

REPORT OF MARINE SURVEY

CONDITION & VALUATION

1994 BAYLINER 4388 MOTORYACHT



M/V “ [REDACTED] ”

REPORT OF MARINE SURVEY

OF THE VESSEL

1994 BAYLINER 4388 MOTORYACHT

M/V “ [REDACTED] ”

SURVEY CONDUCTED BY:

Cale Mathers - AMS® #1156
SAMS® Accredited Marine Surveyor®

PREPARED EXCLUSIVELY FOR:

[REDACTED]

[REDACTED] 2014

SCOPE OF SURVEY

This survey report is for the benefit of [REDACTED] only and may not be relied upon by any other person without written consent of the surveyor or the above beneficiary.

Acting at the request of [REDACTED], the attending surveyor did attend onboard the 1994 Bayliner 4388 Motoryacht, M/V "[REDACTED]" on [REDACTED], 2014, from 0930 to 1500, for vessel survey inspection while vessel sit on the hard at BananaBelt Boats dry storage yard in Anacortes, WA, and while vessel lay afloat at a BananaBelt Boats moorage slip at Fidalgo Marina in Anacortes, WA. Sea trial testing was performed out of Fidalgo Bay / Puget Sound / Anacortes, WA. An out-of-the-water inspection of underwater machinery and the exterior of the hull's wetted surface area was performed. Vessel's engines & generator were started at time of survey inspection. AC & DC power were available and used for testing electronic equipment. Electronic equipment tested during inspection was tested for power up only. The reason for the survey was to ascertain the physical condition and value of the vessel for pre-purchase, insurance, and financing purposes.

- ❖ No reference or information should be construed to indicate evaluation of the internal condition of the engine or the propulsion system's operating capacity.
- ❖ This vessel was surveyed without removal of any parts, including fittings, tacked carpet, screwed or nailed boards, fixed partitions, instruments, personal items, miscellaneous materials in the bilges and lockers, or and other fixed or semi-fixed items.
- ❖ All moisture related values stated in the report were derived using the GE Protimeter Aquant BLD5760 moisture detector. Moisture detector measures conductivity using a value range of 060 - 999. Moisture detector is used to assess & monitor the relative moisture level of non-conductive & porous materials. Conclusions based on moisture readings are not definitive, and confirmation may require destructive testing.
- ❖ Tankage will be inspected from visible surfaces only. No evaluations can be made or opinions rendered as to overall condition of inaccessible areas.
- ❖ Electrical system will be visually inspected where accessible. No in-depth testing or examination of the electrical system schematic will be conducted.
- ❖ Locked compartments or otherwise inaccessible areas would also preclude inspection. Buyer / owner is advised to open up all such areas for further inspection.
- ❖ No determination of stability characteristics has been made, and no opinion is expressed.
- ❖ On sailing vessels, the rig will not be inspected aloft, nor will sails be inspected unless they are visible during a sea trial. Client shall retain the services of a qualified rig surveyor or other expert to inspect such rigging and equipment.
- ❖ A visual cursory inspection of the engine(s), gearbox(es), and generator(s) machinery will be conducted and no opinion of their overall condition will be formed. It is recommended that all engines, gearboxes, and generators be surveyed by a qualified marine engine technician to determine the condition of the engine's gears, pumps, heat exchangers, coolers, etc. This report should not be construed as a full engine mechanical survey inspection.

This survey report represents the condition of the vessel on the above date, and is the unbiased opinion of the undersigned, but it is not to be considered a complete inventory or a warranty, either specified or implied.

CONDUCT OF SURVEY

This survey report represents the condition of the vessel as inspected by the undersigned surveyor on the date of survey. This survey report makes no representation and does not purport to describe any condition that may have changed since the date of the survey, and the recommendations herein are limited to those that in the opinion of this surveyor are reasonably necessary and appropriate based upon the conditions and circumstances, as they existed at the time of the survey.

The services rendered herein and the report rendered herewith are done with the distinct understanding that the undersigned is not responsible or liable under any circumstances whatsoever for any error, omission, negligence, or failure to properly perform the requested services and that all matters and statements contained in this report are of opinion only. They are not to be construed as representations, warranties, or guarantees. No statement made herein, or with services performed hereunder, or work done in connection herewith shall be the basis for any claim, demand, or action against the undersigned. If the work performed is deficient in any material respect, the surveyor shall correct his report or refund the fee paid. In no event shall he be liable for incidental and consequential damages, or damages exceeding the fee actually received for the work.

The market value quoted is the best estimate of the price a willing buyer would pay a willing seller, both parties having reasonable access to the relevant facts, neither party under any compulsion to buy or sell, and under market conditions at the time and place of the survey.

THE MANDATORY STANDARDS PROMULGATED BY THE UNITED STATES COAST GUARD (USCG), UNDER THE AUTHORITY OF TITLE 46 UNITED STATES CONDE (USC); TITLE 33 AND TITLE 46, CODE OF FEDERAL REGULATIONS (CFR), AND THE VOLUNTARY STANDARDS AND RECOMMENDED PRACTICES DEVELOPED BY THE AMERICAN BOAT AND YACHT COUNCIL (ABYC) AND THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAVE BEEN USED AS GUIDELINES IN THE CONDUCT OF THIS SURVEY.

- ❖ The American Boat and Yacht Council “Standards and Recommendations,” are defined by reference to “ABYC”. These standards were developed in cooperative effort with the National Marine Manufacturers Association to complement the mandatory standards promulgated by the United States Coast Guard under the authority of the Federal Boat Safety Act of 1971. The ABYC Standards and Recommendations are considered to be voluntary, but are highly suggested by this surveyor.



GENERAL INFORMATION

<p>SURVEY FILE NUMBER:</p> <p>SURVEY PREPARED FOR:</p> <p>PHONE:</p> <p>EMAIL:</p> <p>TYPE OF MARINE SURVEY:</p> <p>DATE OF MARINE SURVEY:</p> <p>LOCATION OF MARINE SURVEY:</p> <p>VESSEL'S INTENDED SERVICE:</p> <p>WATERS TO BE NAVIGATED:</p> <p>HULL IDENTIFICATION NUMBER (HIN):</p> <p>STATE REGISTRATION NUMBER:</p> <p>DECAL NUMBER:</p> <p>VESSEL NAME:</p> <p>HAILING PORT:</p> <p>MANUFACTURED BY:</p> <p>ORIGINAL BUILD LOCATION:</p> <p>MODEL YEAR:</p> <p>MAKE:</p> <p>MODEL:</p> <p>HULL MATERIAL:</p> <p>HULL TYPE:</p> <p>DEADRISE AFT:</p> <p>LOA:</p> <p>BEAM:</p> <p>DRAFT:</p> <p>CLEARANCE:</p> <p>WEIGHT:</p> <p>PROPULSION SYSTEM:</p> <p>FUEL TYPE:</p> <p>FUEL CAPACITY:</p> <p>DC POWER:</p> <p>AC POWER:</p> <p>FAIR MARKET VALUE:</p> <p>REPLACEMENT COST:</p>	<p>SAMPLE</p> <p>██████████</p> <p>██████████</p> <p>██████████</p> <p>Condition & Valuation</p> <p>██████████ 2014</p> <p>Anacortes, WA</p> <p>Recreation</p> <p>Underwriters Discretion</p> <p>██████████</p> <p>██████████</p> <p>Bayliner Marine Corp.</p> <p>Everett, WA</p> <p>1994</p> <p>Bayliner</p> <p>4388 Motoryacht</p> <p>FRP (Fiber Reinforced Plastic)</p> <p>Modified-V</p> <p>14°</p> <p>43' 1"</p> <p>14' 3"</p> <p>3' 0"</p> <p>13' 6"</p> <p>19,000 lbs.</p> <p>Twin Hino Inboard Engines</p> <p>Diesel</p> <p>300 Gals.</p> <p>12V DC</p> <p>120V AC</p> <p>\$ 95,200.00 USD</p> <p>\$ 607,000.00 USD</p>
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* Hull dimensions cited per 2014 Power Boat Guide (www.powerboatguide.com).

VESSEL DESCRIPTION

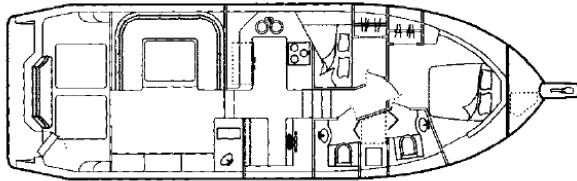
www.powerboatguide.com

Bayliner 4388 Motor Yacht

1991-94



With her Euro-style profile and rakish appearance, the Bayliner 4388 Mid-Cabin MY combined the big-boat accommodations most cruising families expect in a boat this size with a surprisingly affordable price. She was built on a solid fiberglass modified-V hull with a relatively wide beam, shallow keel, and an integrated swim platform. Her two-stateroom interior is arranged with the U-shaped galley forward of the salon which results in an expansive and very comfortable layout. The owner's stateroom is forward, and a small mid-stateroom (with partial standing headroom) extends under the galley. Note the common shower stall between the two head compartments. While the interior accommodations are generous, the cockpit is quite small with just enough space for a couple of deck chairs. Additional features include a spacious flybridge, good access to the engines, and a standard lower helm station. Twin 250hp Hino diesels (with V-drives) cruise the Bayliner 4388 at a respectable (and efficient) 19 knots and deliver a top speed of 24-25 knots. Optional 310hp diesels will run a couple of knots faster. With just 300 gallons of fuel capacity, cruising range is limited.



Pricing NA for Pre-1995 Models

Length.....	43'1"	Fuel	300 gals.
Beam.....	14'3"	Water	100 gals.
Draft.....	3'0"	Waste.....	46 gals.
Weight.....	19,000#	Hull Type	Modified-V
Clearance	13'6"	Deadrise Aft	14°



DEFINITIONS OF TERMS

Please associate the following terms with the given definition as they appear throughout the following Report of Survey.

