Sea Captain Marine Surveyor Inc.

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File No: XXXX2025

Pre-purchase Survey – (Client's name)
September 2025

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Survey Scope:

Purpose:

Sea Captain Marine Surveyor Inc. conducts a visual, non-invasive inspection to assess the vessel's apparent condition and estimate its fair market and replacement values. The survey is limited to accessible areas and systems at the time and location noted; no destructive testing, mechanical diagnostics or electrical load calculations are performed. Observations are compared to applicable standards and guidelines (Transport Canada Small Vessel Regulation SOR/2010-91, Transport Canada Construction Standards for Small Vessels TP1332, Transport Canada Safe Boating Guide TP511E & Canada Shipping Act 2001, International Regulations for Preventing Collisions at Sea, 1972 (COLREGs 1972), American Boat & Yacht Standards (ABYC), NFPA 302 Fire Protection Standard for Pleasure and Commercial Motor craft), but the report is not a certification of compliance. Hidden defects or latent conditions may exist beyond the scope of this survey.

Survey Techniques & Conditions:

We employ non-destructive methods such as percussion sounding, moisture meter readings and basic electrical continuity checks. Mechanical, electrical and electronic equipment are inspected externally only; operation, load testing or disassembly are beyond the scope of this survey. Rigging is inspected from deck level only. Evidence of prior repairs or modifications is noted when visible, but their workmanship and integrity are not evaluated. If specialized inspections are required (e.g., engine diagnostics, rigging aloft, electrical sizing), the Client should engage certified professionals at their own expense. Areas not readily accessible due to design, storage or owner-provided access will be identified in the report.

Survey Context:

The survey commenced at approximately 0930 hours at the dock, beginning with a preliminary inspection of the deck, rigging, and topside fittings from the deck level only. At approximately 1015 hours, a short operational test run of about 45 minutes was conducted. During this period, the sails were set and an attending mechanic from *DDM - Dynamo Diesel & Marine* operated and recorded engine performance data. The anchoring equipment was deployed briefly to verify basic functionality, and an interior inspection was performed concurrently while underway, including testing of the heating system and freshwater pumps.

Following the operational test run, the vessel proceeded to the shipyard lift at approximately 1100 hours, where it was hauled out for inspection of the hull, underwater gear, and appendages. The vessel remained on the lift until approximately 1200 hours before being re-launched. The survey concluded at the dock adjacent to the lift area at approximately 1500 hours. Shore power was not connected or tested; however, most onboard systems and electronic equipment were energized and observed in operation, unless otherwise stated within this report.

Report of survey made by the undersigned surveyor of Sea Captain Marine Surveyor Inc. at the request of (Client's Name), while the vessel was in the water then hauled out at Stones Marina, Nanaimo, on the X day of September 2025.

This report was issued for the following purposes only: **Pre-purchase Survey.**

1. Vessel Overview

Name of Vessel: XXXXXXXXX.
Year, Type & Model: 2002 Catalina C-400 MK II Sloop.
Builder: Catalina Yachts; **Designer:** Frank and Gerry Douglas.**
License/Official No: XXXXXXX.
Hull ID No: CTYD0242XXXX.
Overall Length: 40' 6" (12.34 m).**
Length Waterline (Approx.): 36' 6" (11.13 m).**
Beam: 13' 6" (4.11 m).**
Draft (Approx.): 7' (2.13 m).**
Displacement (Approx.): 18,000 lbs (8,165 kg).**
Ballast (Approx.): 7,200 lbs (3,266 kg).**
Hull Colour: White topside and blue antifouling.
Power: 2002 YANMAR 4JH3E diesel motor 56 HP (41.76 kW).
Sail Area: 808.00 ft² / 75.07 m².**
Estimated Maximum Hull Speed (Approx.): 8 knots (9 mph – 15 km/h).**
Estimated Cruising Speed (Approx.): 7 knots (8 mph – 13 km/h).**
Person attending survey: Nicolas Cote (Surveyor), (Owner) and (Broker).
Client's Information: (Client's Name – Phone - Email).
Mechanic's Information: (Mechanic's Name) from *DDM - Dynamo Diesel & Marine*– Phone - Email).
Weather Condition: 18^{oc} Partially Cloudy, Light wind.
****Data Source:** Information obtained from official documents and selling brochures found onboard.

Report Summary		
Intended use:		**Pleasure Craft**
Estimated current fair market value:	*Excluding taxes.	**$XXX,XXX CAD**
Estimated replacement value:	*Excluding taxes.	**$XXX,XXX CAD**

2. General Description:

(Vessel's Name) is a 2002 Catalina 400 Mk II sloop, constructed in FRP with a deck-stepped aluminum mast and fin keel. The vessel is arranged with two private cabins, one forward and one aft with centerline berth, and a full galley equipped with ALDER BARBOUR refrigerator and freezer, PRINCESS LPG three-burner stove with oven, LG microwave, and KUUMA hot water tank. A VILLAGE MARINE LITTLE WONDER 200 GPD water maker is installed. Propulsion is by a YANMAR 4JH3E diesel engine rated 56 HP (41.76 kW), driving a single 1¼" stainless steel shaft through a PSS dripless stuffing box to a FLEX-O-FOLD three-blade bronze folding propeller. A MERCURY 20 HP FOURSTROKE outboard is carried for tender use.

The rig consists of a sloop configuration with SCHAEFER 3100 headsail furling system, LEWMAR self-tailing winches, GARHAUER traveler, SPINLOCK clutches, and stainless-steel 1x19 standing rigging (3/8" forestay, backstay, upper shrouds; 5/16" lower shrouds). Sails include a fully battened mainsail with Dutchman flaking system, a 135% furling genoa, and an asymmetric spinnaker. Ground tackle comprises a 25 kg ROCNA anchor with stainless swivel, 200 ft of 5/16" chain, and 250 ft of three-strand nylon rode managed by a MAXWELL VW800 windlass. Navigation and electronics include GARMIN GPSMAP, RAYTHEON RC420 (not in current use), RAYTHEON ST60 depth/speed/wind instruments, RAYTHEON radar, RAYTHEON autopilot, AIS receiver, STANDARD HORIZON INTREPID DSC VHF with RAM mic, and dual RITCHIE compasses.

Picture 1: Starboard side bow view.

Picture 2: Starboard side stern view.

Picture 3: Port side bow view.

Picture 4: Port side stern view.

3. Hull & Structural Components:

Hull Material: Fiberglass reinforced plastic (FRP) with mat and woven roving laminate. Solid laminate hull construction with no core material reported or observed in the hull sides or bottom.

Hull or Machinery Overhaul: No evidence of redesign, overhaul, or major renovation reported.

