

REPORT ON MACHINERY.

No. 20539

FRI. AUG. 5 1921

Date of writing Report 10th July 1921 When handed in at Local Office 19 Port of New York
No. in Survey held at Kearny, New Jersey Date, First Survey 25 July 26 Last Survey 7 July 1921
Reg. Book. on the Twin Screw Steel Oil Tanker VICTOLITE Hull 49 Maching ft. Tons { Gross 10896.61
Master G. Slater Built at Kearny N.J. By whom built Federal Ship Building Co When built 1921
Engines made at Kearny N.J. By whom made Federal Ship Building Co when made 1921
Boilers made at Kearny N.J. By whom made Federal Ship Building Co when made 1921
INDICATED Registered Horse Power 3500 Owners Standard Oil Co of New Jersey Port belonging to Victoria, B.C.
Nom. Horse Power as per Section 28 676 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Vertical Reciprocating Triple Exp. No. of Cylinders 3 No. of Cranks 3
Dia. of Cylinders 20 1/2 x 35 x 60 Length of Stroke 42 Revs. per minute 90 Dia. of Screw shaft 12 5/8 Material of screw shaft S
Is the screw shaft fitted with a continuous liner the whole length of the stern tube Yes 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 Welded 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 Liner fits tight If two
liners are fitted, is the shaft lapped or protected between the liners protected Length of stern bush 4'-6"
Dia. of Tunnel shaft 11 3/8 as per rule 11 3/8 Dia. of Crank shaft journals 11 3/8 as per rule 11 3/8 Dia. of Crank pin 12 Size of Crank webs 24 1/2 x 8 1/4 Dia. of thrust shaft under
collars 12 Dia. of screw 15'-0" Pitch of Screw 14'-2" No. of Blades 3 State whether moveable Yes Total surface 50.292 sq ft 1 prop.
No. of Feed pumps 3 Diameter of ditto 12 x 8 Stroke 24 Can one be overhauled while the other is at work Yes
No. of Bilge pumps 3 Diameter of ditto 8 1/2 x 8 Stroke 12 Can one be overhauled while the other is at work Yes
No. of Donkey Engines 1 Sizes of Pumps 8 x 5 x 12 No. and size of Suctions connected to both Bilge and Donkey pumps
In Engine Room 8-3 1/2" Engine & Stokehold In Holds, &c. 4-6" Cargo pump room
2-2 1/2" Forward pump room 2-2 1/2" Forward Hold
No. of Bilge Injections 2 sizes 8" Connected to condenser, or to circulating pump C.P. Is a separate Donkey Suction fitted in Engine room & size Yes 3 1/2"
Are all the bilge suction pipes fitted with roses Yes Are the roses in Engine room always accessible Yes Are the sluices on Engine room bulkheads always accessible Yes
Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Both
Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes Are the Discharge Pipes above or below the deep water line Below
Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Yes Are the Blow Off Cocks fitted with a spigot and brass covering plate Yes
What pipes are carried through the bunkers Steam to pump room & deck machy How are they protected Boxed in with steel plate
Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes
Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes
Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from No Tunnel Machinery Aft.

BOILERS, &c.—(Letter for record S) Manufacturers of Steel Carnegie & Illinois Steel Co.
Total Heating Surface of Boilers 9618 sq ft Is Forced Draft fitted Yes No. and Description of Boilers 3 Multitubular Single ended Scotch
Working Pressure 210 lbs Tested by hydraulic pressure to 315 lbs Date of test 11-1-21 No. of Certificate 398, 399, 400
Can each boiler be worked separately Yes Area of fire grate in each boiler Oil burning No. and Description of Safety Valves to
each boiler 1-3 1/2" Twin Spring Area of each valve 9.62 sq ft Pressure to which they are adjusted 210 lbs Are they fitted with easing gear Yes
Smallest distance between boilers or uptakes and bunkers or woodwork 36" Mean dia. of boilers 16'-0" Length 11'-6" Material of shell plates S
Thickness 1 3/32" Range of tensile strength 26.8 to 32.0 tons Are the shell plates welded or flanged No Descrip. of riveting: cir. seams D.R. LAP
long. seams TR/DBS Diameter of rivet holes in long. seams 1 1/16" Pitch of rivets 9 1/4" Lap of plates or width of butt straps 23 3/4"
Per centages of strength of longitudinal joint rivets 105.5 Working pressure of shell by rules 228# Size of manhole in shell 16 x 12"
Size of compensating ring 37 x 33" No. and Description of Furnaces in each boiler 4 Morison Material S Outside diameter 44 1/4"
Length of plain part top 105.5 Thickness of plates crown 5/8" Description of longitudinal joint Weld No. of strengthening rings 7
Working pressure of furnace by the rules 215# Combustion chamber plates: Material S Thickness: Sides 1 1/8" Back 3/4" Top 1 1/8" Bottom 7/8"
Pitch of stays to ditto: Sides 7 1/2 x 7 1/4" Back 8 x 8" Top 7 1/2 x 7 1/4" If stays are fitted with nuts or riveted heads Yes Working pressure by rules 222#
Material of stays S Area at smallest part 1.8 sq ft Area supported by each stay 8 54.375 sq ft Working pressure by rules 248# End plates in steam space: 248
Material S Thickness 1 1/8" Pitch of stays 15 1/2 x 15" How are stays secured D. Nuts Working pressure by rules 217# Material of stays S
Area at smallest part 5.989 sq ft Area supported by each stay 232.5 sq ft Working pressure by rules 266# Material of Front plates at bottom S
Thickness 1" Material of Lower back plate S Thickness 1" Greatest pitch of stays 13 x 8" Working pressure of plate by rules 220#
Diameter of tubes 2 3/4" Pitch of tubes 4 x 3 3/4" Material of tube plates S Thickness: Front 1" Back 1 3/8" Mean pitch of stays 7 1/2 x 12"
Pitch across wide water spaces 13" Working pressures by rules 236# Girders to Chamber tops: Material S Depth and
thickness of girder at centre 10 x 7 1/8 x 2 Length as per rule 35" Distance apart 7 1/2" Number and pitch of stays in each 4 @ 7 1/4"
Working pressure by rules 272# Steam dome: description of joint to shell Yes % of strength of joint
Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes
Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed
SUPERHEATER. Type Yes Date of Approval of Plan Tested by Hydraulic Pressure to
Date of Test Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler
Diameter of Safety Valve Pressure to which each is adjusted Is Easing Gear fitted