APPEARS:

- Indicates that a very close inspection of the particular system, component or item was not possible due to constraints imposed upon the surveyor (e.g. no power available, inability to remove panels, or requirements not to conduct destructive tests).

SERVICEABLE / FUNCTIONAL / SOUND / ADEQUATE:

- Sufficient for a specific requirement.

POWERS UP:

- Power was applied only. This does not refer to the operation of any system or component unless specifically indicated

EXCELLENT CONDITION:

- New or like new.

GOOD CONDITION:

- Nearly new, with only minor cosmetic or structural discrepancies noted.

FAIR CONDITION:

- Denotes that system, component, or item is functional as is with minor repairs.

DETERIORATING CONDITION:

- Denotes that system, component, or item is functional as is; however, without service, the system, component, or item will degrade to an unusable condition.

POOR OR WASTED CONDITION:

- Unusable as is. Requires repairs or replacement of system, component, or item to be considered functional.



VESSEL SYSTEMS

WETTED SURFACE AREA PHOTOS



Wetted surface photos taken Monday, October 13, 2014

Mathers Marine Survey & Consulting

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HULL STRUCTURES

STRUCTURAL SYSTEM	CONDITION
HULL TOPSIDES:	Cosmetically Fair / Structurally Sound
HULL-TO-DECK JOINT:	Structurally Sound
WETTED SURFACE AREA:	Structurally Sound
TRANSOM STRUCTURE:	Structurally Sound
BOTTOM PAINT:	Poor / See Note Below
DECK STRUCTURE:	See Note Below
SUPERSTRUCTURE:	Structurally Sound
STRINGERS:	Structurally Sound Where Accessible
BULKHEADS:	Structurally Sound Where Accessible
CLEATS, STANCHION & RAIL:	Structurally Adequate / See Note Below
ESCAPE HATCH:	Functional
REBOARDING LADDER:	Inoperable / See Note Below
SACRIFICIAL ZINC ANODES:	See Note Below

NOTES / COMMENTS:

- Vessel's anti-fouling bottom paint was peeling & deteriorating throughout the hull's wetted surface area when sighted at time of out-of-water survey inspection. The bottom paint appears in overall poor / wasted condition. Recommend service & renew vessel's anti-fouling bottom paint as required.
- Vessel's reboarding ladder was inoperable when sighted at time of survey inspection due to its installed location forward of the tender davit structure.
ABYC Standards recommends: Means of unassisted reboarding shall be provided on all boats, and must be accessible to, or deployable by the person in the water (ABYC H-41.9.1).
Recommend equip vessel with reboarding ladder in accordance with ABYC Standards stated above.
- The sacrificial zinc anodes installed at the trim tabs & prop shafts were deteriorated and appeared near the end of their useful lives when sighted at time of survey inspection. The zinc anode plates installed at studs fastened to the hull's transom structure were new / excellent. Recommend monitor the condition of the vessel's sacrificial zinc anodes on a semi-annual basis, and renew zincs as required.
- There was an area of gelcoat & fiberglass damage measuring approx. 6" by 2" sighted at the starboard side of the vessel's transom structure. Damage described is a serviceable deficiency. Recommend monitor the condition of the fiberglass damage described, and service / repair as required.
- There was evidence of crevice corrosion & water intrusion identified at the two stainless steel U-bolt fittings fastened to the vessel's transom structure when sighted at time of survey inspection. Monitor the fittings described to determine the severity of fasteners deterioration & rate of water intrusion. Recommend either renew & rebed U-bolt fittings, or remove fittings & seal holes in the transom structure at time of vessel's next out-of-water service.
- There was a dent identified in the vessel's aluminum rub rail structure at the port side of the swim step perimeter when sighted at time of survey inspection. Damage described is a cosmetic deficiency. Recommend monitor the condition of the rub rail at the damaged area described, and service / repair as required.
- There was minor gelcoat cracking sighted in various places at the vessel's hull topsides structures when sighted at time of survey inspection. All gelcoat damage sighted is a serviceable cosmetic deficiency. Recommend monitor areas of gelcoat cracking described, and service / repair as required.
- There was evidence of crevice corrosion & water intrusion sighted at several trim tab cylinder fasteners secured to the vessel's transom structure when sighted at time of survey inspection. Recommend monitor the trim tab fasteners described to determine the severity of fasteners deterioration & rate of water intrusion, renew trim tab cylinder fasteners & rebed cylinders to transom structure with marine adhesive sealant as required.

- There was a water leak identified at one of the fasteners used to secure the bow pulpit structure to the foredeck as sighted from chain locker interior at time of survey inspection. Water intrusion deficiency described can potentially result in the foredeck core material becoming saturated with water, which leads to deterioration. Recommend remove & renew leaking fastener described. Inspect foredeck core material when fastener is removed. Rebed fastener with marine adhesive sealant. Service / repair damaged foredeck core material as required.
- One of the bow rail stanchion bases at the starboard side foredeck structure was bent & loose when sighted at time of survey inspection. The fiberglass structure surrounding the stanchion base fasteners at the chain locker interior was damaged. There was evidence of water intrusion at the damaged stanchion base fasteners described. Recommend rebed & resecure the damaged bow rail stanchion base described. Recommend install and oversized fastener backing plate at the chain locker interior location to strengthen the damaged fiberglass.
- There were two large areas of soft foredeck structure identified forward of the port & starboard windshield frames when tested at time of survey inspection. Percussion hammer soundings were dull, moisture meter readings were extremely elevated, and the deck structure was physically soft when a minimal amount of pressure was applied to the areas described. Recommend consult with a reputable boatyard for foredeck service options, and service / repair soft foredeck areas described as required.



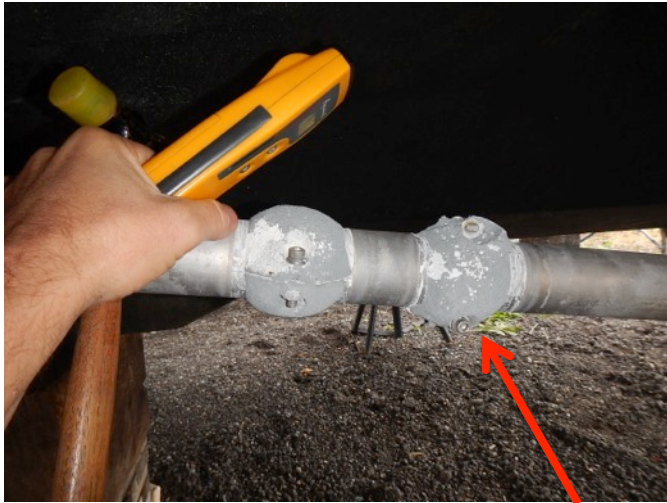
Bottom paint is deteriorating



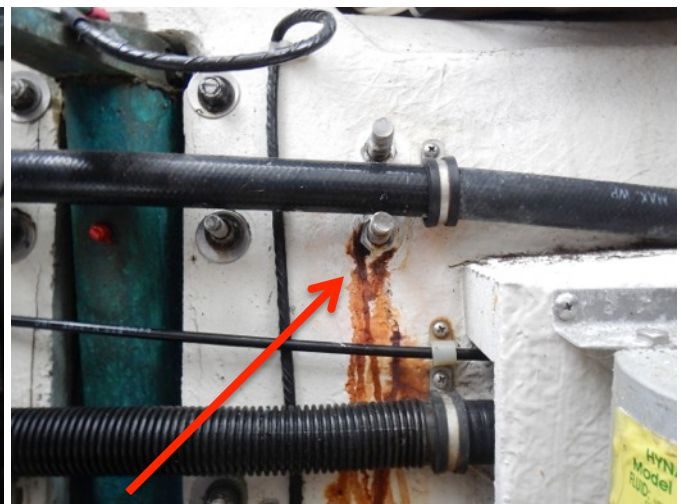
Reboarding ladder is obstructed by davit structure



Gelcoat & fiberglass damage



Zinc anodes are deteriorating



Water intrusion & crevice corrosion at U-bolt fittings



Dent in aluminum rub rail



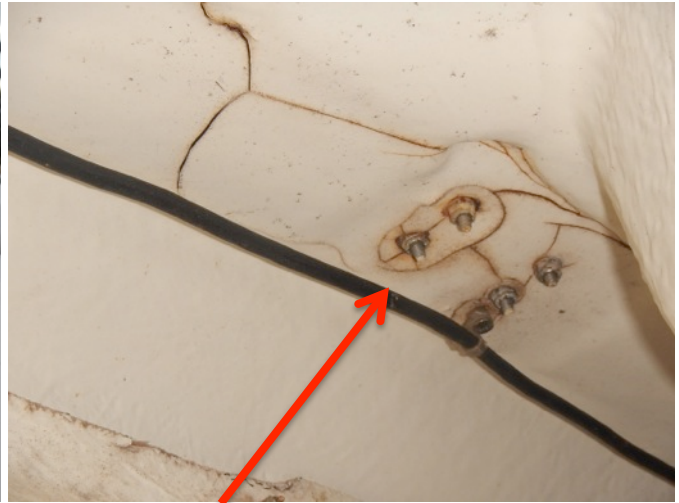
Gelcoat crazing



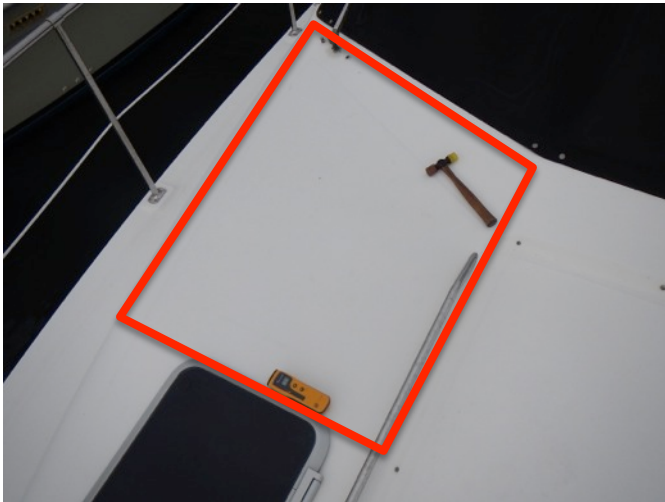
Water intrusion & crevice corrosion at trim tab cylinder fasteners



