



**Report of survey made by the undersigned surveyor of
*Western Maritime Surveyors***

**At the request of :
504897 BC Ltd.**

**While the vessel lay
Drydocked @ Richmond, BC
This Report Issued for the following only:
Insurance Renewal**

Vessel Name: "CURVE OF TIME"

Official Number: 812727

Type: Expedition Trawler

Document Sighted: Yes No

Port of Registry: Prince Rupert, BC

Job Number: BEVJAN

Date of Survey: April 02, 2016

Surveyor: Paul Dupré

In Attendance: Jan Bevelander

Owner/Broker: 504897 BC Ltd.

General Description:

"CURVE OF TIME" is an eighty five commercial passenger vessel, custom built of conventional riveted and welded steel in 1959 by D. en Joh. Boot N.V. (Holland) and currently powered by a single five cylinder diesel engine through reversing gears to conventional propeller. The hull has flared bows, round turn of bilge, keel supported rudder, and compromise stern. The layout below decks consists of a forward water tank / collision bulkhead, followed by forepeak with accommodation for five, hold, machinery space, and aft accommodation for six. Above decks forward there is a whale back shelter with chain locker and storage enclosure, open well deck and house structure aft containing two enclosed heads with showers, two cabins, each with stacked single berths and one with lavatory, galley, mess, door casement to machinery space, steps up to master's cabin, navigation station and pilot house containing helm, engine controls and door casements to aft raised deck.



Vessel Particulars:

Year Built: 1959	Beam: 20 Feet
Built By: D. En Joh. Boot N.V.	Draught: 11 Feet (Estimated)
Model: Custom Steel	Registered Tons: 32.00
Style: North Sea Trawler	Gross Tons: 109.00
Designer: D. En Joh. Boot N.V.	Displacement: 193 Tons (Reported)
Port of Registry: Prince Rupert, BC	C.S.I.: Current Home Trade 3
Official Number: 812727	Hull Number: 1277
Registered Length: 78 Feet	Ballast: Fuel, Water & Stores
Overall Length: 85 Feet	Last Drydocked: 2013
Waterline Length: N/A	Present Owner: 504897 BC Ltd.

Vessel House:

Exterior Construction

Construction:	Welded Steel
Surfacing:	All Painted Surfaces
Window Frames:	Cast Bronze & Steel

Interior Construction

Finish:	Painted Panels & Trim
Cabin Sole:	Vinyl & Painted Wood
Headliner:	Removable Panels
Liner:	N/A

Liquid Propane Gas System

LPG Condition:	None Fitted
Plumbing:	N/A
Shutoffs:	N/A
Gauges:	N/A
Regulators:	N/A

Domestic Equipment

Stove:	"Juno" 4 Burner with Oven
Stove Fuel:	220 V A/C
Stove Pipe:	N/A
Heater:	"Viessmann" Hydronic
Heater Ventilation:	To Outside Atmosphere
Hot Water Tank:	40 Gallon
Hot Water Fuel:	120 VAC & Furnace Buss
Hot Water Venting:	N/A
Ice Box/Fridge:	"Bosch" & "Danby"
Microwave Oven:	"Sylvania"
Head:	2 X Enclosed Manual
Storage:	Lockers and Drawers



Hull and Deck:

Hull Type: Displacement Power	Struts and Bolts: Sat. as Observed
Hull Fairness: Satisfactory Overall	Stern Bearings: Within Allowable Tolerance
Hull Material: Rivetted Steel	Propellor(s): 72 Inch 4 Blade Bronze, Satisfactory
Hull Paint: Renewed at Haul Out	Rudders: Balanced Steel Blade
Stem: Welded Steel	Rudder Stock: Sat. as Observed
Stern: Welded Steel	Electrolysis: No Damage to Note
Core: N/A	Anodes: Renewed at Haulout
Delamination: N/A	Port Holes: None Fitted In Hull
Blisters: N/A	Guards: Sheer and Topsides
Planks: N/A	Decks: Plank over Steel
Seams: Sat. as Observed	Bulwarks: Sat. as Observed
Caulking: N/A	Hawseholes: Sat. as Observed
Fastenings: N/A	Capping: Steel
Butt Ends: N/A	Frames: Steel Flanges
Hood Ends: N/A	Stringers: Sat. as Observed
Sheathing: N/A	Deck Beams: Steel Flanges
Bottom Paint: Renewed at Haul Out	Swim Grid: None Fitted
Keel: Integral Steel	Transom Door: None Fitted
Keel Sole: Integral Steel	Hatches: All Satisfactory
Shoe: Steel	Bulkheads: Four (4) Full Tranverse
Ceiling: Cork/Plywood Paneling	