Bottom Paint: Blue antifouling coating observed; condition consistent with active use, no flaking or large-scale delamination noted. No visible blisters.

Gelcoat Finish: White topsides with consistent finish; grey diamond patterned non-skid areas; no discoloration or notable scratches observed.

Woodwork: Interior woodwork constructed of factory-standard Catalina joinery in teak veneer; usage moderate, finish maintained.

Floorboards: Proper alignment with lined design; no warping or misalignment detected.

Windows & Portholes: Acrylic side windows and deck hatches noted with surface crazing/grazing on most side windows; sealing intact.

Picture 5: Deck, mast and deck hatches.

Bow Condition: Stem and forward sections aligned; no impact or damage observed. See picture 6.

FRP Stress Cracks: None visible on hull, deck, or cockpit areas.

Cockpit: Fiberglass surfaces intact, no stress cracking; functional drainage noted on port and starboard. Equipped with a WHALE cockpit shower aft.

Deck: The deck and coach roof are molded fiberglass with a balsa core. Surface finished in molded non-skid pattern. No soft spots, delamination, or stress cracks were detected during percussion sounding and visual inspection. All deck areas and the coach roof appear secure and structurally intact.

Deck-to-Hull Joint: The hull-to-deck joint was of inward flange design, mechanically fastened with stainless steel fasteners and sealed with marine-grade polyurethane sealant. The joint was finished externally with a continuous vinyl rub rail. The rub rail and joint were observed in alignment, with no visible separations, cracks, or evidence of impact. The joint appeared watertight and structurally intact throughout the accessible perimeter.

Picture 6: Leading edge of starboard bow.

Keel: Lead cast fin keel secured by five visible keel bolts within the bilge area. Surface rust was noted on the accessible fasteners. The external keel-to-hull joint was tight, and no weeping was observed. See picture 7.

Picture 7: Starboard side view.

Bulkheads: Marine plywood bulkheads glassed to hull and deck; tabbing intact with no separation. No evidence of structural compromise where accessible for inspection.

Stringers: FRP-encapsulated longitudinal stringers; no cut-outs or visible deterioration noted.

Transom: Structurally intact; no signs of delamination or water ingress.

Hull Percussion Soundings: Conducted throughout hull; consistent acoustic response with no anomalies detected.

Bonding and Conductivity: A conductivity meter test was performed on accessible metallic fittings, including the rigging chainplates, through-hull fittings, and keel bolts. All readings indicated proper continuity, with resistance values below one ohm. The bonding system appeared intact, and no isolated or unbonded fittings were identified.

4. Deck Equipment & Anchoring System:

Mooring Gear: Vessel equipped with mooring lines, fenders, and pike poles; WINCHRITE cordless winch handle also noted onboard.

Davits: No davits fitted; two stainless steel stern attachments installed for tender securing.

Upholstery: Cockpit and deck cushions closed-cell foam with a white vinyl covering, no rips, stains, or UV fading observed.

Hatches: All deck hatches fitted with good seals and functional locking mechanisms.

Stanchions/Railings/Lifelines: Stainless steel push pit, pulpit, and lifeline stanchions securely fastened with backing plates; no cracks, corrosion, or moisture ingress at bases observed.

Canvas Gear: Full canvas cockpit enclosure with associated winter cover; condition consistent with maintained usage.

Chocks & Cleats: Stainless steel hardware observed throughout deck; all fixtures firm in place with no corrosion staining.

Cabin Ventilation: MARINCO powered vents installed for interior airflow.

Anchor System:

- **Primary Anchor**: 25 kg ROCNA anchor with stainless steel swivel; bitter end properly secured.
- **Rode**: 200 ft of 5/16" high-tensile chain marked G4 and 250 ft of three-strand nylon rode.
- **Windlass**: Electric MAXWELL VW800 unit with foot operated controls at the bow, operational during survey.

Picture 7: Anchor locker bow hatch with windlass and headsail Furler.

5. Mast, Rigging & Sails:

Mast: Fitted with an aluminum sloop rig, deck stepped. No corrosion, deformation, or stress marks observed on the mast section. The mast was inspected from deck level only; internal halyards, masthead fittings, and wiring were not accessed. The mast step was deck-stepped, secure, with no visible cracks, movement, or deformation. Aluminum compression post stepped on a reinforced base.

Standing Rigging: 1x19 stainless steel wire construction, consisting of 3/8" forestay, backstay, and upper shrouds, and 5/16" lower forward and aft shrouds in bridle configuration. Swaged fittings appeared secure with no bends, rust, or cracks, and all cotter pins were in place. The service date and installation age of the standing rigging were unknown, and it could not be confirmed whether the rigging was original.

Chainplates: Chainplates were through bolted to the stringer frames with binding torque rods. They appeared secure, with no corrosion or water ingress visible at deck penetrations or interior backing surfaces.

Picture 8: Mast, spars, radar reflector and rigging looking aft.

Running Rigging: The vessel was equipped with a SCHAEFER 3100 headsail furling system, SPINLOCK jammers and clutches, and a GARHAUER traveller system. All were mounted securely and functioned as intended during the inspection. A spinnaker pole was stowed on deck.

Winches: Primary and secondary winches consisted of two LEWMAR 58 and two LEWMAR 40 self-tailing models located in the cockpit. All were securely mounted and operated smoothly under manual test.

Sails: The vessel was rigged as a sloop. Sails were inspected visually during the short operational test run only; they were not removed from the Furler or mast for detailed examination. The sails were accounted for and noted for inventory purposes only. They were not taken ashore or opened out for full inspection due to space limitations aboard. No tears, UV degradation, or loose stitching were visible from the operational observation.

Sail Inventory:

- Fully battened mainsail with two reef points, fitted with Dutchman flaking system.
- UK Sails Dacron 135% furling genoa (SCHAEFER 3100).
- Asymmetric spinnaker in stock.
- Mainsail cover with double stack pack.
- Reported total sail area: approximately 808 sq. ft. (mainsail 400 sq. ft.; headsail 408 sq. ft.).

6. Through-Hull Fittings:

Above Maximum Heeled Waterline:

- One fuel tank vent, port side aft, flame screen present, stainless-steel.
- Two sewage tank vents, port side mid-ship and starboard side aft, stainless steel fittings.
- Two water tank vents, starboard side mid-ship, stainless steel fittings.
- One galley sink discharge, starboard side, with PVC fitting.
- Two head shower sump discharge, port side aft and starboard side mid-ship.
- Two cockpit drains discharge, port and starboard side aft, PVC fittings.
- One anchor locker drain discharge, starboard bow, PVC fitting.
- One electric bilge discharge, port side mid-ship, PVC fitting.
- One manual bilge discharge, mis-ship aft, PVC fitting.
- One engine exhaust discharge, port side transom, stainless steel fitting.