Water intrusion at pulpit structure fastener

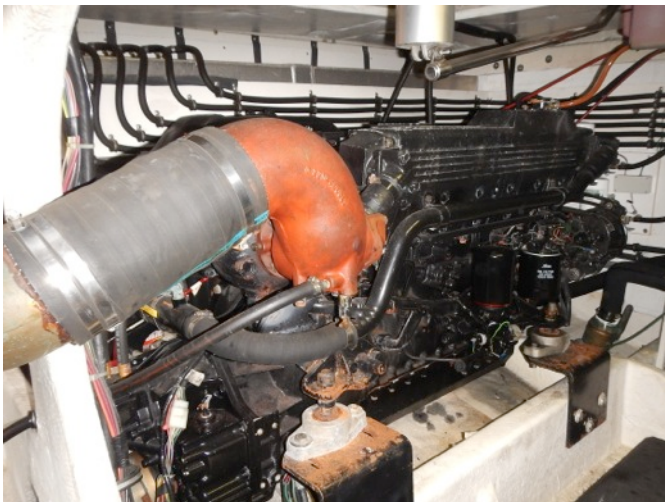


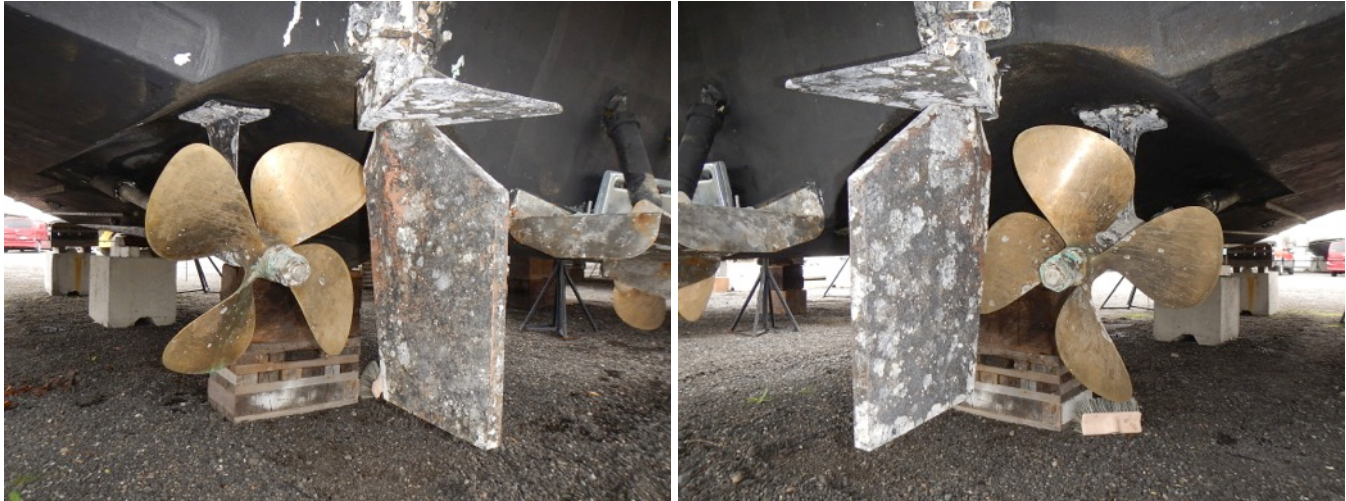
Bow rail stanchion base is loose. Fiberglass is damaged at stanchion base fasteners



Soft foredeck structure

PROPULSION SYSTEM





PROPULSION SYSTEM SPECS

ENGINE QTY:	2
FUEL TYPE:	Diesel
ENGINE DESCRIPTION:	6-Cylinder, Turbocharged & Aftercooled
ENGINE MAKE:	Hino / US Marine / Toyota
ENGINE MODEL:	W06CTI
ENGINE SERIAL:	PORT: D855237 STBD: D855238
DISPLACEMENT:	5.76 L
RATED POWER:	310 HP @ 3000 RPM
COOLING SYSTEM:	Fresh Water Cooled
EXHAUST SYSTEM:	Wet Exhaust
ENGINE HOURS:	PORT: 2,421 Hrs. (Indicated By Analog Gauge) STBD: 2,421 Hrs. (Indicated By Analog Gauge)

GEAR / TRANSMISSION DETAILS

GEAR MAKE:	Hurth Marine Gear
GEAR MODEL:	HSW 800A – 2.0
GEAR RATIO:	2.0 : 1

NOTES / COMMENTS:

- This report does not represent a full mechanical / engine survey inspection. For more detailed information pertaining to the working condition of engine components it is recommended a certified marine technician perform a detailed mechanical inspection.
- The port & starboard main engine seawater intake hose sections between the sea strainers & engine seawater pumps were cracking & deteriorating and in overall poor / wasted condition when sighted at time of survey inspection. Recommend renew main engine seawater intake hoses described.
- The port engine exhaust hose connection to the exhaust elbow was secured with a single hose clamp fastener when sighted at time of survey inspection.

ABYC Standards recommends: *Every exhaust hose connection shall be secured with at least two non-overlapping clamps at each end to produce a secure, liquid and vapor-tight joint (ABYC P-1.7.1.10.1).*

Recommend install additional marine grade stainless steel hose clamp fasteners at port engine exhaust hose connection described in accordance with ABYC Standards stated above.



Main engine seawater intake hoses are cracking



Main engine seawater intake hoses are cracking



Single hose clamp fastener at main engine exhaust hose

MAIN ENGINE CONTROL SYSTEM DETAILS

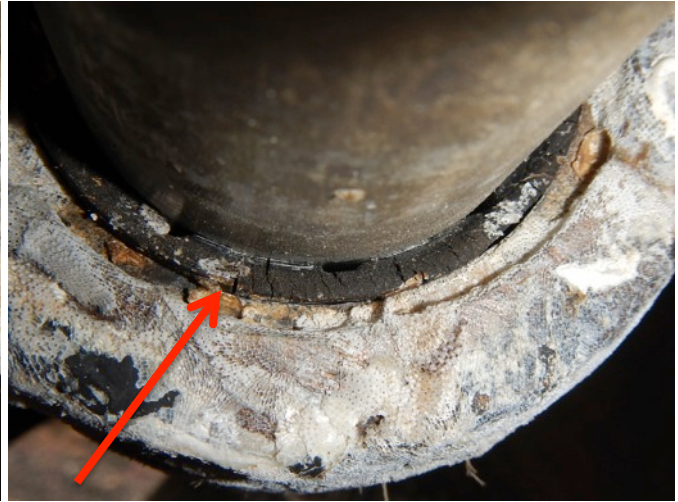
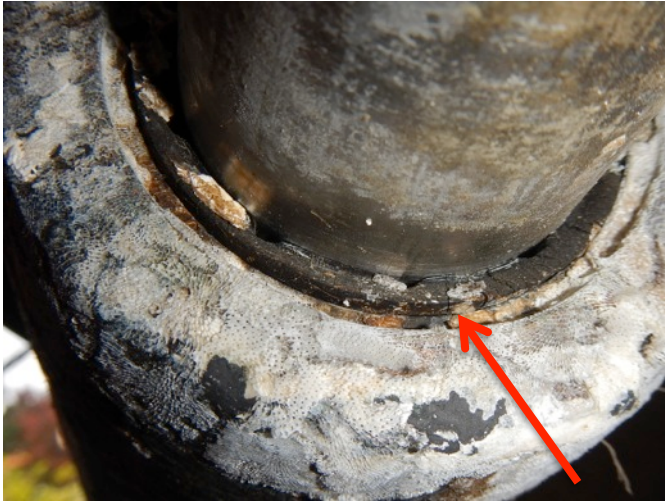
SYSTEM TYPE:	Mechanical / Push-Pull Cable
STATION QTY:	2
CONTROL DESCRIPTION:	4-Lever Control
CONDITION:	Functional / Adequate

PROPELLER & SHAFT DETAILS

PROP TYPE:	4 Blade Bronze
PROP SIZE(S):	D22" X P25"
PROP ROTATION DIRECTION:	Counter Rotating / Rotation Outboard
PROP CONDITION:	Appear Adequate / No Visible Damage
SPARE PROP(S):	Not Sighted
SHAFT SIZE & MATERIAL:	2" Stainless Steel
SHAFT SEAL TYPE & CONDITION:	Stuffing Box / See Note Below
CUTLASS BEARING CONDITION:	Poor / Wasted / See Note Below

NOTES / COMMENTS:

- The vessel's cutlass bearings were in overall poor / wasted condition when sighted at time of out-of-water inspection. The rubber portion of the cutlass bearings have become separated from the bronze sleeve, and were sighted spinning with the prop shafts when the props were rotated. Recommend renew vessel's cutlass bearings.
- The starboard engine stuffing box shaft seal was leaking seawater excessively when sighted at time of survey inspection. There was a constant stream of seawater leaking into the vessel's bilge from the shaft seal while vessel lay afloat during inspection. Recommend either service / adjust shaft seal described to eliminate excessive seawater leakage, or repack stuffing box with new packing gland as required. Monitor both port & starboard shaft seals for recurring deficiency, and service as required.



