

## REPORT of SURVEY for REPAIRS, &amp;c.

Date of writing Report 21/10/38 When handed in at Local Office 21/10/38 Port of PIRAEUS  
No. in Survey held at Piraeus Date, First Survey 23/3/38 Last Survey 11/10/38  
Reg. Book. 44360 on the Wood, Iron or Steel S.S. KEHREA (No. of Visits -18-)

TONNAGE:— Built at Port Glasgow By whom Dunlop, Bremner & Co. Ltd. When 1912 - 7  
GROSS 1968 Owners J. N. Epiphaniades Owners' Address (if not already recorded in Appendix to Register Book).  
UNDER DK. 1606 Managers (if not already recorded in Appendix to Register Book).  
NET 1118 Port belonging to Piraeus

Surveyed Afloat or in Dry Dock? Both Name of Dock Nº 20, Piraeus Destined Voyage (blank)  
WB=CellDBorDBa feet; uE&B feet; f feet  
total capacity tons. FPT tons; APT tons; MT feet tons.

N.B.—All alterations in the existing records should be underlined.  
If the Vessel has Water Ballast Tanks, state whether the manhole covers have been removed, and the insides of the tanks examined. Also state the amount of deterioration (if any) found in the thicknesses of the floors, framing, girders, and of the inner bottom plating, especially in the boiler space.

Last Report, No. 2385 Port Hul

(Periodical Surveys, when held, must be reported in detail and serially 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 summarised in the form shown below. Whenever the replacement of Anchors or Chains is reported the particulars should be clearly stated in the space provided on the back of this form. State also the dates and initials of any letters respecting this case.)

In 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 to whom and why they were declined

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).
<u>H 100A1.</u>		<u>ELMC.</u>
<u>2.34.</u>		<u>MS. 7.34.</u>
<u>SS. S.D. Nº 3-2.25.</u>		<u>BS. 9.37.</u>
<u>SS. PR. Nº 2-34.</u>		<u>TS (CL) 7.36.</u>
<u>Cargo batteries not fitted.</u>		

Society's Freeboard (if assigned) as 6.48 painted on Ship and now verified (blank)

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

REPAIRS, OR EXAMINATION AS PER RULE, FOR 2<sup>ND</sup> SPECIAL SURVEY Nº 3.

Please see Piraeus Report of General Examination, Nº 4420, dated 8/3/34.  
Now done: Vessel placed in dry docks. The bottom, stern frame and rudder (rudder lifted) cleaned, examined and recoated. All close ceiling and cement checks in all holds & cross bunkers & foot plates in boiler & engine spaces removed, bidders cleaned & recoated. All steelworks externally above the light load line & internally throughout the peaks, holds, cross bunkers, boiler & engine spaces thoroughly scaled, examined & recoated. Plating in way of side lights examined. Shell plating drilled with results as shown on the attached slip. All double bottom tanks, the deep tanks aft & the fore & after peak tanks cleaned, steelworks scaled as necessary, examined internally & externally, recoated & tested.

SUMMARY OF DAMAGE REPAIRS:—	Shell Plates.	Frames.	E. Frames.	Floors.	Beams.	Str. Plates.	Dk. Plates.	Other Items:—
Renewed								
Removed and Faired or Repaired								
Faired or Repaired in place								