Picture 5: Two MARELON through-hull fittings; top for starboard side shower sump and lower for starboard head sink drain.

Comment: All PVC and stainless steel fittings located above the waterline are subject to degradation from ultraviolet exposure and saltwater environment. These components have a limited-service life and should be inspected regularly and replaced as required to maintain watertight integrity.

Below Maximum Heeled Waterline:

- Two head/sewage tank discharge, Marelon seacock, port side mid-ship and starboard mid-ship, valves operated smoothly.
- Two head saltwater intake, Marelon seacock, port side mid-ship and starboard side mid-ship, valves operated smoothly.
- Two head sink discharge, Marelon seacock, port side aft and starboard side forward, valves operated smoothly.
- One engine saltwater intake, Marelon seacock, port side aft, valve operated smoothly.

Comment: Bonding wires not required with Marelon material. Emergency bungs present on the vessel in a locker. All fittings appeared securely installed with backing plates. No movement present. All valves tested by hand only.

Picture 6: YANMAR 4JH3E diesel engine.

7. Main Engine:

Main Engine: 2002 YANMAR 4JH3E marine diesel, 56 HP (41.76 kW). Engine identification plate observed; serial no: E23765. Reported engine hours approximately 2,231. See picture 6 & 7.

Engine Oil & Coolant: Levels tested. No evidence of leakage observed in accessible areas.

Engine Controls: Single-lever cable controls located at helm; cables intact and operating smoothly.

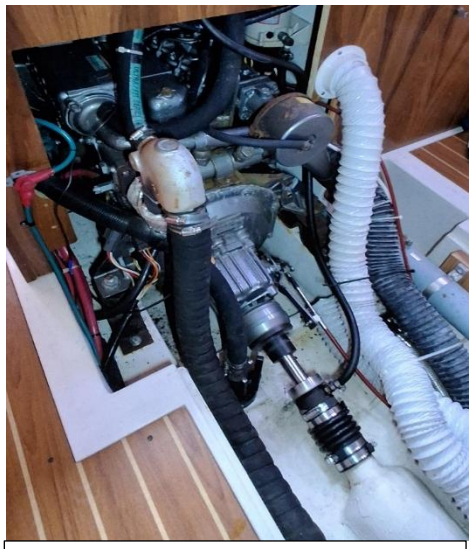
Starter: Solenoid type with cable activation; ignition wiring secure with no visible deterioration.

Picture 7: Engine ID plate.

Belts & Injectors: Drive belts properly tensioned; no soot accumulation observed around injector lines.

Transmission: KANZAKI KM3A1 marine gear, gear ratio 2.64:1. Transmission housing clean with ID plate present. See picture 8.

Exhaust System: Exhaust elbow located at the engine outlet constructed of cast iron with an upward bend and partial thermal insulation covering. Surface rust and soot accumulation observed at the outlet flange. The exhaust system was fitted with SAE J2006-rated marine wet exhaust hose in serviceable condition, secured with double stainless steel clamps at all connections. An ULTRA Marine Products silencer was installed in-line. The mechanic from *DDM - Dynamo Diesel & Marine* reported that new exhaust components have been ordered, with replacement scheduled. See appendix photo 1. ***See recommendation B-1**.



Picture 8: KANZAKI transmission with PSS shaft seal.

Cooling System: Raw water cooled via sea strainer. Hoses in serviceable condition with secure double stainless steel hose clamps. No active leaks observed.

Alternator: One alternator 12V/80A mounted starboard side, tested during short operational test run and was noted working and charging.

Engine Mounts: Four-point system with rubber vibration dampeners; no misalignment or deterioration noted.

Engine Room Ventilation: One 12 VDC RULE blower fan fitted with hose intact; tested and working as intended.

Engine Compartment: Accessible from cabin and aft cabin. No fire suppression system installed. No standing oil noted.

Picture 9: MERCURY 20 HP outboard motor.

7.1 <u>Auxiliary (Outboard) Kicker Engine:</u>

Make/Model: MERCURY FOURSTROKE outboard 20 HP (15 kW). Model no: 1A20201LK: Serial no: 1R095759. See picture 9.

Mounting Location: Secured on stainless steel EDSON stern bracket.

Fuel System: Outboard connected to portable tank stored in the transom locker.

Condition: Exterior finish intact; mounting hardware secure. Not tested as part of the survey.

7.2 <u>Generator:</u> None.

8. <u>Running Gear:</u>

Propeller: One FLEX-O-FOLD bronze three-blade folding propeller. 18" diameter, 14" pitch. No radial wear present and blades moved freely. See picture 10.

Picture 10: Folding propeller, strut, anodes and shaft.

Shaft: Stainless steel shaft, 1 ¼" diameter, fitted with two shaft anodes. Alignment true, no vibration noted during sea trial.

Stuffing Box: PSS shaft seal type; observed dry with no leakage at time of inspection. See picture 8.

Shaft Coupling: Four-bolt coupling in good condition, free of corrosion.

Strut: Bronze strut molded into hull, bearing secure with no measurable play or shaft wear.

Rudder: Spade rudder; movement firm with no excessive play or looseness detected. Moisture testing conducted with a TRAMEX moisture meter indicated dry readings throughout the rudder blade. No gelcoat blisters or surface deformation observed. Percussion testing produced clear, solid tones, consistent with sound laminate structure. See picture 11.

Picture 11: Starboard view of spade rudder.

Rudder Tube/Stuffing Box: FRP rudder tube fitted with a hex-nut style stuffing box. No leaks or movement observed. The seal remained dry throughout the short operational test run, and no water ingress was detected in the surrounding bilge area.

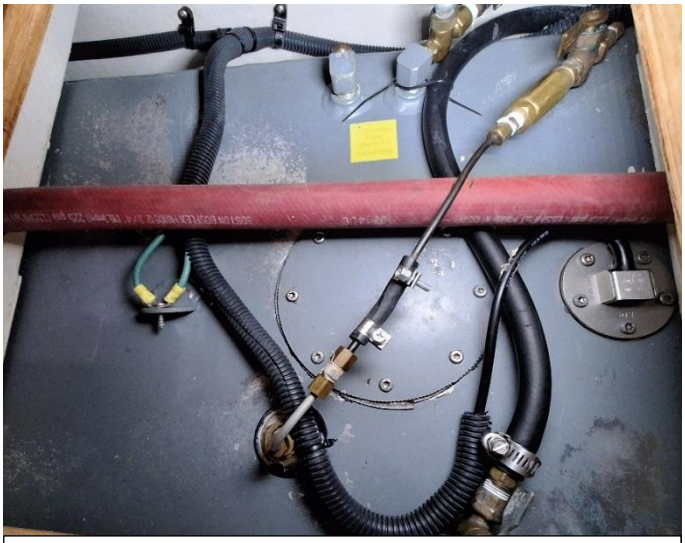
Steering System: Cable and quadrant steering system observed. Dual helm configuration with interconnected steering wheels located at the port and starboard

cockpits, operating in sync. All visible hardware and fittings were secure with no loose fasteners or corrosion observed. Steering cables properly tensioned and aligned. No binding, stiffness, or abnormal feedback noted during helm operation throughout the short operational test run.