Cutlass bearings are in need of renewal



Starboard engine shaft seal leaking excessively

FUEL SYSTEM

MAIN ENGINE FUEL SYSTEM DETAILS

FUEL TANK QTY:	2
FUEL TYPE:	Diesel
TANK MAKE:	Coastline Marine, Inc.
TANK MATERIAL:	5052 Aluminum Alloy
TOTAL FUEL CAPACITY:	300 Gals. (150 Gals. Per Tank)
FUEL TANK CONDITION:	Appear Good / Adequate Where Sighted
FUEL SUPPLY LINE TYPE:	USCG Approved Type A1
FUEL FILL HOSE TYPE:	USCG Approved Type A2
FUEL SUPPLY LINE CONDITION:	Appear Adequate Where Sighted
FUEL FILL HOSE CONDITION:	Appear Adequate Where Sighted

STEERING SYSTEM

STEERING SYSTEM COMPONENTS & DETAILS

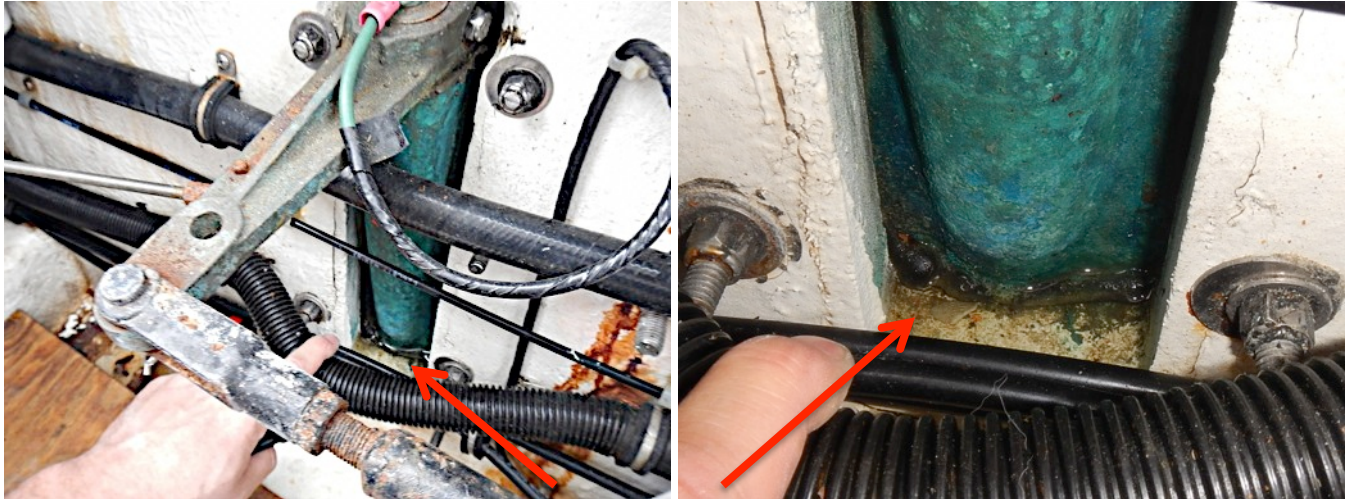
STEERING SYSTEM TYPE:	Hydraulic
MAKE / MODEL:	Hynautic / Teleflex Marine
STEERING SYSTEM CONDITION:	Functional / Responsive
AUTOPILOT SYSTEM TYPE:	Not Installed
RUDDER MATERIAL & CONDITION:	Bronze / Structurally Sound
RUDDER STOCK SEAL TYPE:	Transom Mounted Rudder / See Note Below

NOTES / COMMENTS:

- There was water intrusion identified at the port & starboard rudder systems when sighted at time of survey inspection. Rudder system used is a transom mounted rudder assembly with marine adhesive sealant applied to the perimeter of the assembly to prevent water intrusion through the transom rudder cutouts. It appears that the sealant has deteriorated, allowing seawater to weep through the transom cutouts and into the lazarette bilge. Recommend remove rudder assemblies from vessel's transom structure, and reinstall with new fasteners & new marine adhesive sealant.



Water leak at rudder assembly to transom seal



Water leak at rudder assembly to transom seal

DC (DIRECT CURRENT) ELECTRICAL SYSTEM

DC ELECTRICAL SYSTEM DETAILS

SYSTEM VOLTAGE:	12V DC		
BATTERY QTY:	8 Total		
BATTERY BANK:	Start / House / Inverter / Generator		
BATTERY MAKE / DESCRIPTION	QTY	BANK	DATE
6V Trojan 105		House	02/2006
6V Trojan T-105		Inverter	10/2013
12V Group 24		Generator	06/2012
12V Group 8D		Start	Unknown

NOTES / COMMENTS:

- The 12V DC power supply to the inverter/charger system was not equipped with overcurrent protection when sighted at time of survey inspection.

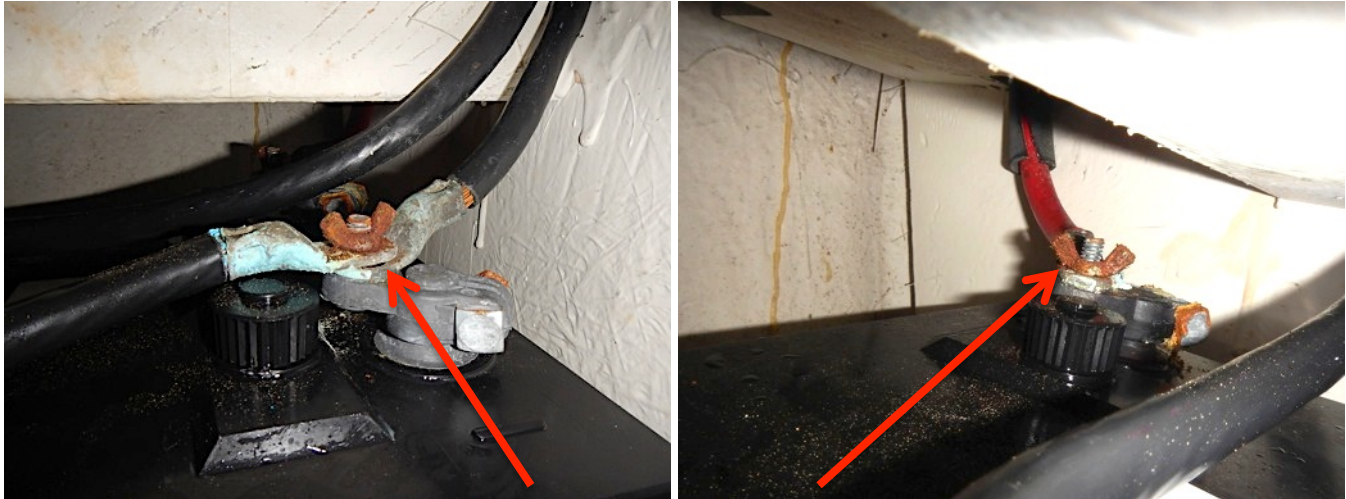
ABYC Standards recommends: *The ungrounded external DC conductor(s) of battery chargers shall be equipped with an overcurrent protection device within seven inches of the termination of connection to the DC system or to the battery conductor in accordance with ABYC E-11 (ABYC A-31.5.2.3.1). Devices that serve as both battery charger and inverter, shall meet the requirements applicable to both battery chargers and inverters (ABYC A-31.5.4.1).*

Recommend install overcurrent protection at the DC power supply to the inverter/charger system in accordance with ABYC Standards stated above.

- The vessel's DC power system Start Bank battery uses wing nut fasteners to secure conductors to battery terminals. Wing nut fasteners have the tendency to vibrate loose and result in poor connections. The wing nuts fasteners were corroded when sighted at time of survey inspection.

ABYC Standards recommends: *Battery cables and other conductors size 6 AWG and larger shall not be connected to the battery with wing nuts (ABYC E-10.8.3).*

Recommend renew wing nut fasteners at battery terminals with marine grade stainless steel hex nut style fasteners.



Wing nut fasteners & corrosion at battery terminals

AC (ALTERNATING CURRENT) ELECTRICAL SYSTEM

AC ELECTRICAL SYSTEM DETAILS

SYSTEM VOLTAGE:	120V AC 60 Hz
SHORE POWER INLET DESCRIPTION:	(2) 30A 125V Inlet
SHORE POWER CABLE:	30A 125V Cable w/ 30A 125V Y-Adapter
MAIN BREAKER LOCATION:	@ AC Power Distribution Panel
DISTRIBUTION PANEL:	120V AC / 60 Hz Breaker Panel
REVERSE POLARITY INDICATION:	Red Light @ Distribution Panel
CONDITION OF WIRING:	Appears Adequate Where Sighted
CONDITION OF SHORE POWER INLET:	Good / Functional
CONDITION OF SHORE POWER CORD:	Good / Functional

BATTERY CHARGER & POWER INVERTER SYSTEM DETAILS

MAKE / MODEL	DESCRIPTION	SPECS
Heart Interface Freedom 20	Battery Charger & Power Inverter	100 Amp 12V DC Charger / 2000 Watt 120V AC Inverter
Professional Mariner ProTech 1230	Battery Charger	30 Amp 12V DC Charger

