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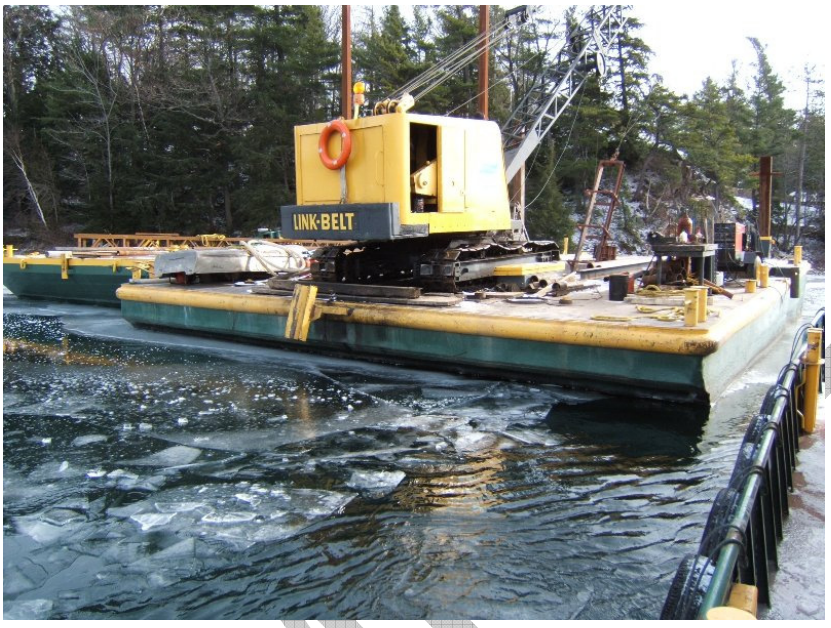
SURVEY REPORT



Commercial Barge

Prepared for:

[redacted]

Prepared by:

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Signed:_____Date:_____

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CONTENTS

GENERAL

The following is a report on a survey conducted by Stephen W. Leake (Surveyor).
The survey was requested by St. Lawrence Marine & Dredging Ltd. (Client).
The object of the survey was to ascertain the general condition of the vessel for insurance purposes.

This report represents the educated opinion of the Surveyor and is subject to the condition of the vessel being ascertained from a general inspection while ashore without removing equipment or opening parts normally concealed, testing for tightness, operating machinery or systems unless specifically noted.

Use of this report by the Client or any third party, serves as acknowledgement of these provisions.

STANDARDS

The subject vessel has been surveyed for compliance where applicable with the following regulations and standards under the Canada Shipping Act:

Small Vessel Regulations
Collision Regulations

SURVEY PARTICULARS

Date attended:	[redacted]
Location:	[redacted] Ontario.
Conditions:	Calm, clear, dry, -12°C.
In attendance:	Client representatives ([redacted]).

VESSEL PARTICULARS

Name:	None marked.
Builder:	Dominion Bridge Co., Montreal, Qu.
Model:	Commercial general purpose work barge
Year:	1954
Registered Owner:	[redacted].
Port of Registry:	Toronto (not marked)
Registration Number:	[redacted] (from tonnage certificate, marking not found)
Gross Registered Tonnage:	84.31
Net Registered Tonnage:	84.31
Length:	52 ft measured (15.24 m from tonnage certificate)
Beam:	34 ft – 10in measured (10.61 m from tonnage certificate)
Depth:	5 ft – 9 in measured (1.71 m from tonnage certificate)
Draft:	Variable according to load up to ~3 ft
Freeboard:	Variable according to load, minimum ~2 ft
Propulsion:	None
Auxiliaries:	Deck mounted gasoline winch motor.

VESSEL DESCRIPTION

Vessel is a commercial barge of steel construction.
Hull form; hard chine, flat bottom with 45 degree sloped ends, vertical flat sides.
Flat decked with central open hold.

Internal arrangement consists of ten watertight compartments each accessible via bolted deck manholes.
Largest compartments ~ 10.5 ft wide extend 30 ft along each side in the mid-body. Three compartments located across bow and stern with intermediate compartments at centre between hold and end compartments. The two after compartments on the centreline could not be accessed due to the presence of a crane. All other compartments were entered and examined.

CONSTRUCTION

Hull Bottom plating viewed from interior appeared fair and in good condition. Thickness undetermined.