Emergency Steering: Emergency tiller located onboard in aft cockpit locker and accessible.

Anodes: Two shaft-mounted anodes fitted; condition serviceable.

Bow Thruster: Not fitted.



Picture 12: Diesel fuel tank with shut-off valve and fuel vent (top right).

9. Fuel System:

Fuel Tanks: One aluminum fuel tank, located aft under berth. Capacity approximately 35 US gallons (132 L). Internal inspection through access ports possible. No ID plate visible, Tank grounded with bonding wire. No signs of corrosion or leakage observed on accessible surfaces. See picture 12.

Fuel Fill System: Double stainless steel hose clamps fitted with intact O-ring; cap permanently attached and fitted with proper "Diesel" marking. Ground wire in place to mitigate static charge.

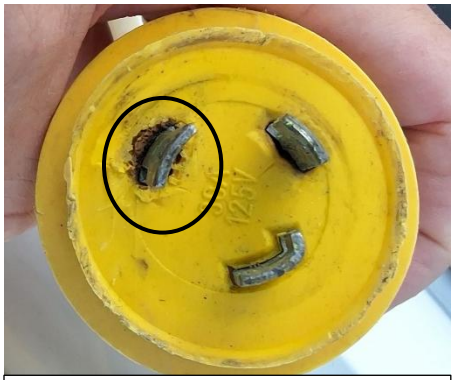
Fuel Gauge: Electric fuel gauge installed and operational when powered. Accuracy not verified. Fuel quantity indicators on marine vessels frequently provide approximate readings only, as accuracy depends on sender calibration and tank geometry. Gauge indication was observed to move when energized; actual fuel level was not confirmed.

Fuel Vent System: Stainless steel vent with flame screen fitted port side aft on hull topsides; hose connections secure. See picture 12.

Fuel Shut-Off Valve: Manual shut-off valve located at tank. See picture 12.

Fuel Lines: Flexible marine-grade USCG type A1 hose connecting tank to engine; double hose clamps secure at fittings. Hose in serviceable condition; no cracks or bends sighted.

Fuel Filter: RACOR 500FG diesel fuel/water separator with clear bowl for monitoring; condition satisfactory at time of survey. Located starboard side in engine compartment.



Picture 13: Shore Power cable plug with damaged terminal.

10. Electrical Systems:

10.1 AC System:

Shore Power Connection: One 30A/125V shore power inlet located port side aft. Backside protection in place; however, one cable terminal showed evidence of burning and arcing, requiring replacement. See picture 13. ***See recommendation B-2**.

Main Breaker & Switchboard: CATALINA factory AC/DC switchboard located in saloon. The AC system was protected by a 30A double-pole main breaker located within the switchboard in compliance with

ABYC E-11 standards. Breakers properly labeled, polarity test lamp fitted, and no doubled circuits observed. See picture 14.

Inverter: PROMARINER PRONAUTIC 3600 inverter installed; fused, grounded, and properly secured with associated wiring protected. Located on the port side below the chart table inside a storage compartment. The unit was energized and observed in operation during the short operational test run; only basic functional testing was performed to confirm power output and indicator response. Extended load testing was not conducted.

Wiring: Marine-grade stranded conductors routed in conduit and loom where accessible. No evidence of overheating, chafe, or unsecured cabling.

Picture 14: AC/DC switchboard Panel.

Galvanic Isolator: None observed in the shore power grounding circuit.

Receptacles: All AC outlets fitted with GFCI protection throughout the vessel, including galley and head locations. Each outlet was tested using the built-in test function and successfully tripped and reset as designed. No faults or abnormal operation observed.

AC Grounding and Polarity: AC and DC grounding systems tested and confirmed to be bonded with a resistance reading of 0.24 ohm. Polarity at all AC receptacles verified correct using a plug-in polarity tester. No wiring irregularities or reversed polarity detected during inspection.

10.2 DC System:

Wiring: 12 V DC system with marine-grade wiring observed. Conductors color-coded and routed in looms and conduits where accessible. Wires well supported with clamps; no chafing or overheating detected in visible areas.

Bus Bars: Positive, negative, and grounding bus bars fitted behind distribution panels; connections secured and labeled.

Picture 15: Dual PERKO battery switch

Primary Circuit Protection: Distribution protected by breakers integrated in DC switchboard. Individual circuits labeled and switched.

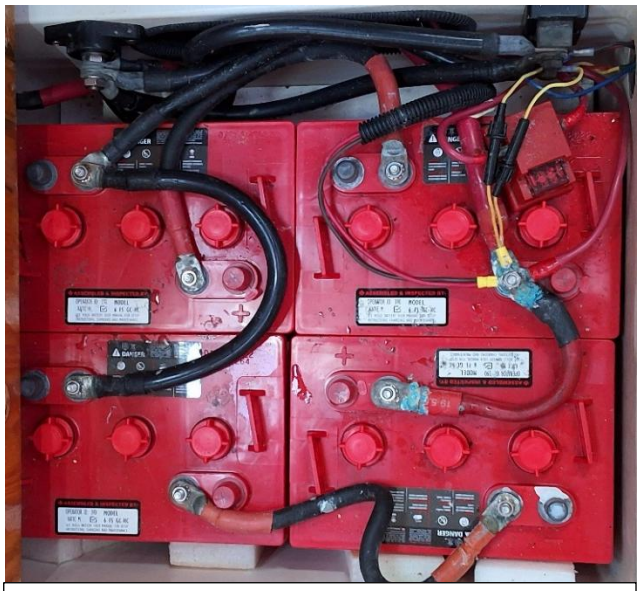
Main Battery Switches: Dual PERKO rotary switches installed — one for main battery bank selection and one for engine DC power. Distribution circuit breakers installed adjacent to the switches. Both switches are mounted on the port side, outside the engine compartment, secured to the outer engine-room

bulkhead. The installation is easily accessible from outside the engine space, allowing safe operation without entering the machinery area.