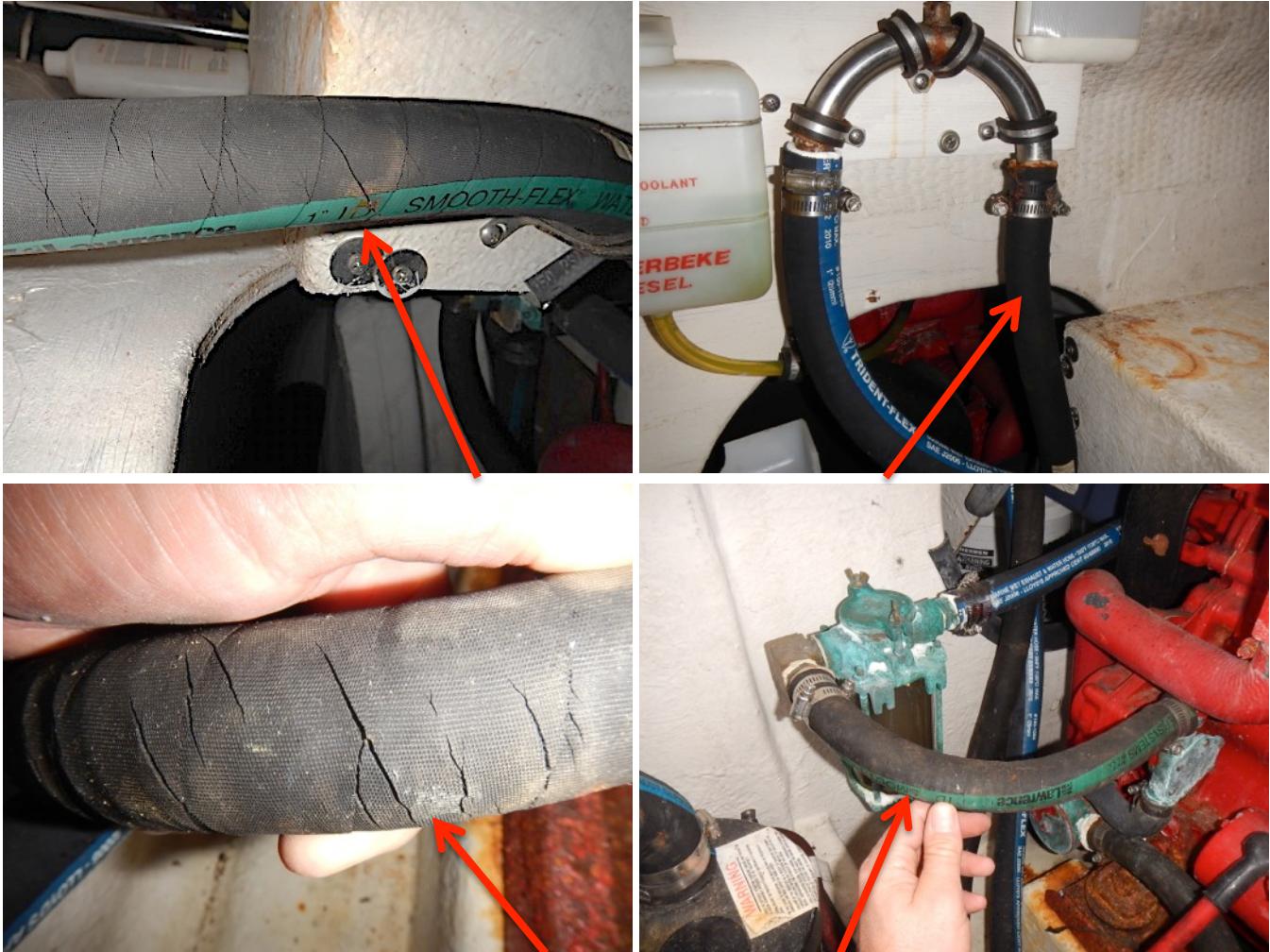
GENERATOR SYSTEM DETAILS

GENERATOR MAKE:	Westerbeke
FUEL TYPE:	Diesel
MODEL:	8.0 BTD
SERIAL:	97603-D306
RATED POWER:	8.0 kW
AC POWER OUTPUT:	120V AC
DC POWER INPUT:	12V DC
FREQUENCY:	60 Hz / Phase 1
ENGINE HOURS:	602 Hrs. (Indicated By Analog Gauge)

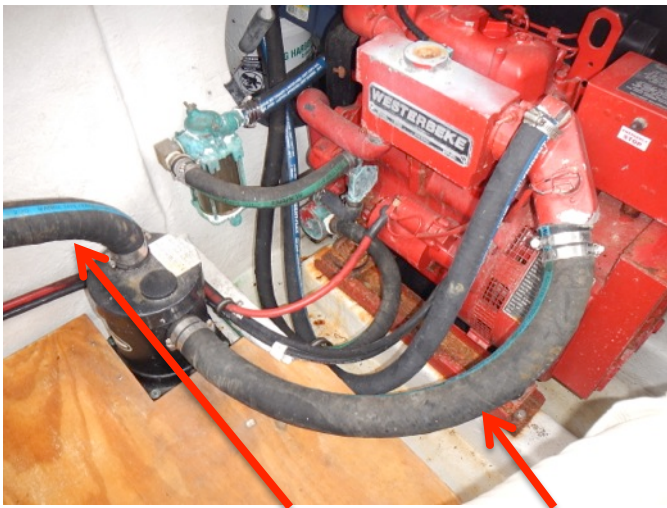
NOTES / COMMENTS:

- This report does not represent a full mechanical / generator engine survey inspection. For more detailed information pertaining to the working condition of generator engine components it is recommended a certified marine technician perform a detailed mechanical inspection.

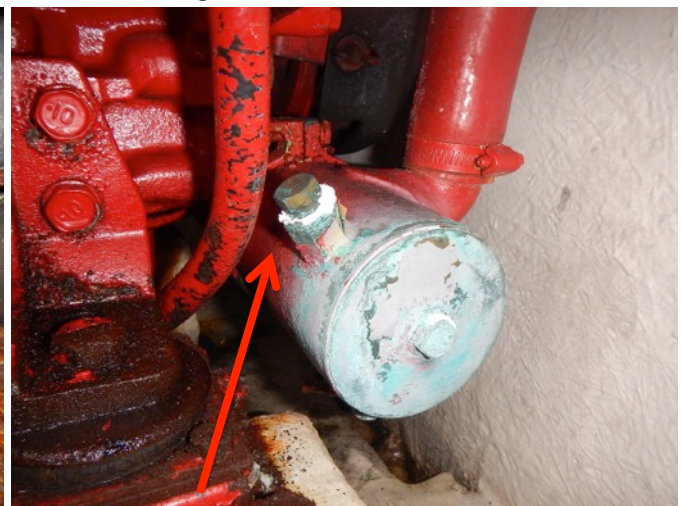
- The majority of the generator engine seawater cooling system hoses were cracking, and appeared in overall poor / deteriorating condition. Recommend renew all cracking generator engine seawater cooling system hoses.
- All sections of generator engine exhaust hose was cracking, and appeared in poor / deteriorating condition when sighted at time of survey inspection. Recommend renew all generator engine exhaust hose.
- There was corrosion sighted at the cap ends of the generator engine heat exchanger when sighted at time of survey inspection. Heat exchanger requires disassembly for closer inspection. Overall condition is undetermined. Recommend monitor the condition of the generator engine heat exchanger, and service or renew heat exchanger components as required.



Generator seawater cooling system hoses are cracking



Generator exhaust hoses are cracking



End caps of generator heat exchanger are corroded

THRU-HULL FITTING SYSTEMS

BELOW-THE-WATERLINE (BWL) THRU-HULL FITTING DETAILS

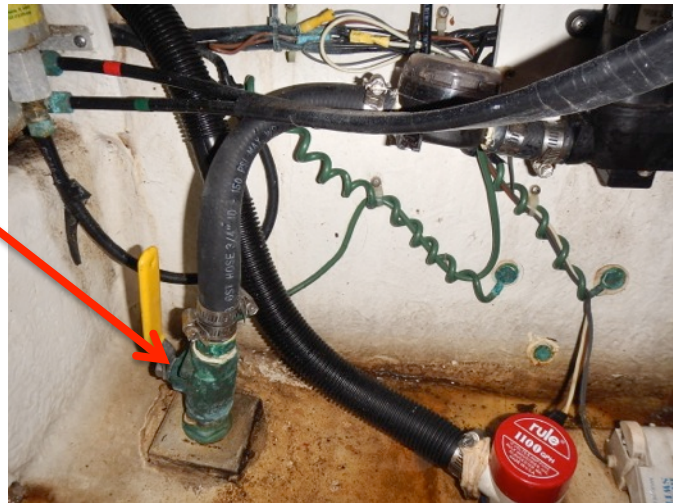
THRU-HULL MATERIAL:	Bronze
SEACOCK TYPE:	Ball Valve
SEACOCK CONDITION:	Functional / See Note Below

SEACOCK SYSTEMS

(2) Main Engine Raw Water Intake
(1) Generator Engine Raw Water Intake
(1) Head Toilet Raw Water Intake
(1) Water Maker Raw Water Intake
(1) Washdown Pump Raw Water Intake

NOTES / COMMENTS:

- The below-the-waterline thru-hull ball valve seacock used for seawater intake to the washdown pump system was stiff & difficult to operate when tested at time of survey inspection. Recommend service / lubricate & exercise seacock valve described so that all seacock valves are functional by hand, without the use of tools.



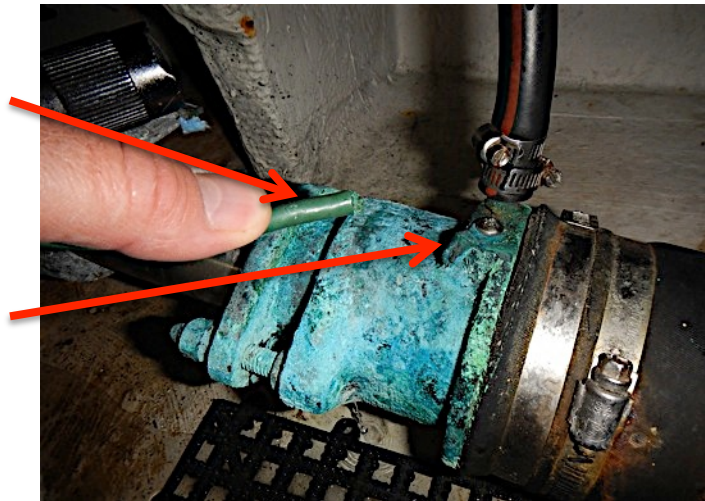
BONDING / GROUNDING SYSTEM

BONDING / GROUNDING SYSTEM DETAILS

BONDING SYSTEM DESCRIPTION:	Non-Current Carrying Grounding Wire
BONDING TERMINAL CONDITION:	Appear Adequate / Minimal Corrosion @ Terminals
BWL THRU-HULLS TERMINATED:	Yes / See Note Below

NOTES / COMMENTS:

- The bonding / DC grounding system conductor used to terminate the starboard engine stuffing box shaft seal was broken / connection severed when sighted at time of survey inspection. Recommend renew the bonding conductor ring connector end, and re-terminate the broken bonding conductor described to the starboard engine shaft seal.