Clutch/Reduction:

Clutch:	"Kuypers" KKRL 10
Reduction:	2:1
Rebuilt:	2004
Shaft(s):	6 Inch
Bearings:	1 Intermediate
Lubricant:	Remote Grease
Packing Gland:	Correctly Adjusted

Fuel System:

Fuel System Overall:	Satisfactory
Fuel Lines:	All Rated Pipe & Hose
Water Separators:	Sat. as Observed
Fuel Filter:	Sat. as Observed
Shutoff(s):	At Tanks & Manifold
Filter(s):	All Satisfactory



Engine Room:

Overall Condition: Satisfactory

Bilges: Clean and Dry

Blower Ventilation: To Outside Atmosphere

Insulation: Mineral Wool

Engine(s):

Engine(s):	One
Type:	5 Cylinder Diesel
Model:	DE INDUSTRIE 5.0.6
Horsepower:	275 @ 500 RPM
Serial:	4255
Hours:	Approximately 15,000
New:	1959
Rebuilt:	No History Available
Cooling:	Keel Cooled
Mounts:	Hard Mounted With Shims
Oil Filter:	Dry Sump Type
Water Filter:	N/A
Air Filter:	Sat. as Observed
Power Takeoff:	None Fitted

Generator Set:

Type:	2 X 3 Cylinder Diesel
Model:	"Iveco Fiat" / Leroy Somer
Horsepower:	N/A
Serial:	Not Sighted
Hours:	100 and 3,500 (Key)
New:	No History Sighted
Rebuilt:	#1 in 2014
AC Power:	32 KW 3 Phase

Stern Drive(s):

Manufacturer:	None Fitted
Type:	N/A
Model:	N/A
Serial Numbers:	None Fitted
New:	N/A
Rebuilt:	N/A

Comments:

Clean and serviceable overall with evident on-going maintenance throughout. Bilge water is sent through separator and oily portion stored in scavenged oil tank and the treated portion is discharged.



Pumps

Location	Type	Size	Motive Power	Servicing	Condition
Machinery Space	Impeller	2 Inch	A/C Motor	Bilges /Fire	Sat. as Observed
Machinery Space	Impeller	1 1/2 Inch	A/C Motor	Bilges	Sat. as Observed
Machinery Space	Impeller	1 Inch	A/C Motor	Bilge Oil Scavenging	Sat. as Observed

Tanks

Location	Type	Capacity	Material	Condition
Forward	2 X Dom. Water	3,000 Gals Est.	Integral Steel	Sat. as Observed
Amidships	2 X Holding	1,600 Gals. Est.	Steel	Sat. as Observed
Machinery Space	Sewage	800 Gals. Est.	Stainless	Sat. as Observed
Machinery Space	2 X Fuel	3,000 Gals. Est.	Steel	Sat. as Observed
Machinery Space	Fuel	1,000 Gals. Est.	Steel	Sat. as Observed
Machinery Space	Fuel Day Tank	250 Gals. Est.	Steel	Sat. as Observed

Through Hulls and Seacocks

Location	Valve Type	Construction	Size	Purpose	Condition
Machinery Space	Gate	Bronze	2 Inch	Washdown Inlet	"T.C." Inspected 200
Machinery Space	2 X Gate	Bronze	1 Inch	Head Inlets	Satisfactory
Machinery Space	Gate	Bronze	4 Inch	Sewage Discharge	Satisfactory



Electrical

Storage Batteries

Location	Type	Capacity	Purpose	Date	Condition
Bridge	2 X Group 8 D	24 Volts	Emergency	No Tags	Sat. as Observed
Main Cabin	2 X Group 8 D	24 Volts	House	No Tags	Satisfactory
Machinery Space	4 X Group 27	24 Volts	Gen. Start	No Tags	Satisfactory

D.C. Wiring

Type: 12 & 24 Volt

Distribution Panel: Sat. as Observed

Circuit Protection: Multibreakers

Main Switch: Vapour Tight

Battery Charger: Ferro Resonant Type

Number Of Circuits: Sufficient

Comments:

Where accessible all wiring, terminations and related equipment appear to be well installed, correctly rated and in good working condition.