Cabin & Deck Lights: LED lighting installed throughout the vessel; fixtures are accessible and appropriately positioned in expected locations. All lights were energized and observed to operate correctly during the survey.

10.3 Batteries:

House Bank: Four ROLLS 6FS-6V GC-HC deep-cycle flooded lead-acid batteries configured as a 12 V DC house bank. Installed in a dedicated compartment beneath the cabin sole in front of the engine mid-ship. Containment arrangement secure with no lateral movement observed, and no signs of electrolyte spillage at the time of survey. Compartment fitted with natural ventilation. Batteries were not restrained against vertical movement. See picture 16. ***See recommendation B-3**.



Picture 16: ROLLS battery bank. Not restrained from vertical movements.

Starting Battery: One automotive-style starting battery (model 78–1000, 750 CCA, 135 RC), located in a separate compartment port side of battery bank in a plastic containment box. Battery change date marked 2022. Containment secure with no movement noted and secured with a strap.

Condition: Both battery installations are properly secured, with containment adequate for their type. Connections are serviceable, though light terminal corrosion observed on portions of the house bank cabling.

10.4 Battery Charging System:

Battery Charger: XANTREX TRUECHARGE 40+ multi-stage battery charger, 40A output. Outer case grounded and securely mounted. Wiring connections properly fused and protected. Located on the port side below the chart table inside a storage compartment. The unit was energized and observed in operation during the survey, delivering a steady charging voltage of approximately 13.6 VDC, consistent with proper absorption or float-charge output. See picture 17.

Picture 17: XANTREX battery charger.

Battery Monitor: DC distribution panel fitted with analog voltmeter and ammeter for system monitoring; operational during survey.

Solar Panel: None installed.

11. Navigation Equipment:

Compass: Two RITCHIE POWERDAMP magnetic compasses mounted at helm stations.

Horn/Bell: 12V electric horn and bell present and tested.

Navigation Lights: Operational and compliant with COLREG requirements. No crazing or moisture on housing.

Anchor Light: Fitted and functional. Light located on top of the mast and was not physically inspected.

Searchlight: None permanently mounted.

Instrumentation & Alarm Systems: Engine alarm indicators (oil pressure, temperature, charging) located on YANMAR panel at helm; functional at time of survey.

Chart Plotters: RAYTHEON RC420 installed but not in current use. GARMIN GPSMAP x5 series helm-mounted chart plotter installed and functional.

Sonar & Depth Sounder / Log-Speedometer: RAYTHEON ST60 depth, speed, and wind instruments installed at helm; functional during trial.

GPS: RAYTHEON GPS system present.

AIS: Receiver-only unit installed; transmit capability not fitted.

Picture 18: Helm instruments in cockpit.

VHF Radio: STANDARD HORIZON INTREPID DSC fixed-mount VHF located at navigation station, with STANDARD HORIZON RAM mic extension in cockpit. Functional at time of survey.

VHF Antenna: SHAKESPEARE antenna fitted.

MMSI Number: The vessel's VHF radio was not programmed with a Maritime Mobile Service Identity (MMSI) number, and no indication of registration was found. ***See recommendation C-1**.

Autopilot: RAYTHEON autopilot system installed, operational during sea trial.

Radar: RAYTHEON radar dome mounted on stern pole; system powered and functional.

Licensing & Documentation: Vessel documentation, Pleasure Craft Operator Card (PCOC), Restricted Operator's Certificate (Maritime) [ROC-M], bill of sale, and insurance policy were not confirmed on board at the time of survey. Verification of these documents is required to ensure that vessel licensing and operator certifications are current and maintained on board.

Picture 19: Electric SOS distress light and orange smoke canister.

12. Safety Equipment:

Flares & Distress Signals: One orange smoke canister and one electronic SOS distress light carried on board. See picture 16.

Personal Flotation Devices (PFDs): Four wearable standard PFDs, foam-filled Type II style vests, and two MUSTANG collar-type inflatable lifejackets were observed on board. All units were adult size and approved by Transport Canada. All PFDs and lifejackets appeared serviceable at the time of inspection, with no visible damage or deterioration noted.

Throwing Devices: One LIFE SLING overboard rescue system mounted on stern rail with retrieval line.

Buoyant Heaving Line (15 m): Not observed during survey.

Sound Signaling Devices: One handheld foghorn-type device present.

Lighting Devices: Waterproof flashlight and portable spotlight reported onboard, not individually tested.

Re-boarding Means: Boarding ladder fitted; must be deployable by a person in the water per ABYC H-41 standards.

Radar Reflector: Installed in rigging.

First Aid Kit: Onboard, contents not inventoried.

Comment: It is the responsibility of the vessel's owner to ensure that all Transport Canada required safety equipment is carried on board at all times. Reference should be made to Transport Canada Boating Safety TP511E resources for the most up-to-date requirements and compliance guidance. ***See recommendation A-1**.

12.1 Fire Extinguishers:

Fire Extinguishers: Three (3) portable ABC dry chemical extinguishers, all properly mounted and identified at bow, galley, and aft cabin. Last inspection dated March 2023 with service due March 2024. Extinguishers are now expired and require immediate replacement or servicing. ***See recommendation A-2**.

Fire Port: None installed. ***See recommendation C-2**.

Built-in Fire Extinguisher: None installed.

Comment: All portable fire extinguishers must be securely mounted in accessible locations, fitted with safety pins, and tagged with a valid inspection label showing the next required service date. Each extinguisher should be inspected annually to verify charge pressure, hose integrity, pin security, and compliance with Transport Canada and ABYC A-4 standards. Units should be re-certified or replaced as necessary to maintain operational readiness and regulatory compliance.

Picture 20: Fire extinguisher with location tag.

12.2 Alarms & Detection Systems:

Bilge High-Level Alarm: Installed and operational.

Smoke Detector: One KIDDE battery operated smoke detector fitted inside cabin space. Manufactured in 2022 June 01. Expiry stamped 2032/06.

Carbon Monoxide Detectors: Two (2) SAFE-T-ALERT CO detectors installed and operational. Manufactured in 2022 May 18. No expiry date stamped. Ensure with manufacturer for expiry date.

Propane Vapor Detector: SAFE-T-ALERT marine gas detector model MGD-1XL installed and powered on at time of inspection. Indicator lights illuminated, confirming the unit was energized; however, the detector was not function-tested with propane gas.

Comment: In accordance with Transport Canada TP 1332E Section 8.9, Section 7.3.2, and Section 7.3.3 and ABYC A-14, A-24 and H-22 standards, vessels with accommodation spaces must be fitted with bilge high-water alarms, carbon monoxide alarms, and smoke alarms; propane vapor alarms are not mandatory but are strongly recommended to enhance onboard safety.