IS A DONKEY BOILER FITTED?

Yes.

If so, is a report now forwarded?

Yes.

SPARE GEAR.

State the articles supplied:—

1 propeller shaft, 2 propellers complete, 1 crank shaft section, 3 valve stems with link blocks, 3 eccentric straps with bolts & nuts, 1 set of bottom end bearings, 1 set of top end bearings, 2 Top end & 2 bottom end bolts & nuts, 2 main bearing bolts & nuts, 1 set of rings & springs for H.P. I.P. & L.P. pistons, 12 cylinder cover studs & nuts, 6 relief valve springs, 2 sets of coupling bolts & nuts, 3 spare check valves, spare feed & bilge pump valves & springs, 25 condenser tubes, 100 ferrules & packing, 35 boiler tubes, 8 tube stoppers, Boiler bearers, baffle plates & firebars complete, assorted bolts & nuts & round iron bars.

The foregoing is a correct description,

The Federal Shipbuilding Co., A.W. Smith, A. Eng. Manufacturer.

Dates of Survey while building
During progress of work in shops -- 1920 Jan 15, 13, 11, 19, 21, 23, 25, 27, 29, Feb 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, Mar 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, Apr 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, May 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, Jun 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, Jul 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, Aug 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, Sep 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, Oct 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, Nov 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, Dec 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29
During erection on board vessel -- 1920 Jan 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, Feb 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, Mar 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, Apr 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, May 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, Jun 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, Jul 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, Aug 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, Sep 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, Oct 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, Nov 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, Dec 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29
Total No. of visits 14, 15, 17, 20, 21, 22, 24, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Cylinders 7-6-21 Slides 7-6-21 Covers 7-6-21 Pistons 7-6-21 Rods 7-6-21
Connecting rods 7-6-21 Crank shafts 15-4-21 Thrust shafts 9-6-21 Tunnel shafts 9-6-21 Screw shafts 25-5-21 Propellers 20-5-21
Stern tubes 5-6-21 Steam pipes tested 7-6-21 Engine and boiler seatings 10-6-21 Engines holding down bolts 27-6-21
Completion of pumping arrangements 1-7-21 Boilers fixed 24-6-21 Engines tried under steam 7-7-21
Completion of fitting sea connections 13-6-21 Stern tubes 3-6-21 Screw shafts and propellers 8-6-21
Main boiler safety valves adjusted 27-6-21 Thickness of adjusting washers 1 3/8 1 3/4 1 3/8 1 3/4 1 3/8 1 3/4
Material of Crank shafts S Identification Mark on Do. S Material of Thrust shafts S Identification Mark on Do. S
Material of Tunnel shafts S Identification Marks on Do. S Material of Screw shafts S Identification Marks on Do. S
Material of Steam Pipes Open Hearth Steel, Seamless Test pressure 630 lbs

Is an installation fitted for burning oil fuel Yes Is the flash point of the oil to be used over 150°F. Yes

Have the requirements of Section 49 of the Rules been complied with Yes

Is this machinery duplicate of a previous case Yes If so, state name of vessel S/S E. T. BEDFORD, Hull

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

The above Engines & Boilers have been constructed under Special Survey in accordance with the approved plans. The material & workmanship employed in their manufacture, so far as can be seen are sound and good. They have been fitted on board the Vessel and proved satisfactory under steam trial. They are eligible in my opinion, to the notation in the Register Book + L.M.C. fitted for oil fuel 7-21. Flash point above 150°F.

It is submitted that this vessel is eligible for

THE RECORD + L.M.C. 7-21 F.D.C.L.

Fitted for oil fuel 7-21 F.P. above 150°F

Roll 15/8/21 ARK

The amount of Entry Fee ... \$ 30:00
Special Survey Fee \$ 544:00
Donkey Boat Survey Fee \$ 10:00
Travelling Expenses (if any) \$ 20:00

When applied for,

When received,

When received,

When received,

When received,

When received,

When received,

When received,

When received,

When received,

When received,

When received,

When received,

When received,

When received,

When received,

When received,

When received,

Committee's Minute

Assigned

New York JUL 19 1921

+ L.M.C. 7-21

MAHINER DEPT
WRITTEN 5/8/21
immed 28/9/21

J. Flockhart

Engineer Surveyor to Lloyd's Register of Shipping.



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