Side plating viewed from interior appeared fair (Exception – an inward bulge on starboard side at forward section on central side compartment. Maximum point of indentation approximately 3 ft from bottom and 6 ft from forward bulkhead, maximum indentation approximately 4" tapering to zero at deck and chine and within 5 ft forward and aft. Side longitudinal also distorted but remains attached to plating.) No action deemed necessary. End plating fair and in good order. (Exception - a crack through the plating exists in the port forward corner compartment. Crack located on sloped end plating adjacent second longitudinal from outboard just above transverse floor. Crack U shaped, diameter of U ~ ¼" , legs of crack also ~ ¼". [1] Crack to be sealed with weld deposit.

Bottom reinforced by watertight bulkheads and longitudinal stiffeners, 5x3x5/16" OAs at 32" centres. All seen were found in good condition.
Four transverse floating frames were found in the mid section of the outer side compartments in way of the hold. These were of 6x2x3/16 Channel welded over the tops of the longitudinals and ends connected to vertical deep web frames. All seen were found in good condition

Watertight transverse bulkheads of undetermined thickness. Some surface corrosion where paint coating has broken down. Otherwise fair and in good condition.

Transverse bulkheads reinforced by vertical stiffeners; 3x2x3/16" OAs (Ordinary Angles) at 32" centres and intermittent welded. Bulkhead stiffener ends lapped and welded to deck and bottom longitudinal stiffeners.

Longitudinal bulkheads reinforced by a single longitudinal stiffener; 5x3x5/16" OAs (Ordinary Angles) at mid-height and intermittent welded. All seen were found in good condition.

Deck: Plating of ¼" steel. In good condition.
Deck reinforced by bulkheads and longitudinal stiffeners, 4x3x1/4" OAs at 32" centres. All seen were found in good condition.

ANCHORING & MOORING

Anchors: None. Barge can be secured by dropping one or both spuds.

Cleats: 5" pipe bitts at each corner. Sound and secure.
5" pipe bollard each side forward and aft. Sound and secure.

Fendering: 8" half pipe welded to side and end plating all around deck perimeter. In good condition.

LADDERS, RAILS & STANCHIONS

Ladders in void spaces provided in way of inspection manholes. Rungs of ¾" square steel bar 16" wide welded to 2x1/4" FB risers welded to bulkheads. Sound and secure.

No side rails fitted due to nature and purpose of vessel.

HATCHES, DOORS & WINDOWS

Manholes with steel plate covers. Most ~17" diameter, at least one only 12x18". Satisfactory.

HULL & DECK FITTINGS – Miscellaneous

Fabricated steel pushing notch on centerline at aft end. Sound and secure.
Steel workbench aft to starboard.
Two spuds of steel 12" square section, 35 ft long. Located at forward end for securing barge whilst conducting dredging, pile driving or other functions requiring maintenance of constant position.

AUXILIARY MACHINERY

A deck mounted four cylinder gasoline engine (Chevrolet Chevette) linked to a double barreled windlass
located forward on port side. Engine operation was not demonstrated but appeared to be in serviceable condition.
Windlass is double barreled with wire winch drums. Cables leading to two spuds forward.

FUEL SYSTEM

Type: Gasoline
Tank: Outboard motor type steel portable. In good condition.

BILGE PUMPING SYSTEM

No fitted system. None required.

VENTILATION

None. All void spaces sealed.

ELECTRICAL SYSTEM – DC

Battery(ies): One for windlass engine start.
Location : On deck adjacent engine.

ELECTRICAL SYSTEM – AC

None.

NAVIGATION & ELECTRONICS EQUIPMENT

None

PROTECTIVE COATINGS & COSMETICS

Painted overall and throughout. Internally the paint system is breaking down. Externally generally commensurate for a working vessel in constant use, i.e. numerous and extensive bare areas..

MISCELLANEOUS EQUIPMENT

Link-Belt jib crane
Pile driver
Two bucket grabs
The Surveyor is not qualified to comment on the suitability of the above equipment.
Aluminum workboat. Servicable

SAFETY EQUIPMENT

None.

DOCUMENTATION (Certificates, manuals etc)

None seen.

GENERAL COMMENT

Overall the vessel was found to be sound and in servicable condition except as noted.

INSURABILITY

The vessel as seen, remains suitable for its designed purpose, subject to Recommendation [1] being implemented.

VALUATION

As inspected: In the order of $ 200,000.
Valuation based upon prevailing local market, vessel condition and outfit

SAFETY DEFICIENCIES & RECOMMENDATIONS

[1] A crack through the plating exists in the port forward corner compartment. Crack located on sloped end plating adjacent second longitudinal from outboard just above transverse floor. Crack U shaped, diameter of U ~ ¼" , legs of crack also ~ ¼". **Crack to be sealed with weld deposit.**