Picture 21: RULE 2000 bilge pump with SURE BAIL float switch.

13. <u>Bilge Pumping System:</u>

Automatic Pump: RULE 2000 GPH electric bilge pump installed with SURE BAIL float switch, located in bilge sump. Wired direct to battery with fused circuit and manual/auto helm switch. Electric bilge pump energized and tested during the survey. The pump motor operated normally when activated; however, the system was not tested with water in the bilge, so actual discharge flow and pumping performance were not verified. See picture 21.

Manual Pump: WHALE GUSHER manual diaphragm pump with cockpit-mounted deck fitting. Operational at time of survey.

Hoses: Oil-resistant hoses installed, properly secured with clamps and non-return valve fitted.

Bilge Condition: Bilge observed clean, free of oil, grease, debris, and fitted with spill pads.

14. <u>Domestic Systems, Appliances & Propane System:</u>

Refrigeration: ALDER BARBOUR refrigerator and ALDER BARBOUR deep freezer installed and tested operational.

Cooking Appliances: PRINCESS LPG three-burner stainless steel gimbaled stove with oven. Hose condition observed serviceable, protected where going through bulkhead. Does not restrict stove movement. No cracking noted. Oven and burners operational at time of survey.

Microwave: LG stainless steel microwave securely mounted in galley cabinetry. Energized but not tested.

Picture 22: Port side view of galley.

Heaters: SMR THERM 90S HYDRONIC diesel heating system, tied into both engine and hot water system. Provides space heating and hot water. Tested and turned on.

Electronics (Interior Entertainment): KENWOOD KDC-X459 AM/FM/CD stereo with cockpit speakers; Samsung flat screen 32" TV with Samsung DVD player. None tested.

Picture 23: Propane cylinder within a dedicated propane locker located at the starboard transom.

Propane System: One (1) aluminum propane cylinder of unknown capacity located in a dedicated starboard stern transom locker. Locker vented overboard and fitted with a pressure gauge, regulator, solenoid, and manual shutoff valve. Solenoid switch located at the galley panel; switch and indicator light were tested and found operational. A three-minute leak-down test was performed with no pressure loss observed, confirming system integrity. See picture 23.

Marine-approved LPG hose installed, properly routed and supported, with no visible cracks, kinks, or chafing. Hose protection provided where passing through bulkheads. The hose was not inspected along its entire length, only in accessible and visible sections.

15. Plumbing:

15.1 Sewage and Head System:

Heads: Two (2) JABSCO manual marine toilets installed, one forward and one aft. Units securely mounted with serviceable operation noted at time of survey.

Macerator Pump: Electric JABSCO self-priming macerator pump installed model: 18590-2092, 12VDC, base plate secure, no leaks observed at connections. Grounding wire present. Pump wiring properly terminated.

Picture 24: Black sewage tank with JABSCO macerator pump located port side mid-ship.

Sewage Tank: Two polyethylene black holding tank, total capacity approximately 25 gallons (94.6 liters). One (1) located port side mid-ship under settee and one (1) located starboard side under seating settee. Hose and connection points intact with no active leaks observed. See picture 21.

Overboard Discharge: Y-valve bypass for direct overboard discharge located near each tank. Discharge via macerator pump.

Deck Pump-out: Dedicated deck pump-out fittings located on both port and starboard sides at midship. Fittings securely installed, clearly labeled, and observed in serviceable condition at the time of survey.

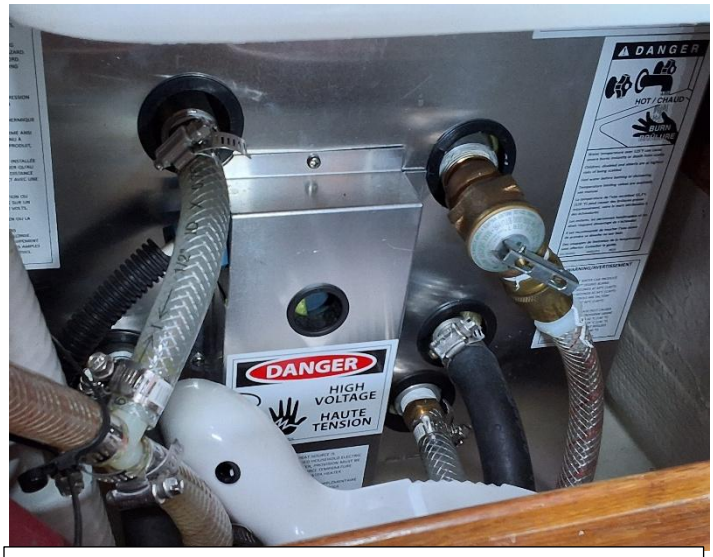
Piping & Hose Clamps: TRIDENT white EPDM sanitation hoses of marine grade observed, double-clamped at critical connections. No softening or odor permeation noted at time of inspection.

Comment: In accordance with the Canada Shipping Act, 2001 and Transport Canada regulations (TP 11717E & TP 1332), all vessels operating in Canadian waters must be fitted with a sewage system that prevents accidental overboard discharge. Non-compliant systems may be subject to fines. Discharges are only permitted through an approved marine sanitation device (MSD) that limits fecal coliform levels to ≤250/100ml, or ≤14/100ml in designated sewage areas.

15.2 Hot/ Fresh and Potable Water:

Fresh Water Tanks: Two (2) polyethylene tanks; one (1) located forward under port side saloon seating and one (1) aft below berth, vented overboard. Total capacity approximately 110 gallons (416 liters). Tanks securely mounted with accessible and marked deck fill inlets.

Fresh Water System: Deck fills clearly marked for potable water located port side bow and port side aft. Hoses and clamps at tank connections secured and in serviceable condition. Inline filtration was fitted at the pump intake; filter condition not verified.



Picture 25: KUUMA hot water tank.

Fresh Water Pump: JABSCO V-Flo 5.0 water pressure pump (Model 42755-0092), 12V DC, 10A max, rated flow 5.0 GPM (18.9 LPM), pressure rating 60 PSI (4.1 BAR). Pump label and wiring visible, installation sound. Tested and working.

Manual Pump: WHALE GUSHER Galley Mk3 manual freshwater pump fitted at galley sink, operational.

Hot Water Tank: KUUMA 6-gallon (22.7 liters) marine water heater, ignition protected, UL-listed. Unit connected to both 120V AC shore power and engine heat exchanger. Located in galley compartment. See picture 25.