## PRESENT CONDITION OF THE

Decks <u>Good</u>	State if Tanks have been examined inside <u>Yes</u>	Air and Sounding Pipes <u>Good</u>	Copper, or Y.M. of Wood Vessels <u>(State if on Felt).</u>
Caulking of Decks <u>"</u>	State if Tanks now tested <u>Yes</u>	Dble. Plates under Sounding Pipes <u>"</u>	When put on, Month <u>Year</u>
Coamings <u>"</u>	Bulkheads <u>Good</u>	Engine Room Skylights <u>"</u>	Boats <u>Good</u>
Beams & Fastenings <u>"</u>	Ceiling <u>"</u>	Coal Bunkers, Open'gs, Lids, &c. <u>"</u>	Masts, Yards, &c. <u>"</u>
Outside Plating <u>"</u>	Cement or Asphalt <u>"</u>	Oil Bunkers <u>"</u>	Condition, how ascertained <u>By examination</u>
" in way of sidelights <u>"</u>	(State which.) <u>"</u>	Scuppers <u>"</u>	(State if wedges removed) <u>Yes</u>
Breasthooks <u>"</u>	Rudder <u>"</u>	Cargo Hatchways <u>"</u>	Sails <u>"</u>
Transoms <u>"</u>	Steering gear and its connections <u>"</u>	Hatches <u>"</u>	Equipment letter <u>"</u>
Frames <u>"</u>	Windlass <u>"</u>	Planking of Wood Vessels <u>"</u>	Anchors, No. of <u>3 B 15 14</u>
Reverse Frames <u>"</u>	Have pumps now been examined and found efficient? <u>Yes</u>	Caulking ditto <u>"</u>	Chain Locker <u>Good</u>
Longitudinals <u>"</u>	Have Sluice Valves now been examined and found efficient? <u>None</u>	Treenails ditto <u>"</u>	Cables (State if now ranged) <u>Yes</u>
Transverses <u>"</u>	Have Watertight Doors now been examined and found efficient? <u>Yes</u>	Breasthooks & Stemson ditto <u>"</u>	PLEASE SEE OVERLEAF.
Floors <u>"</u>	Have Ventilators and their Coamings been examined and found efficient? <u>Yes</u>	Transoms Pointers, & Crutches ditto <u>"</u>	length mean diam.
Keelsons <u>"</u>		Timbers of Frame at openings ditto <u>"</u>	(on board) 240 mm. size 1 1/16"
Stringers <u>"</u>		Ditto Ditto at other places ditto <u>"</u>	Rule length
Inner Bottom Plating <u>"</u>		Stringers, Clamps & Shells ditto <u>"</u>	Hawser & Warps <u>Sufficient</u>
		Salting ditto <u>"</u>	Standing and Running Rigging <u>Good</u>
		(State if examined.)	

General Observations, Opinion as to Class, Recommendation, &c.:— This vessel is in an efficient condition & eligible, in our opinion, to be continued as at present classed - B 100A1 - with fresh record of survey 10.38 & notation of St. Pir. 2<sup>ND</sup> Nº 3 - 10.38, subject to 45 fathoms of anchor stud link chain cable 1 1/2" diameter & 2 lengths (approx. 86 feet total) of steering chain - all of proved weight, size & test, being placed on board with the least possible delay. Recommended that the items in S.P. list respecting intended plating (P.S.) stringers in F.P. & deck plating R.G.D. be deleted.

Survey Fee (per Section 29) £ 62 : 10 : 0 Fees applied for, 21/10/1938  
Special Damage or Repair Fee (if any) £ 10 : 0 : 0 Received by me, R.G.D.  
Travelling Expenses (if chargeable) £ 2 : 5 : 0  
Second Surveyor's Fee (if any) £ 1 : 0 : 0

Committee's Minute Deferred for Comp  
Character Assigned Inte Ant  
TUE 8 NOV 1938  
Surveyor Robert G. Knox  
Surveyor to Lloyd's Register of Shipping.

Lloyd's Register Foundation  
subject



S.S. KEHREA

under water pressure in accordance with the Rules & found or made tight. The partly plated well under boilers & the wells forward and aft of the deep tanks cleaned, all steelworks scaled, examined and recoated and cement in bottom hammer tested and found sound. Anchors examined and chain cables ranged & gauged. The chain locker cleaned, ship's side framing & steelworks in way scaled, examined and recoated. The decks, deck erections, bulwarks, stanchions & railings, masts, mast wedges, rigging, general equipment, hatchways, hatch covers and supports, tarpaulins, cleats & battens, ventilator coamings & covers, auxiliary & steam steering gear & connections, steering engine, windlars & engine, hawse & chain pipes, hand pumps to flat above fore peak tanks (Downton pump has been removed at some prior time) watertight doors, air & sounding pipes & doubling plates examined & found or placed in order & the freeboard verified.

All rule requirements carried out.

NOTE: Anchor chain cables.

195 fathoms ranged & gauged.  $1\frac{9}{32}$ " minimum mean diameter, and 45 " " "  $1\frac{8}{32}$ " diameter, renewable  $1\frac{9}{16}$ "

NOTE: Steering chains. Two lengths of chain (approx. 86 feet total length) found somewhat worn but efficient for the present.

The Owners Superintendent stated that the steering chain would be ordered forthwith & placed on board at Antwerp to where the vessel is now en route from Salonica, & that the anchor cable would be renewed at the earliest opportunity.