RAW WATER & WASTE PUMP SYSTEMS

RAW WATER PUMP SYSTEM DETAILS

SYSTEM COMPONENT	MAKE / DESCRIPTION	CONDITION
Waste Tank Discharge Pump	12V DC Macerator Pump	Appears Adequate / Powers On
Shower Sump Pump	12V DC Shower Sump Box	Inoperable / See Note Below
Raw Water Washdown Pump	12V Flojet Water Pump	Inoperable / See Note Below

NOTES / COMMENTS:

- The seawater washdown pump system was inoperable / would not power on when tested at time of survey inspection. Source of deficiency is undetermined and requires further troubleshooting. Recommend service / repair or renew components of the seawater washdown system as required.
- The shower sump pump was inoperable / would not power on when tested at time of survey inspection. Source of deficiency is undetermined and requires further troubleshooting. Recommend service / repair or renew components of the shower sump pump system as required.



Shower sump pump is inoperable



Raw water washdown pump is inoperable

FRESH WATER SYSTEM

FRESH WATER SYSTEM DETAILS

FRESH WATER TANK QTY:	1	
FRESH WATER TANK MATERIAL:	Plastic	
FRESH WATER CAPACITY:	100 Gals. (Per Manufacturer Specs.)	
FRESH WATER TANK CONDITION:	Appears Adequate Where Sighted	
SYSTEM COMPONENT	MAKE / DESCRIPTION	CONDITION
Fresh Water Pump	12V DC Flojet Water Pump	Powers On / Functional
Water Heater	120V AC or Engine Heat / Atwood / 10.5 Gals.	Powers On / Functional
Water Maker	120V AC Water Maker	Not Tested / System Winterized

SANITATION SYSTEM

SANITATION SYSTEM DETAILS

SANITATION SYSTEM TYPE:	MSD Type III (Holding Tank)
BLACK WATER TANK MATERIAL:	Plastic
BLACK WATER TANK QTY:	1
BLACK WATER TANK CAPACITY:	46 Gals. (Per Manufacturer Specs.)
BLACK WATER TANK CONDITION:	Appears Adequate Where Sighted

SANITATION HOSE CONDITION:

Appear Poor Where Sighted / See Note Below

BLACK WATER TANK BYPASS OPTION:

(2) Y-Valve / Inoperable / See Note Below

BLACK WATER TANK DISCHARGE OPTION:

Dockside Pump-Out or Discharge Pump Overboard

NOTES / COMMENTS:

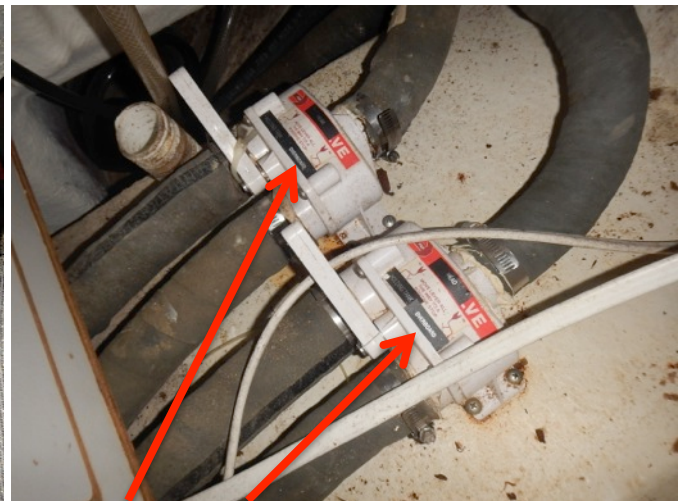
- The vessel's rubber sanitation system hoses were bulging in several places with a small sanitation leak identified at one location when sighted at time of survey inspection. Sanitation system hoses appear in overall poor / deteriorating condition. Recommend monitor the condition of the vessel's rubber sanitation system hoses, and renew hoses as require.
- The two sanitation system Y-valves used to bypass the black water holding tank and flush the marine toilets directly overboard were inoperable when tested at time of survey inspection. The Y-valves are currently set to flush the toilets into the black water holding tank. The Y-valves do not need to be operational for the vessel's sanitation system to operate properly. It is illegal to flush black water waste directly overboard in the Puget Sound region. If the black water direct overboard discharge option is desired, it appears that the vessel's sanitation system Y-valves require renewal.



Sanitation system hoses are bulging & leaking



Sanitation system hoses are bulging



Sanitation system Y-valves are inoperable

HEAD SYSTEM DETAILS	
HEAD QTY:	2
TOILET DESCRIPTION:	(1) Fresh Water Electric Flush & (1) Raw Water Manual Pump
MAKE / MODEL:	(1) Dometic MasterFlush 12V DC & (1) Jabsco Manual Pump
TOILET CONDITION:	Good / Functional (All)

ELECTRONICS & NAVIGATION EQUIPMENT

ELECTRONICS & NAVIGATION EQUIPMENT DETAILS		
EQUIPMENT	MAKE / MODEL	CONDITION
Magnetic Compass	Ritchie Powerdamp Plus	Fair / See Note Below
Electronic Compass	Taria	Powers On / Functional
VHF Radio	(2) Standard Horizon Matrix	Powers On / Functional
GPS Receiver	Raytheon NAV 398 GPS	Powers On / Functional
GPS Chartplotter	Raytheon RAYCHART 600XX & Standard Horizon CP300i	Powers On / Functional
Depth Sounder	Raytheon V850	Powers On / Functional
Digital Depth & Speed	Furuno RD-30	Powers On / See Note Below
Marine Radar	Raytheon R41XX Raster Scan Radar	Powers On / Functional
Pulpit Searchlight	N/A	Inoperable / See Note Below

NOTES / COMMENTS:

- The speed-over-water paddle wheel installed at the thru-hull transducer was inoperable due to marine growth blockage when sighted at time of haul-out inspection. Recommend service / clean blockage described at paddle wheel as required to make speed-over-water gauge operational.
- There was an air bubble in the compass dome of the magnetic compass at the flybridge pilot station when sighted at time of survey inspection. If the air bubble becomes large, the compass will no longer function accurately. Recommend monitor the size of the air bubble inside the compass dome described, and service or renew compass if condition worsens.
- The foredeck searchlight system was inoperable / would not power on when tested at time of survey inspection. Plastic searchlight components were identified as damaged when system was inspected. Recommend service / repair or renew searchlight components as required.



Paddle wheel is inoperable



Air bubble in compass dome



Search light is damaged

GALLEY APPLIANCES & CABIN INTERIOR

GALLEY APPLIANCES & CABIN INTERIOR SYSTEM DETAILS

EQUIPMENT	MAKE / MODEL	POWER SOURCE	CONDITION
Water Tap	Hot & Cold Water	12V DC	Powers On / Functional
Refrigerator & Freezer	Nova Kool	12V DC	Powers On / Functional
Stovetop	Kenyon	120V AC	Powers On / Functional
Microwave	GE	120V AC	Powers On
Ice Maker	U-Line	120V AC	Powers On / Functional
Hydronic Heater	Heater Craft	12V DC + Engine Heat	Powers On / Functional
Electric Heater	3-Units	120V AC	Powers On / Functional (All)

NOTES / COMMENTS:

- The chain locker access panel at the V-berth interior would not maintain in the closed position when tested at time of survey inspection. The bungee cord used to secure the access panel closed was weak & deteriorating. Recommend service / repair the inoperable chain locker access panel described as required.



Chain locker access panel requires service

BILGE PUMP DETAILS

ELECTRIC BILGE PUMP QTY:	4
POWER SOURCE:	12V DC
PUMP CONDITION:	(2) Power On / (2) Inoperable / See Note Below
AUTOMATIC FLOAT SWITCH:	(1) Functional / (3) Inoperable / See Note Below

NOTES / COMMENTS:

- Three of the four bilge pumps installed onboard the vessel were not functioning properly when tested at time of survey inspection. The forward most bilge pump was fully operational, powering on with both manual switch & automatic float switch. The bilge pump installed at the forward bulkhead of the engine compartment powered on with the manual switch, however, the automatic float switch function of the pump was inoperable. The bilge pumps at the aft engine compartment location & the lazarette location were inoperable / would not power on when tested. Recommend either service / repair or renew components of inoperable bilge pump systems described as required.



Inoperable bilge pump systems

GROUND TACKLE & DECK EQUIPMENT

GROUND TACKLE & DECK EQUIPMENT DETAILS

ANCHOR DETAILS

ANCHOR MAKE / STYLE:	Fluke Style
ANCHOR CONDITION:	Good / Adequate
ANCHOR CHAIN CONDITION:	Appears Good / Adequate

ANCHOR WINDLASS DETAILS

MAKE / MODEL:	Muir Cougar
POWER SOURCE:	12V DC
CONDITION:	Powers On / Functional

TENDER, DAVIT & MOTOR DETAILS

DAVIT DETAILS

DESCRIPTION:	Swim Step Mounted Winch Davit
MAKE / MODEL:	Skiff-Lift
POWER SOURCE:	12V DC Winch Motor
CONDITION:	See Note Below

NOTES / COMMENTS:

- The swim step mounted tender davit winch powered on in the OUT direction when tested at time of survey inspection, however, the winch was inoperable in the IN direction. Source of deficiency is undetermined and requires further troubleshooting. Recommend service / repair or renew components of the davit winch control system as required.