A.C. Wiring

Type: 3 Phase 220/ 380/ 480

Main Switch: Yes

Circuit Protection: Multibreakers

Distribution Panel: Sat. as Observed

Inverter: None Sighted

Number Of Circuits: Sufficient

Comments:

Where accessible all wiring, terminations and related equipment appear to be well installed, correctly rated and in good working condition. Annual megger testing completed in April, 2016.



Safety Equipment

Fire Extinguishers

Location	Type	Size	Purpose	Dated Recharged	Condition
Forward Accom	Dry Chemical	5 lb.	A B C	Current	Satisfactory
Hold	Dry Chemical	10 lb.	A B C	Current	Satisfactory
Whaleback	Dry Chemical	5 lb.	A B C	Current	Satisfactory
Well Deck-Mach.	2 X CO2	2 X 50 Lb.	B C	Current	Satisfactory
Mach. Space 3 P	3 X Dry Chem.	3 X 25Lb.	A B C	Current	Satisfactory

Flares

Location	Type	Size	Dated Stamped	Condition
Pilothouse 6 pieces	Parachute	A	Current	Satisfactory
Pilothouse; 12 pieces	Red Hand	A	Current	Satisfactory
Pilothouse; 48 pieces	Parachute	B	Current	Satisfactory

Safety Gear:

Life Raft:	"DBC" 20 Person(15')
Life Jackets:	23 Adult DOT Approved
Life Rings:	5 X 30 Inch Approved
Fire Hose:	Sat. as Observed
Fire Pump:	Sat. as Observed
Fire Axe:	Two (2)

Alarms:

Fire (Heat)	3 X "Unitor" Current
Smoke:	6 X "Unitor" Current
Fume:	None Sighted
Propane:	N/A
Bilge:	Yes
Other:	Machinery Functions



For standards and regulations specific to your vessel, or if you have any related questions, you may speak to the undersigned or call the Canadian Coast Guard directly at 1-800-267-6687.



Vessel Equipment

Ground Tackle

Winch:	Two Head Hydraulic
Anchor:	500 Lb. "Navy" Type
Chain:	300 Feet 3/4" Stud Link
Rode:	All Chain
Spares:	250 Lb. "Danforth" Type

Navigational

Compass:	8 Inch Card and Gyro
Swung:	No Table Sighted
Loran C:	"Furuno" LC 90
Sat Nav - GPS:	"Furuno" GPS / WAAS
Auto Pilot:	"Robertson" AP-45

Deck Equipment

Davits:	"Atlas" Hydraulic Arm	Deck Furniture:	N/A
Dinghy:	1985 "Lucas" RBI	Mast:	Painted Steel
Outboard Motor:	2002 "Yamaha" 50 HP	Railings:	3 X Perimeter Pipe
Boarding Ladder:	Satisfactory	Boom:	Painted Steel
Canvas Work:	Well Deck Cover		

Steering Notes

Single pilot house wheel and autopilot servo motor controlling twin rams by hydraulic means actuating single keel mounted steel rudder; where accessible all plumbing and related equipment appear to be well installed and in good working condition.

Sail Equipment

Main:	N/A	Winches:	N/A
Genoa:	N/A	Furling:	N/A
Jib:	N/A	Sheets:	N/A
Storm:	N/A	Halyards:	N/A
Other:	Steady Sail Only	Other:	N/A



Vessel Electrical Equipment

Electronics and Controls

Engine Controls:	Pilot House Controls Through Cables	Knotmeter:	Plotter Function
Trim Tabs:	N/A	Barometer:	6 Inch Brass Body
Navigation Lights:	To C.C.G. Standards	Clock:	4 & 5 Inch Brass Body
Anchor Light:	Satisfactory	Stereo:	"Sony" XR-C5120
Spot Light:	Manual	Television:	None Fitted
Windshield Wipers:	Single Clearview Screen	VCR:	None Fitted
Rudder Indicator:	2 X "Robertson"	Whistle/Horn:	24 VDC & Hand Held Air
Windspeed Meter:	None Fitted	Loud Hailer:	From "Uniden" VHF