Indented shell plating: With regard to the indented shell plating mentioned in Piræus Report No. 4420 as requiring to be dealt with at the Special Survey, we have to state that an error was then made inasmuch as it was reported that Plates G 1 & 2 at port side would require fairing, whereas they were actually renewed at that time, as will be seen from the entry at the bottom of page 2 of the same report. Respecting the other indented plates they have been dealt with as detailed in this present report.

Now Done. Repairs - Wear & Tear.

NOTE C.P.R. denotes dropped & part renewed.

Shell plates: (All plates numbered from forward).

Port side:

D. Strake - No 2 plate renewed.

No 3 " C.P.R.

E. " - No 2, 3 & 4 plates renewed.

No 7, 8 & 9 plates released & faired in place.

No 11 part doubled.



S.S. KEHREA.Shell plating:Port side (Continued).

F strake - No 1 plate part doubled.

No 4 " renewed.

G strake - Nos 4, 5, 6, 7, 10, 11 &amp; 13 plates renewed.

No 9 plate C.P.R.

H strake - Nos 10 &amp; 11 plates renewed.

Bilge Keel - One length of bulb plate removed, faired &amp; refitted.

Starboard side:

D strake - No 1 plate C.P.R.

No 2 " renewed.

E strake - Nos 1, 2, 3, 4, 5 &amp; 6 plates renewed.

No 7 plate C.P.R. &amp; remaining part released &amp; faired in place.

No 8 plate released &amp; faired in place.

No 9 plate released &amp; faired in place &amp; an internal doubling fitted in way of one frame space.

F strake - No 1 plate part doubled.

Nos 4, 5, 6 &amp; 9 plates renewed.

G strake - Nos 2, 3, 4, 6, 10, 11 &amp; 13 plates renewed.

No 9 plate C.P.R.

H strake - Nos 10 &amp; 11 plates renewed.

Bilge Keel - Two lengths of bulb plate removed, faired &amp; refitted.

All seams &amp; riveting of new and repaired shell plating and framing satisfactorily tested by hose jet of water.

Rudder - 5 gudgeon bushes renewed.Rudder Quadrant. The bottom angle on quadrant plate renewed.Miering Gear. 4 wheel pins renewed.Collision Bulkhead. In way of chain locker - One vertical angle stiffener renewed.

In way of Fore peak tanks - The two lower vertical wing plates - one each p.s. - C.P.R.

The upper part of the foundation plate doubled full breadth of tanks.

In Fore peak tanks: 2 B.H. shell frames - one each p.s. - renewed.

10 B.H. shell frames - 5 each p.s. - C.P.R. with suitable shift of butts &amp; boom bars fitted at new butts.

The two stringer plates (please see Piraeus Rpt. No 4420) - one each p.s. -

&amp; the transverse stiffener plate on collision bulkhead all entirely renewed.

One shell lug and one bracket renewed.



S.S. "KEHREH"

In way of Nos 1 & 2 holds. (only a wooden bulkhead separates these two compartments).

16 B.H. shell frames - 8 each p.s. - C.P.R. with suitable shift of butts & B.H. back bosom bars fitted at new butts, riveted to shell plating and framing.

58 shell frames - 35 port & 23 star - reinforced in way of where locally wasted by fitting B.H. back bosom bars riveted to shell plating & framing.

The upper & lower side stringer plates & their face angles renewed for practically their full length at p. & s. sides of holds.

Two horizontal brackets renewed.

Approx. 64 rivets renewed in connection of bilge brackets to tank margin angles.

Aft bulkhead (non-waterlight) - One port side vertical wing plate renewed.

In way of Nos 3 & 4 holds (only a wooden bulkhead separates these two compartments).

22 B.H. shell frames - 10 port & 12 star - C.P.R. with suitable shift of butts & B.H. back bosom bars fitted at new butts, riveted to shell plating & framing.

24 shell frames - 9 port & 15 star - similarly reinforced in way of local wastage, as in Nos 1 & 2 holds.

The upper, middle & lower side stringer plates & their face angles renewed for practically their full length at port & star sides of holds. (There is no lower stringer in No 4 hold owing to the deep tank being built in here).

3 horizontal brackets renewed.

Approx. 88 rivets renewed in connection of bilge brackets to tank margin angles in No 3 hold.

Forward bulkhead of No 3 hold - 8 brackets from vertical stiffeners to tank top, renewed.