Desalinator: VILLAGE MARINE LITTLE WONDER 200 GPD unit fitted. Not tested as cylinder housing has been reported to have a hairline crack requiring replacement prior to safe operation. See picture 26. ***See recommendation C-3**.

Picture 26: VILLAGE MARINE TEC. desalinator.

16. Tender:

Tender: HIGHFIELD inflatable hard-bottom. Not present at time of survey, condition not observed.

17. <u>Short Operational Test Run:</u>

The diesel engine (2002 Yanmar 4JH3E, 56 HP / 41.76 kW) was subjected to a short operational sea trial of approximately 25 minutes under the supervision of a qualified mechanic from *DDM - Dynamo Diesel & Marine*. Pre-departure cold readings were taken while at the dock. The engine was operated at idle while the vessel exited the marina and allowed to reach normal operating temperature before increasing speed.

At wide-open throttle, the engine achieved approximately 3,800 RPM and propelled the vessel to about 8 knots. When reduced to 3,200 RPM (approximately 85% of maximum), the vessel maintained a steady cruising speed of roughly 7 knots.

Shaft seal, rudder post, and steering components were observed throughout the trial and found dry, smooth in operation, and free of abnormal vibration or leakage. Steering response was positive at all speeds, with no undue play or resistance noted. Engine instrumentation indicated normal operating parameters, including an engine temperature of approximately 175°F throughout the entire time.

During the operational test run, navigation and electronic equipment were energized and tested. The autopilot was engaged and maintained a steady heading throughout the trial. Navigation lights and all primary electronics were powered and observed in operation. The chart plotter, radar, AIS, GPS, sonar, and depth sounder were each tested and functioning as intended, with GPS receiving accurate position data. The vessel's horn was tested and operated correctly, and all navigation lights were observed illuminated as required under COLREGS.

Following the motoring period, the engine was shut down, and the sails were hoisted for inspection. The rigging and sails were examined from deck level only. All lines, pulleys, winches, and sail surfaces were visually checked and found to operate as intended, with no signs of snagging, chafing, or loose hardware.

After completion of the sail inspection, the engine was restarted, and the vessel was motored to the lift. A proper shutdown procedure was carried out upon arrival, concluding the sea trial prior to haul-out.

Recommendations:

A – Immediate & Urgent: Critical deficiencies and safety-related issues that require prompt correction before the vessel is operated. These items typically involve essential safety equipment, fire protection, lifesaving gear, or systems that present an immediate hazard if left uncorrected. They often represent non-compliance with Transport Canada Small Vessel Regulations and/or ABYC Standards and therefore must be rectified without delay to ensure safe operation and regulatory compliance.

A-1: Ensure that all required Transport Canada safety equipment is carried onboard, kept current, and maintained in serviceable condition with annual inspection. See Transport Canada Boating Safety TP511E for latest requirements.
A-2: Fire extinguishers were not tagged or marked with current service dates; ensure all portable extinguishers are inspected, tagged, and maintained in accordance with Transport Canada TP 1332E, Section 10.4, and serviced annually by a certified technician.

B – To Be Done: Important items that should be corrected in a timely manner and incorporated into the vessel's next maintenance cycle. These are issues that do not present an immediate hazard but may develop into safety, reliability, or compliance problems if left unaddressed. They should be dealt with sooner rather than later to maintain the vessel's seaworthiness and to prevent more costly or hazardous deficiencies in the future.

B-1: Replace or refurbish the corroded exhaust elbow and renew the missing insulation wrap to restore proper thermal protection and prevent heat damage to adjacent components.
B-2: Replace the damaged shore power inlet cable terminal and inspect adjacent wiring for heat damage to ensure safe connection and compliance with ABYC E-11.
B-3: Install proper vertical restraints to prevent battery displacement in the event of vessel motion or knock-down, in accordance with ABYC E-10 & TC TP1332E/Section 8.

C – Advisable / None Warranted: Advisory items and non-urgent suggestions that do not require immediate or mandatory action. These notes may include good practices, monitoring of non-critical conditions, or optional improvements that could enhance safety, convenience, or vessel longevity. They are not required for compliance and do not currently present a hazard but should be considered by the owner for long-term maintenance and stewardship of the vessel.

C-1: Register an MMSI number through Innovation, Science and Economic Development Canada (ISED) and program it into the VHF radio to enable DSC (Digital Selective Calling) and ensure compliance with Transport Canada communication requirements.
C-2: Consider installation of a fire port to allow safe discharge of extinguishing agents into the engine compartment without opening access panels, in accordance with Transport Canada TP 1332E Section 10.4 and ABYC A-4 standards.
C-3: Replace the cracked cylinder housing on the Village Marine Little Wonder 200 GPD water maker before operating the system to ensure safe and leak-free pressure containment in accordance with manufacturer specifications.

D – Compliance / Regulatory Observation: Items that did not meet the technical or installation standards specified by Transport Canada, ABYC, NFPA, or the International Regulations for Preventing Collisions at Sea (COLREG). These observations identified deviations from current regulatory or best-practice guidelines that did not present immediate safety hazards or operational impairment at the time of inspection. They are recorded to inform the owner of non-conforming installations or components that should be corrected at their discretion to ensure full compliance and maintain the vessel's certification integrity.

Best Practice Recommendations:

1) We recommend that all vessels undergo regular maintenance, checks, and servicing. This includes, but is not limited to, ensuring the operation of through hulls and valves, checking the integrity of lifelines and life rails, inspecting electrical wiring and components, assessing corrosion on hose clamps, and verifying the tightness of bolt assemblies.
2) Fire extinguishers are to be checked, refilled if required and date tagged.
3) It is the client`s responsibility to ensure that Transport Canada required safety equipment is on board. See http://www.tc.gc.ca/boatingsafety for the requirements.
4) All seacocks and through-hull fittings must be regularly inspected and operated.
5) Bilge area must be kept dry, free of oil, without debris and clean at all times.
6) All electrical cable ends and connectors should be serviced at least annually.
7) It is advisable to inspect and service all pumps and impellers annually.
8) Any traces of corrosion or rust stain should not be taken lightly. All matter should be investigated for damages and metal loss.
9) Navigation lights must meet the applicable standards set out in the Collision Regulations.
10) The possibility of fuel tank deterioration or failure increase with age. It is therefore suggested that older tanks be routinely inspected and pressure tested.
11) Stability is particularly affected by vessel handling and by overloading of cargo and crew. Every effort should be made to operate within the capabilities and limitations of the operator and the vessel.
12) Shore power connectors should be dismantled and inspected on an annual basis.