SAFETY EQUIPMENT

FIRE EXTINGUISHER DETAILS

HANDHELD EXTINGUISHER QTY:	3 Sighted Onboard
EXTINGUISHER TYPE:	USCG Approved Size B-1 / Type A B C
INSPECTION TAGS:	Not Sighted / See Note Below
AUTOMATIC EXTINGUISHER:	Not Installed

DISTRESS SIGNAL FLARE DETAILS

FLARE QTY:	All EXPIRED / See Note Below
OTHER:	Glow Stick / Orange Flag / Signal Mirror

SOUND SIGNALING DEVICE DETAILS

HORN:	Yes / Functional
WHISTLE:	Yes
BELL:	Yes

NAVIGATION LIGHT DETAILS

PORT (RED):	Functional
STARBOARD (GREEN)	Functional
MASTHEAD (WHITE)	Functional
STERN (WHITE)	Inoperable / See Note Below
ANCHOR (WHITE)	Functional

NOTES / COMMENTS:

- All distress signal flares sighted onboard the vessel at time of survey inspection were EXPIRED.
USCG CFR regulations state: *All vessels 16ft. and larger are required to carry 3 distress signal flares suitable for day & night use (3 day & 3 night, or 3 rated for day or night use). (46 CFR 175.110). No person may use a boat unless each signal required by sec. 175.110 is in serviceable condition and the service life of the signal, if indicated by a date marked on the signal, has not expired. (46 CFR 175.125).*
Equip vessel in accordance with USCG CFR regulations stated above.
- The vessel's fire extinguishers were not equipped with inspection tags when sighted at time of survey inspection. Date of last inspection & service is unknown.
ABYC Standards recommends: *At one-year intervals, a full maintenance check should be made by a qualified fire extinguishing system service facility in accordance with the manufacture's maintenance instructions. A tag should be attached showing the date of such maintenance check (ABYC A-4 Ap.6.3).*
Recommend a qualified technician service & tag vessel's fire extinguishers in accordance with ABYC Standards stated above.
- The STERN navigation light was inoperable / would not power on when tested at time of survey inspection.
USCG CFR regulations & ABYC Standards state: *A power driven vessel underway shall exhibit (ABYC A-16.7.1.1):*
 - a. *A Masthead Light (White)*
 - b. *Sidelights (Port: Red / Starboard: Green)*
 - c. *A Stern Light (White)*
Service / repair or renew bulb of STERN navigation light as required.

FINDINGS & RECOMMENDATIONS

All safety equipment aboard this vessel, including VHF channel 16, fire extinguishers, flares, and PFD's have been checked and deficiencies noted. New **NFPA** (National Fire Protection Association) or **ABYC** (American Boating and Yacht Council) standards, as quoted, may have gone into effect since this vessel was built. Findings may also be in violation of **USCG** Regulations. While **NFPA** and **ABYC** standards are not always retroactive, except for where there is a distinct hazard of life or property, this firm suggests their compliance for safety reasons. All **CFR** (Code of Federal Regulations) and **72 COLREGS** (Navigation Rules) quoted herein are mandatory for correction.

A. USCG MANDATED REQUIREMENTS & SAFETY DEFICIENCIES

B. DEFICIENCIES REQUIRING ATTENTION

C. SURVEYORS NOTES & OBSERVATIONS

D. ABYC RECOMMENDATIONS

A. USCG MANDATED REQUIREMENTS & SAFETY DEFICIENCIES

1. All distress signal flares sighted onboard the vessel at time of survey inspection were EXPIRED.
USCG CFR regulations state: *All vessels 16ft. and larger are required to carry 3 distress signal flares suitable for day & night use (3 day & 3 night, or 3 rated for day or night use). (46 CFR 175.110). No person may use a boat unless each signal required by sec. 175.110 is in serviceable condition and the service life of the signal, if indicated by a date marked on the signal, has not expired. (46 CFR 175.125).*
Equip vessel in accordance with USCG CFR regulations stated above.
2. The STERN navigation light was inoperable / would not power on when tested at time of survey inspection.
USCG CFR regulations & ABYC Standards state: *A power driven vessel underway shall exhibit (ABYC A-16.7.1.1):*
 - a. *A Masthead Light (White)*
 - b. *Sidelights (Port: Red / Starboard: Green)*
 - c. *A Stern Light (White)*Service / repair or renew bulb of STERN navigation light as required.
3. The vessel's fire extinguishers were not equipped with inspection tags when sighted at time of survey inspection. Date of last inspection & service is unknown.
ABYC Standards recommends: *At one-year intervals, a full maintenance check should be made by a qualified fire extinguishing system service facility in accordance with the manufacture's maintenance instructions. A tag should be attached showing the date of such maintenance check (ABYC A-4 Ap.6.3).*
Recommend a qualified technician service & tag vessel's fire extinguishers in accordance with ABYC Standards stated above.

B. DEFICIENCIES REQUIRING ATTENTION

1. Vessel's anti-fouling bottom paint was peeling & deteriorating throughout the hull's wetted surface area when sighted at time of out-of-water survey inspection. The bottom paint appears in overall poor / wasted condition. Recommend service & renew vessel's anti-fouling bottom paint as required.

2. There was a water leak identified at one of the fasteners used to secure the bow pulpit structure to the foredeck as sighted from chain locker interior at time of survey inspection. Water intrusion deficiency described can potentially result in the foredeck core material becoming saturated with water, which leads to deterioration. Recommend remove & renew leaking fastener described. Inspect foredeck core material when fastener is removed. Rebed fastener with marine adhesive sealant. Service / repair damaged foredeck core material as required.
3. One of the bow rail stanchion bases at the starboard side foredeck structure was bent & loose when sighted at time of survey inspection. The fiberglass structure surrounding the stanchion base fasteners at the chain locker interior was damaged. There was evidence of water intrusion at the damaged stanchion base fasteners described. Recommend rebed & resecure the damaged bow rail stanchion base described. Recommend install and oversized fastener backing plate at the chain locker interior location to strengthen the damaged fiberglass.
4. There were two large areas of soft foredeck structure identified forward of the port & starboard windshield frames when tested at time of survey inspection. Percussion hammer soundings were dull, moisture meter readings were extremely elevated, and the deck structure was physically soft when a minimal amount of pressure was applied to the areas described. Recommend consult with a reputable boatyard for foredeck service options, and service / repair soft foredeck areas described as required.
5. The port & starboard main engine seawater intake hose sections between the sea strainers & engine seawater pumps were cracking & deteriorating and in overall poor / wasted condition when sighted at time of survey inspection. Recommend renew main engine seawater intake hoses described.
6. The vessel's cutlass bearings were in overall poor / wasted condition when sighted at time of out-of-water inspection. The rubber portion of the cutlass bearings have become separated from the bronze sleeve, and were sighted spinning with the prop shafts when the props were rotated. Recommend renew vessel's cutlass bearings.
7. The starboard engine stuffing box shaft seal was leaking seawater excessively when sighted at time of survey inspection. There was a constant stream of seawater leaking into the vessel's bilge from the shaft seal while vessel lay afloat during inspection. Recommend either service / adjust shaft seal described to eliminate excessive seawater leakage, or repack stuffing box with new packing gland as required. Monitor both port & starboard shaft seals for recurring deficiency, and service as required.
8. There was water intrusion identified at the port & starboard rudder systems when sighted at time of survey inspection. Rudder system used is a transom mounted rudder assembly with marine adhesive sealant applied to the perimeter of the assembly to prevent water intrusion through the transom rudder cutouts. It appears that the sealant has deteriorated, allowing seawater to weep through the transom cutouts and into the lazarette bilge. Recommend remove rudder assemblies from vessel's transom structure, and reinstall with new fasteners & new marine adhesive sealant.
9. The 12V DC power supply to the inverter/charger system was not equipped with overcurrent protection when sighted at time of survey inspection.

ABYC Standards recommends: *The ungrounded external DC conductor(s) of battery chargers shall be equipped with an overcurrent protection device within seven inches of the termination of connection to the DC system or to the battery conductor in accordance with ABYC E-11 (ABYC A-31.5.2.3.1). Devices that serve as both battery charger and inverter, shall meet the requirements applicable to both battery chargers and inverters (ABYC A-31.5.4.1).*

Recommend install overcurrent protection at the DC power supply to the inverter/charger system in accordance with ABYC Standards stated above.

10. The majority of the generator engine seawater cooling system hoses were cracking, and appeared in overall poor / deteriorating condition. Recommend renew all cracking generator engine seawater cooling system hoses.
11. All sections of generator engine exhaust hose was cracking, and appeared in poor / deteriorating condition when sighted at time of survey inspection. Recommend renew all generator engine exhaust hose.
12. The below-the-waterline thru-hull ball valve seacock used for seawater intake to the washdown pump system was stiff & difficult to operate when tested at time of survey inspection. Recommend service / lubricate & exercise seacock valve described so that all seacock valves are functional by hand, without the use of tools.
13. The bonding / DC grounding system conductor used to terminate the starboard engine stuffing box shaft seal was broken / connection severed when sighted at time of survey inspection. Recommend renew the bonding conductor ring connector end, and re-terminate the broken bonding conductor described to the starboard engine shaft seal.
14. The shower sump pump was inoperable / would not power on when tested at time of survey inspection. Source of deficiency is undetermined and requires further troubleshooting. Recommend service / repair or renew components of the shower sump pump system as required.
15. The vessel's rubber sanitation system hoses were bulging in several places with a small sanitation leak identified at one location when sighted at time of survey inspection. Sanitation system hoses appear in overall poor / deteriorating condition. Recommend monitor the condition of the vessel's rubber sanitation system hoses, and renew hoses as require.
16. Three of the four bilge pumps installed onboard the vessel were not functioning properly when tested at time of survey inspection. The forward most bilge pump was fully operational, powering on with both manual switch & automatic float switch. The bilge pump installed at the forward bulkhead of the engine compartment powered on with the manual switch, however, the automatic float switch function of the pump was inoperable. The bilge pumps at the aft engine compartment location & the lazarette location were inoperable / would not power on when tested. Recommend either service / repair or renew components of inoperable bilge pump systems described as required.
17. The swim step mounted tender davit winch powered on in the OUT direction when tested at time of survey inspection, however, the winch was inoperable in the IN direction. Source of deficiency is undetermined and requires further troubleshooting. Recommend service / repair or renew components of the davit winch control system as required.