Tunnel: The wood covering on tunnel top in No 3 hold renewed.

Tunnel Ventilator: Renewed.

Close ceiling wood, on side bilges, renewed & relaid in good condition on tank tops in way of cargo holds and cross bunker.

Double bottom tanks:

No 1 tank: Approx. 350 rivets renewed in connection of floor plates to tank margin angles.

Partly plated well (under Boilers). One port side tie plate part doubled.

No 2 tank (under engines). The lower part of port side after waterlight floor part doubled.



S.S. "KEHREH".

Nº 4 tank: Approx. 210 rivets renewed in connection of floor plates to tank margin angles.

2 floors in starboard side of tank part doubled.

Deep Tank 2: Approx. 196 <sup>rivets</sup> renewed in connection of beams to beam knees.

After peak tank: 2 stringer plates - one each p.s. - and stringer angles renewed. 4 horizontal brackets renewed. 10 brackets, from bulkhead vertical stiffeners to under side of deck plating, renewed.

Wash plate - One plate & one angle stiffener renewed.

Doubling Plates: Fitted under sounding pipes in all double bottom tanks & in bilges in all holds - 12 plates in all.

Sounding Pipes: To Nº 1 D.B. tank & Deep Tank, to Nº 2 hold bilges, p.s., & to Nº 3 hold bilge - all partly renewed.

Air Pipes: P & V pipes from Nº 2 tank & starboard pipe from Nº 4 tank partly renewed.

Upper deck plating & Bulwark Stanchions.

In way of fore well :- 4 deck plates, forward of Nº 1 hatchway, part doubled.

One port side deck plate, abaft of Nº 1 hatchway, renewed.

11 bulwark stanchions removed, faired & refitted.

In way of fore part of Nº 3 hold :- Under the quarter deck :- 7 deck plates C.P.R. & 5 bracket plate angles renewed.

Raised Quarter deck plating & Bulwark Stanchions: (Please see Piræus Rpt. 4420).

12 deck plates renewed, one C.P.R. & 3 part doubled.

15 bulwark stanchions removed, faired & refitted.

Bridge deck plating: All wood sheathing removed from port side of deck & partly removed from starboard side and after repairs relaid with part new as necessary.

Cement in galley removed, plating scaled, examined and found good & recemented.

4 deck plates renewed & one part doubled & one length of machinery casing deck angle renewed at port side and

2 deck plates part doubled at starboard side.

Saloon House on Bridge deck: 3 casing plates part doubled.

Cargo Hatchways on Freeboard Deck.

Nº 1 hatchway: Forward end coaming plate part doubled & after coaming plate renewed. Port side coaming cropped & part renewed & starboard side coaming part doubled.

Nº 2 hatchway: Forward end coaming plate renewed & port side coaming C.P.R.



S.S. KEHREFA.

No 3 Hatchway: Forward end coaming plate C.P.R. & part renewed & after coaming plate renewed. Port side coaming C.P.R.

No 4 Hatchway: Forward end coaming plate renewed.

In way of No 1, 2, 3 & 4 Hatchways. The two shifting beams at ~~each~~ each hatch (8 in all) renewed, complete with their angle mountings & all angle sockets for these beams also renewed.

10 centre & 24 side (all steel) fore & after renewed complete with their angle mountings.

40 angle mountings renewed on remaining fore and after. 72 fore & after sockets renewed.

Approx. 161 plates renewed.

Cross bunker (trunked) hatchway. Two trunk plates part doubled & eleven vertical angle stiffeners in way of trunk renewed. 8 angle mountings on fore and after renewed. 34 plates renewed.

In way of the 4 cargo hatchways & cross bunker hatch. 174 white pine wood covers (single planks 3" thick) renewed. 6 tarpaulins renewed.

Machinery casings on Bridge Deck. 8 plates of the casing top & sides C.P.R. & 3 part doubled.

Ventilator coaming: Starboard side coaming 15 No 2 hold renewed.

Fore Mast. The lower part of the fore mast from under side of upper deck to the double bottom tank top renewed.

Main Mast. The lower part of the mast from under side of quarter deck to tank top renewed.

Winch. The steel pinion wheel on crank shaft renewed.

Lawse pipes: The upper and lower parts of both lawse pipes built up by electric welding where somewhat locally grooved. A number of minor repairs effected generally.

R.G.K. + P.F.B.

NOTE: The Midship section plan is herewith attached.

R.G.K.