts fitted. all new pins fitted to eccentric sleeves. a new top ring fitted to H.P. piston valve. H.P. steam chest cover renewed. L.P. balance cylinder, new piston, rings & cover fitted. reversing shaft one new bearing cap supplied and fitted. connecting rods taken to shop. cleaned up in lathe and new top end bearings fitted. Piston rods taken to shop skimmed up and new neck bushes fitted. all guide shoes remetalled on the ahead side and refitted, and guides trued up.

P.T.O.

all glands of piston & valve rods rebushed and several gland studs renewed.

main cocks on all cylinders and valve chests renewed. all escape valves on cyls top & bot renewed. main engine stop valve. seat. valve. throttle valve. over. rods. levers and handwheel renewed. starting valves to M.P. & L.P. cylinders renewed. new rods and levers fitted.

all indicator cocks and pipes renewed.

running gear. taken to shop overhauled. a new worm made and fitted.

reversing Engine taken to shop. new frame. bearings. etc. fitted and engine placed in order.

new reversing rod fitted. new brasses fitted. pumps. Air. Circ. feed & bilge pumps skimmed up and rebushed.

2 pump crosshead placed in lathe and new guide fitted.

2nd levers trued up. journals dressed. all new brasses fitted and links lined up.

red. Circulating and bilge pump valves taken adrift. cleaned and ground in.

2 opened out. cleaned and new lagging fitted.

2 pistons opened out. cleaned. rings refitted and number of junk ring studs and nuts renewed.

condenser. the top fore and aft ends were broken. repaired by fitting solid cast brass plates

se patches fitted in such a manner that they can be taken as a permanent repair. all tubes drawn

and tested about 50% renewed. forward tube plate renewed. Condenser retubed. repacked and

tested. both Condenser doors renewed. all valves renewed.

2 holding down bolts examined & hardened up.

2 engine room gratings & ladders repaired and renewed as found necessary.

2 stokehold gratings and ladders repaired and renewed as found necessary.

handrails and guard plates renewed.

2 tank suction and filling pipes & connections

on adrift. examined and repaired and partly renewed

bilge suction valves. cocks. pipes taken adrift

examined, repaired and partly renewed.

discharge chests and valves on ship's side renewed.

Contd.

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Lloyd's Register  
Foundation



"ANGELA" EX "RIVER CLYDE"

50% of Discharge pipes renewed,  
 all aux steam piping renewed and tested to  
 twice the working pressure, and annealed  
 all exhaust piping and valves renewed.  
 all waste steam pipes renewed.  
 all feed pipes renewed and tested to twice  
 the working pressure, and annealed  
 all blow-off pipes renewed.  
 all main steam pipes renewed and tested  
 to twice the W.P. and annealed,  
 Steering engine and whistle steam pipes renewed,  
 main injection valve renewed.  
 all auxiliary pumps overhauled and renewed  
 as necessary and placed in good working  
 condition,  
 Evaporator opened out, cleaned. coils tested  
 and repaired, all mountings and pipe connections  
 to evaporator renewed.  
 Engine room and stokehold flooring renewed,  
 new screen bulkhead fitted between engines  
 and boilers.  
 On completion the engines and pumps were  
 tried under steam and found to work satisfactorily.

A.D.L.

It is observed from Malta Rpt 16.2.1920 that  
 the M.P. & L.P. back Columns (which form with main  
 condenser one complete casing) were broken beyond  
 repair, this was not so, the main condenser  
 was broken at each end on the top ship side  
 corner. now efficiently repaired as stated in  
 body of Report.