

REPORT ON MACHINERY.

No. 25823

Port of Sunderland

Received at London Office WED. 16 SEP 1908

No. in Survey held at Sunderland

Date, first Survey 1st June

Last Survey 12 Sept. 1908

Reg. Book.

on the S. S. Onaida

(Number of Visits 23)

Master

Built at Graysmouth. By whom built Greenock & Graysmouth Bldg Co When built 1908

Engines made at Sunderland & Huddersfield By whom made Richardsons Westpark Ltd

when made 1908

Boilers made at Huddersfield By whom made do

when made 1908

Registered Horse Power

Owners Anglo American Oil Co

Port belonging to London

Nom. Horse Power as per Section 28

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

ENGINES, &c.—Description of Engines Inverted Triple No. of Cylinders Three No. of Cranks Three

Dia. of Cylinders 14" 23" 37" Length of Stroke 24" Revs. per minute 120 Dia. of Screw shaft as per rule Material of screw shaft as fitted

Is the screw shaft fitted with a continuous liner the whole length of the stern tube Is the after end of the liner made water tight in the propeller boss yes

If the liner is in more than one length are the joints burned If 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 Length of stern bush

Dia. of Tunnel shaft as per rule Dia. of Crank shaft journals as per rule Dia. of Crank pin 1 1/2" Size of Crank webs 12" x 5" Dia. of thrust shaft under collars

Dia. of screw as fitted Pitch of Screw No. of Blades State whether moveable Total surface

No. of Feed pumps Two Diameter of ditto 2 1/2" Stroke 12" Can one be overhauled while the other is at work yes

No. of Bilge pumps Two Diameter of ditto 2 1/2" Stroke 12" Can one be overhauled while the other is at work yes

No. of Donkey Engines Sizes of Pumps No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room In Holds, &c.

No. of Bilge Injections sizes Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine room & size

Are all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible Are the sluices on Engine room bulkheads always accessible

Are all connections with the sea direct on the skin of the ship Are they Valves or Cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Discharge Pipes 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

What pipes are carried through the bunkers How are they protected

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges

Dates of examination of completion of fitting of Sea Connections of Stern Tube 12.9.08 Screw shaft and Propeller 12.9.08

Is the Screw Shaft Tunnel watertight Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record) Manufacturers of Steel

Total Heating Surface of Boilers Is Forced Draft fitted No. and Description of Boilers

Working Pressure Tested by hydraulic pressure to Date of test No. of Certificate

Can each boiler be worked separately Area of fire grate in each boiler No. and Description of Safety Valves to each boiler

Area of each valve Pressure to which they are adjusted Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers Length Material of shell plates

Thickness Range of tensile strength Are the shell plates welded or flanged Descrip. of riveting: cir. seams

long. seams Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps

Per centages of strength of longitudinal joint Working pressure of shell by rules Size of manhole in shell

Size of compensating ring No. and Description of Furnaces in each boiler Material Outside diameter

Length of plain part Thickness of plates Description of longitudinal joint No. of strengthening rings

Working pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom

Pitch of stays to ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules

Material of stays Diameter at smallest part Area supported by each stay Working pressure by rules End plates in steam space:

Material Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays

Diameter at smallest part Area supported by each stay Working pressure by rules Material of Front plates at bottom

Thickness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules

Diameter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays

Pitch across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and

thickness of girder at centre Length as per rule Distance apart Number and pitch of stays in each

Working pressure by rules Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked

separately Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet

holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness

If stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed

Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear



W996-0304

VERTICAL DONKEY BOILER— Manufacturers of Steel

No. _____ Description _____

Made at _____ By whom made _____ When made _____ Where fixed _____

Working pressure tested by hydraulic pressure to _____ Date of test _____ No. of Certificate _____ Fire grate area _____ Description of Safety _____

Valves _____ No. of Safety Valves _____ Area of each _____ Pressure to which they are adjusted _____ Date of adjustment _____

If fitted with easing gear _____ If steam from main boilers can enter the donkey boiler _____ Dia. of donkey boiler _____ Length _____

Material of shell plates _____ Thickness _____ Range of tensile strength _____ Descrip. of riveting long. seams _____

Dia. of rivet holes _____ Whether punched or drilled _____ Pitch of rivets _____ Lap of plating _____ Per centage of strength of joint _____ Rivets _____ Plates _____

Working pressure of shell by rules _____ Thickness of shell crown plates _____ Radius of do. _____ No. of stays to do. _____ Dia. of stays _____

Diameter of furnace Top _____ Bottom _____ Length of furnace _____ Thickness of furnace plates _____ Description of joint _____

Working pressure of furnace by rules _____ Thickness of furnace crown plates _____ Stayed by _____

Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____ Dates of survey _____

SPARE GEAR. State the articles supplied: *Two each bolts nuts for top & bottom ends & main bearings
6 coupling bolts & nuts & junking bolts. Sets of gland studs, valves for all pumps. Bolts
nuts, & iron assorted.*

The foregoing is a correct description,

Richardsons Westgarth & Co., Ltd.
Henry James, Manufacturers

Assistant Secretary.
Dates of Survey: During progress of work in shops - 1908: June 1, 12, 15, 19, 30. July 2, 6, 10, 14, 23, 29. Aug: 7, 11, 13, 17, 19, 22, 26, 27, 28, 31. Sept 8, 12
while building: During erection on board vessel - -
Total No. of visits: 23

Is the approved plan of main boiler forwarded herewith *ho*

" " " donkey " " " *ho*

Dates of Examination of principal parts—Cylinders *8.9.08*. Slides *11.8.08*. Covers *11.8.08*. Pistons *11.8.08*. Rods *7.8.08*

Connecting rods *7.8.08*. Crank shaft Thrust shaft Tunnel shafts Screw shaft Propeller

Stern tube Steam pipes tested Engine and boiler seatings Engines holding down bolts

Completion of pumping arrangements Boilers fixed Engines tried under steam

Main boiler safety valves adjusted Thickness of adjusting washers

Material of Crank shaft *Glasgow Rep.* Identification Mark on Do. *2505 AF* Material of Thrust shaft Identification Mark on Do. _____

Material of Tunnel shafts Identification Marks on Do. _____ Material of Screw shafts Identification Marks on Do. _____

Material of Steam Pipes Test pressure

General Remarks (State quality of workmanship, opinions as to class, &c.)

The machinery of this vessel as stated above has been constructed under special survey. The material & workmanship found good & efficient & after being erected at this Port. was temporarily secured on board the vessel which left for Huddersbrough for completion.

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

E. J. Stoddart & R. W. Coomber
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute **FRI. 16 OCT 1908**
Assigned



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

Signature _____
No., Date _____
Whether Fore _____
British _____
Number _____
Number _____
Rigged _____
Stern _____
Build _____
Galleries _____
Head _____
Frame _____
vesse _____
Number _____
Number _____
and _____
Total t _____
at si _____
No. of _____
Engines _____
/ _____
No. of Sha _____
/ _____
Under T _____
Closed-i _____
Space _____
Poop _____
Forec _____
Bow _____
Other _____
Spaces f _____
Section _____
1894, _____
Deductio _____
M _____
No. of O _____
Name, R _____
Ar _____
Joh _____
Dated _____
WB & L _____
Working pres _____