Vessel Condition:

It is the Surveyor's experience that develops an opinion of the OVERALL VESSEL RATING OF CONDITION after the Survey has been completed, and the findings have been organized in a logical manner. The grading of condition developed by BUC RESEARCH and accepted in the marine industry for a vessel at the time of Survey determines the adjustment to the range of base values in the BUC USED BOAT PRICE GUIDE for a similar vessel sold within a given time period as a consideration to determine the Market Value.

The following is the accepted Marine Grading System of Condition:

''EXCELLENT (BRISTOL) CONDITION'', is a vessel that is maintained in mint or Bristol fashion (usually better than factory new, loaded with extras, a rarity).

''ABOVE AVERAGE CONDITION'', has had above average care and is equipped with extra electrical and electronic gear.

''AVERAGE CONDITION'', ready for sale requiring no additional work and normally equipped for her size.

''FAIR CONDITION'', requires usual maintenance to prepare for sale.

''POOR CONDITION'', substantial yard work required and devoid of extras.

''RESTORABLE CONDITION'', enough of hull and engine exists to restore the boat to usable condition.

As a result of the Survey, as shown in the REPORT OF MARINE SURVEY & FINDINGS AND RECOMMENDATIONS sections of this report and by virtue of my experience, my opinion is:

Overall Vessel Rating was: "ABOVE AVERAGE CONDITION".

Valuation Summary:

Market Assessment:

1) 2001 Catalina 400 MK II – Listed at US $149,000 (~CAD $202,000), located Annapolis, MD.

Highlights: Features include new batteries (2024), solar, PANDA generator, updated rigging (2018), ULLMAN sails (2019), GARMIN electronics, and HIGHFIELD RIB on davits.
Source: https://www.yachtworld.com/yacht/2001-catalina-400-mkii-9877448/.

2) 2002 Catalina 400 Mk II – Listed at US $130,000 (~CAD $179,000), located in Titusville, Florida.

Highlights: 2-cabin layout, YANMAR 4JH3E (56 HP), ~3060 engine hours, updated rigging, large equipment package.
Source: https://ca.boats.com/sailing-boats/2002-catalina-400-mkii-9765454/.

3) 2002 Catalina Morgan 40' (400 Mk II) – Listed ~US$129,900 (~CAD $180,000) in Port Clinton, Ohio.

Highlights: Cruiser-racer layout with aft master cabin (centre-line queen), furling main & genoa, twin helm cockpit; 2 cabins; 107 gal. fresh water, 38 gal holding tank; displacement ~20,500 lbs.
Source: https://rcryachts.com/yacht-details/?id=83734&title=40-ft-catalina-morgan-2002-400-mkii-port-clinton-ohio-united-states-yacht-for-sale&vessel=2807606.

Valuation Assessment:

The **Fair Market Value** reflects the estimated price a knowledgeable buyer would reasonably pay for the vessel in its current "as-is, where-is" condition, assuming no pressure on either party. The **Replacement Value** represents the approximate cost to replace the vessel with a similar new model at today's market rates, excluding depreciation.

All values are based on the vessel's observed condition, location, and available market data. Equipment not fully tested is assumed to be serviceable unless otherwise stated. These figures are estimates and subject to change with market conditions. The surveyor has no financial interest in the vessel.

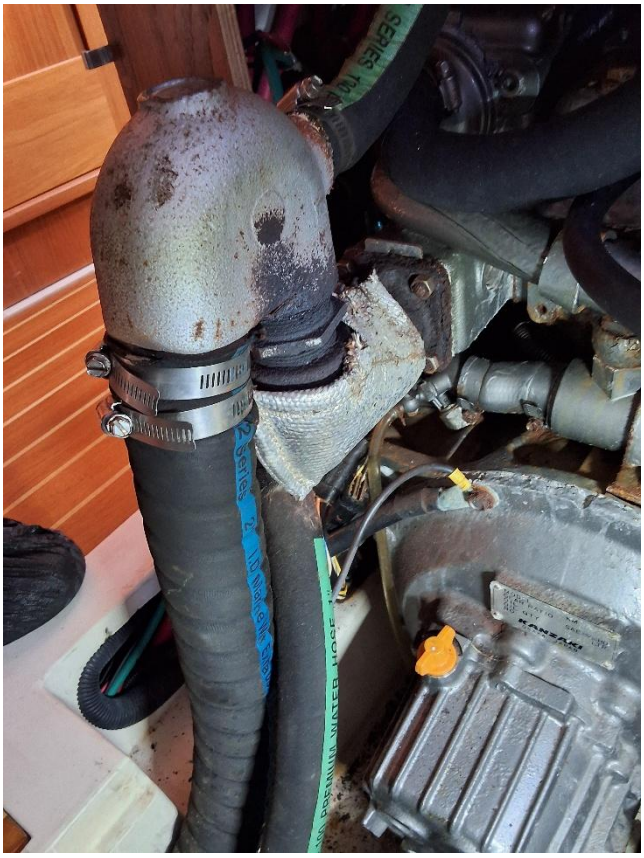
Valuation Results: Estimated Fair Market Value is allocated as follows: *All values excluding taxes.

- **Hull & Structure** (Above Average Condition): $ XXXX CAD.
- **Machinery** (Main engine): $ XXXX CAD.
- **Equipment** (Navigation electronics, inverter, charger, batteries, etc.): $ XXXX CAD.
- **Tender** (Inflatable tender and outboard motor): $ XXXX CAD.

Total Estimated Fair Market Value: **$ XXX,XXX CAD.**
Total Estimated Replacement Value: **$ XXX,XXX CAD.**

Appendix:

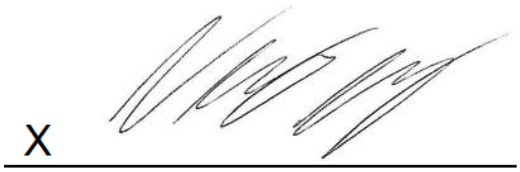
1) YANMAR exhaust elbow showing soot and rust.



Utilization of Survey

This vessel was surveyed exclusively for (Client's Name). This survey is to be used by the client only. Any other person(s) using this survey report does so at their own risk. This report should be considered as an entire document. No single section is meant to be used except as part of the whole. This report remains the property of Sea Captain Marine Surveyor Inc. and is not transferable without written consent. This survey represents the surveyor's honest and unbiased opinion. The surveyor has no personal interest in the vessel or the transaction.

Sea Captain Marine Surveyor Inc. certify that, to the best of the surveyor's knowledge and belief, the statements of facts contained in this report are true and accurate. This report represents the surveyor's unbiased professional opinion, based on the conditions and findings observed during the survey.



X

Nicolas Cote
Marine Surveyor

Signed on: XX/XX/2025.
Survey report sent on: XX/XX/2025.

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