C. SURVEYORS NOTES & OBSERVATIONS

1. The sacrificial zinc anodes installed at the trim tabs & prop shafts were deteriorated and appeared near the end of their useful lives when sighted at time of survey inspection. The zinc anode plates installed at studs fastened to the hull's transom structure were new / excellent. Recommend monitor the condition of the vessel's sacrificial zinc anodes on a semi-annual basis, and renew zincs as required.
2. There was an area of gelcoat & fiberglass damage measuring approx. 6" by 2" sighted at the starboard side of the vessel's transom structure. Damage described is a serviceable deficiency. Recommend monitor the condition of the fiberglass damage described, and service / repair as required.
3. There was evidence of crevice corrosion & water intrusion identified at the two stainless steel U-bolt fittings fastened to the vessel's transom structure when sighted at time of survey inspection. Monitor the fittings described to determine the severity of fasteners deterioration & rate of water intrusion. Recommend either renew & rebed U-bolt fittings, or remove fittings & seal holes in the transom structure at time of vessel's next out-of-water service.

4. There was a dent identified in the vessel's aluminum rub rail structure at the port side of the swim step perimeter when sighted at time of survey inspection. Damage described is a cosmetic deficiency. Recommend monitor the condition of the rub rail at the damaged area described, and service / repair as required.
5. There was minor gelcoat cracking sighted in various places at the vessel's hull topsides structures when sighted at time of survey inspection. All gelcoat damage sighted is a serviceable cosmetic deficiency. Recommend monitor areas of gelcoat cracking described, and service / repair as required.
6. There was evidence of crevice corrosion & water intrusion sighted at several trim tab cylinder fasteners secured to the vessel's transom structure when sighted at time of survey inspection. Recommend monitor the trim tab fasteners described to determine the severity of fasteners deterioration & rate of water intrusion, renew trim tab cylinder fasteners & rebed cylinders to transom structure with marine adhesive sealant as required.
7. There was corrosion sighted at the cap ends of the generator engine heat exchanger when sighted at time of survey inspection. Heat exchanger requires disassembly for closer inspection. Overall condition is undetermined. Recommend monitor the condition of the generator engine heat exchanger, and service or renew heat exchanger components as required.
8. The seawater washdown pump system was inoperable / would not power on when tested at time of survey inspection. Source of deficiency is undetermined and requires further troubleshooting. Recommend service / repair or renew components of the seawater washdown system as required.
9. The two sanitation system Y-valves used to bypass the black water holding tank and flush the marine toilets directly overboard were inoperable when tested at time of survey inspection. The Y-valves are currently set to flush the toilets into the black water holding tank. The Y-valves do not need to be operational for the vessel's sanitation system to operate properly. It is illegal to flush black water waste directly overboard in the Puget Sound region. If the black water direct overboard discharge option is desired, it appears that the vessel's sanitation system Y-valves require renewal.
10. The speed-over-water paddle wheel installed at the thru-hull transducer was inoperable due to marine growth blockage when sighted at time of haul-out inspection. Recommend service / clean blockage described at paddle wheel as required to make speed-over-water gauge operational.
11. There was an air bubble in the compass dome of the magnetic compass at the flybridge pilot station when sighted at time of survey inspection. If the air bubble becomes large, the compass will no longer function accurately. Recommend monitor the size of the air bubble inside the compass dome described, and service or renew compass if condition worsens.
12. The foredeck searchlight system was inoperable / would not power on when tested at time of survey inspection. Plastic searchlight components were identified as damaged when system was inspected. Recommend service / repair or renew searchlight components as required.
13. The chain locker access panel at the V-berth interior would not maintain in the closed position when tested at time of survey inspection. The bungee cord used to secure the access panel closed was weak & deteriorating. Recommend service / repair the inoperable chain locker access panel described as required.

D. ABYC RECOMMENDATIONS

1. Vessel's reboarding ladder was inoperable when sighted at time of survey inspection due to its installed location forward of the tender davit structure.

ABYC Standards recommends: *Means of unassisted reboarding shall be provided on all boats, and must be accessible to, or deployable by the person in the water (ABYC H-41.9.1).*

Recommend equip vessel with reboarding ladder in accordance with ABYC Standards stated above.

2. The port engine exhaust hose connection to the exhaust elbow was secured with a single hose clamp fastener when sighted at time of survey inspection.

ABYC Standards recommends: *Every exhaust hose connection shall be secured with at least two non-overlapping clamps at each end to produce a secure, liquid and vapor-tight joint (ABYC P-1.7.1.10.1).*

Recommend install additional marine grade stainless steel hose clamp fasteners at port engine exhaust hose connection described in accordance with ABYC Standards stated above.

3. The vessel's DC power system Start Bank battery uses wing nut fasteners to secure conductors to battery terminals. Wing nut fasteners have the tendency to vibrate loose and result in poor connections. The wing nuts fasteners were corroded when sighted at time of survey inspection.

ABYC Standards recommends: *Battery cables and other conductors size 6 AWG and larger shall not be connected to the battery with wing nuts (ABYC E-10.8.3).*

Recommend renew wing nut fasteners at battery terminals with marine grade stainless steel hex nut style fasteners.

CONDITION

STATEMENT OF OVERALL VESSEL RATING OF CONDITION:

It is the surveyor's experience that develops an opinion of the overall vessel rating of condition after a complete survey has been performed and the findings organized in a logical manner.

The grading of condition as developed by **BUC RESEARCH**, found within **BUC USED BOAT PRICE GUIDE**, is widely accepted in the marine industry for a vessel at the time of survey. It determines the adjustment to the range of base values 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. Normally equipped for her size. May require normal wear & tear / maintenance improvements.

FAIR CONDITION:

- Requires repairs 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 my investigation, as shown in the **SYSTEMS** and **FINDINGS & RECOMMENDATIONS** section, my opinion is:

OVERALL VESSEL RATING:

FAIR

VALUATION

STATEMENT OF VALUATION:

The **FAIR MARKET VALUE** is the most probable price in terms of money which a vessel should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently, knowledgeably, and assuming the price is not affected by undue stimulus.

Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

- ❖ Buyer and seller are typically motivated.
- ❖ Both parties are well informed or well advised, and each acting in what they consider their own best interest.
- ❖ A reasonable time is allowed for exposure in the open market.
- ❖ Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto
- ❖ The price represents a normal consideration for the vessel sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

Vessel valuation range is determined by using the following sources: www.soldboats.com, www.yachtworld.com, BUC Used Boat Price Guide, N.A.D.A Price Guides, and other current vessel listings. Local market demands, and current vessel condition can affect the valuation.

CLOSEST COMPARABLE:

1. 1991 Bayliner 4388 MY – Listed: \$99,500 USD (12/2013) – Sold: \$99,500 USD (02/2014) – Portland, OR – Note: Similar engine configuration. Appears similarly equipped.
 2. 1991 Bayliner 4388 MY – Listed: \$115,307 USD (06/2013) – Sold: \$97,944 USD (09/2013) – Sidney, BC – Note: Similar engine configuration. Appears similarly equipped.
 3. 1991 Bayliner 4388 MY – Listed: \$105,000 USD (06/2014) – Sold: \$97,000 USD (09/2014) – Tacoma, WA – Note: Similar engine configuration. Appears similarly equipped.
 4. 1994 Bayliner 4388 MY – Listed: \$99,000 USD (08/2012) – Sold: \$93,000 USD (10/2012) – Tacoma, WA – Note: Similar engine configuration. Appears similarly equipped.
 5. 1992 Bayliner 4388 MY – Listed: \$97,944 USD (07/2013) – Sold: \$88,595 USD (06/2014) – North Vancouver, BC – Note: Similar engine configuration. Appears similarly equipped.
-

FAIR MARKET VALUE:

\$ 95,200.00 USD

Ninety-five thousand two hundred dollars and zero cents

REPLACEMENT COST:

\$ 607,000.00 USD (Per BUC ValuPro)

Six hundred seven thousand dollars and zero cents

VALUATION NOTE:

- *Valuation figures are statements of opinion. No guarantees can be made. Figures should not be considered absolute.*

CONCLUSION

In accordance with the request for Report of Marine Survey on the 1994 Bayliner 4388 Motoryacht, M/V "██████████", for the purpose of evaluating its present condition, and estimating its Fair Market Value & Replacement Cost, I herewith submit my conclusion based upon the preceding report. The subject vessel was inspected on ██████████ 2014, and was found to be a well-constructed, appointed, and comfortable vessel.

In consequence of this inspection, I am of the opinion that the vessel is in suitable condition and fit for her intended service, subject to the above recommendations for safety.

SURVEYORS CERTIFICATION:

I certify that, to the best of my knowledge and belief:

- ❖ The statements of fact contained in this report are true and correct.
- ❖ The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are of my personal, unbiased professional analyses, opinions, and conclusions.
- ❖ I have no present or prospective interest in the vessel that is the subject of this report, and I have no personal interest or bias with respect to the parties involved.
- ❖ My compensation is not contingent upon the reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of stipulate results, or the occurrence of a subsequent event.
- ❖ I have made a personal inspection of the vessel that is the subject of this report.

This report is submitted in good faith. The statements and information contained in it are not to be construed that other unforeseen or undetected defects or damages do not exist. All the findings reflect conditions observed at the time of the survey inspection. The surveyor reserves the right to amend or extend this report upon receipt of additional relevant information.

The above report is a statement of opinion made, signed and submitted without prejudice.

Respectfully submitted,



Cale Mathers - AMS® #1156
Mathers Marine Survey & Consulting
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