Radios

Make and Model	Type	Antenna	Condition
"Sailor" model RT 146	VHF	Whip	Sat. as Observed
"Simrad" model 68 DGMS	VHF (DSC)	Whip	Sat. as Observed
"Uniden" ES	VHF (DSC)	Whip	Sat. as Observed

Sounders and Sonar

Make and Model	Type	Transducer	Condition
"Furuno" model FCV 627	Colour Video	Through Hull	New, 2015
"Simrad" model ER-2	Recording Chart	Through Hull	Sat. as Observed

Radar

Make and Model	Range	Antenna	Condition
"Furuno" model FR-8111	72 Mile	Open	Sat. as Observed



Deficiencies and Recommendations

Number	Comment
1	<p>NONE TO NOTE:</p> <p>Diligent on-going maintenance is evident throughout. The subject vessel is currently in compliance with Transport Canada Ship Safety Home Trade Class III requirements for 12 passengers with 3 crew or 21 day passengers with 4 crew. The annual Transport Canada safety inspection was completed at this haul out.</p>
2	<p>ALSO FITTED:</p> <p>1) "Bosch" up-right deep freezer. 2) Three domestic chest type deep freezers. 3) "Phillips" clothes washer. 4) Eleven hydronic heat registers for listed "Viessman" 5) "Magellan" GPS. 6) "Toshiba" laptop computer with "Captain's" e-charts. 7) Chlorination treatment plant for grey/black waste water. 8) "Victor" oily bilge water separator. 9) Two stage air compressor and storage tanks. 10) Two (2) 480 to 380 VAC transformers. 11) 220 to 110 Volt transformer. 12) "ACR" Class I EPIRB. 13) four personal strobe lights. 13) Four "Necky" model "Amaruk" 2 person plastic kayaks. 14) Laptop computer with AIS software and Tel Chart V-3.</p> <p>OTHER:</p> <p>1) Dinghy Hull Identity Number (HIN): ZLH111228F585.</p> <p>2) Outboard motor Serial Number (S/N): 905107.</p>

All deficiencies to be rectified within thirty (30) days unless otherwise noted.

Surveyor's Notes For Maintenance Purposes Only:

- 1) New insulation fitted to hot water boiler April, 2016. 2) Annual scaling and paint undertaken in April, 2016.
- 3) Wear and tear of the hull, machinery, and equipment overall for this vessel is considered to be average for this make, model and vintage and consistent with it's reported use as a commercial charter vessel.



Valuation

Estimated
Replacement Value
\$3,000,000

Estimated
Market Value
\$350,000

Comments:

"CURVE OF TIME" is a well built, serviceably maintained commercial passenger vessel. It is considered suitable for use working the waters of the Pacific Northwest within navigational limits established by Transport Canada for Home Trade class III and Underwriters. This vessel surveyed in accordance with A.B.Y.C. and C.C.G. standards. Values determined using the surveyor's knowledge, brokerage consultants and/or periodicals reflecting current market and sales conditions including but not limited to BUC and other weekly or monthly boat and trade magazines.

Qualification and Conditions

"EXCLUSION OF LIABILITY"

Western Maritime Surveyors, its servants, agents and employees, including Paul Dupré and/or David Wood (the "Releasees") shall under no circumstances whatsoever be liable to any party for any loss, injury or damages arising from or connected with errors or omissions in the inspection of the vessel or property, or failure to discover any defects, damage or deterioration, or in reporting thereon, or in any statements made by the Releasees, whether such loss, injury or damage arises from negligence or any other cause whatsoever. If any party acts or relies on the contents of our survey report or statements referred to herein, then such acting or relying shall be confirmation by that party of the acceptance of this term excluding liability.

Notwithstanding the foregoing, if it is held that the Releasees are liable for any claim, then the amount of their liability shall not exceed the amount charged and actually paid by the customer for the survey.

Prepared by: *Western Maritime Surveyors*



Paul Dupré
Marine Surveyor

Seal

April 02, 2016

Dated