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MAIN PHOTOGRAPH REMOVED TO PROTECT CLIENT CONFIDENTIALITY

'xxxxxx'

Pre Purchase Hull only Survey

Report Date: 17th March 2018

Survey Date: 15th March 2018

Place of Survey: Southdock Marina, London

Vessel name: xxxxxx

Vessel Type: Sealine 33

Builder: Sealine

XXXXXXXX

Sealine 33

Length Overall: 34'4"
Beam: 11'0"

Built: 2002
Builder: Sealine

HIN no: XXXXXXXXX
Vessel no: XXX
SSR: Not displayed

Engines: 2 x Diesel 400hp - Volvo AD41P/DP

*Above taken from various sources, not checked unless specifically noted.

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1. About the Survey and this Report

Terms & Conditions

This Survey was carried out under the Yacht Designers and Surveyors Association current Terms of business which were E-mailed to the client prior to the survey.

Limitations

- We have not inspected woodwork or any other parts of the structure which are covered, unexposed or inaccessible and we are, therefore, unable to report that any such part of the structure is free from defect.
- In some cases it is not possible to detect latent and hidden defects without destructive testing, not possible without the Owner's consent.
- Where repairs, further opening up or dismantling is required, additional decay, damage or necessary work may be uncovered.
- The engine, tanks and other normally installed mechanical equipment were in situ which limited inspection and examination in these areas.
- A Sovereign Quantum Marine Moisture Meter, a capacitance-type moisture meter was used. The calibration of the meter was checked on the day of the survey, prior to readings being taken. Readings are taken in the relative mode, which ranges from 0-100. The values are regarded as an index and do not represent moisture content as a percentage of the dry weight. Where appropriate both shallow and deep modes were employed. Direct comparisons with other meters, be they Sovereign or others are not valid.
- The vessel was out of the water during the survey. This survey is unable to ascertain the water tightness of the vessel.
- The vessel was not surveyed with respect to any particular code or standard or navigation body's rules or bylaws unless specifically stated. No documentation or compliance with any regulations has been checked as part of this survey. No guarantees or warranties are given or implied with respect to the vessels suitability or fitness for purpose.
- The vessel was inspected in the slings at Southdock Marina, London. Access to the hull was generally good except in areas which were covered by the supporting slings.
- The vessel was not shot blasted or UHP washed which may have uncovered additional faults hidden behind layers of coatings applied to the hull.
- This report carries no warranties regarding ownership of the vessel or any outstanding mortgage, charges or debt there may be on the vessel.
- This Report has been prepared for the use of the commissioning client and no liability is extended to others who may see it.

Scope of Survey

- This is a Limited Scope Pre Purchase Hull Survey and its purpose is to establish the structural and general condition of the hull. Where items of equipment have been tested this will be stated in the text.

- The survey is not a parts and labour guarantee and it should be noted that defects may exist in the vessel that the survey could not detect due to limitations of time, vessel presentation and the range of tests acceptable to the owner.
- Please note that where reference is made to condition in all cases this must be considered in relation to the vessels's age, for example: very good condition should not be taken to mean new condition.

Recommendations

Recommendations will be restricted to those defects which should be rectified before vessel is used, (or with a given time span if specified, and items which may affect insurability).

Recommendations are listed at the end of each section, labelled with priorities listed below:

- **Dangerous:** Items which must be repaired prior to the vessel being re-floated or used for habitation/navigation. Vessel deemed uninsurable with this issue.
- **Urgent:** Items which are not classed as dangerous, however, should be repaired preferably prior to the vessel being re-floated or used for habitation/navigation. Vessel deemed an increased risk for insurers with this issue.
- **Priority:** Items of repair should be carried out as soon as possible. Repair should be carried out no later than within six months. Vessel only insurable with restrictions or safety precautions.
- **Caution:** Items would require monitoring and further investigation. Repair may be required within the next twelve months.
- **Advisory:** Items are advised for safety or maintenance. These do not pose an insurance risk to the vessel.

Recommendations will be printed in blue, for quick reference. The recommendations are contained in the body of the report in order that they may be read in context, and are also listed as part of the conclusions at the end of this report.

Suggestions will be printed in italics as they do not constitute a requirement, and are not repeated in the conclusions. Suggestions are this surveyors opinion only and can be looked on as 'helpful advice' to preserve the craft for the long term or improve handling and comfort. Occasionally suggestions concern faulty items that may affect negotiations and in this case they will be listed after the recommendations at the end of the report.

Legislation & Ownership

Note: The inspection is not undertaken with any intention to ascertain that the vessel would comply with any rule or code of practice as may be required by any authority under whose jurisdiction the vessel may be operated. It carries no warranty regarding ownership of the vessel or any warranty regarding outstanding mortgages, charges or other debt there may be on the vessel.

No documentation was found onboard the vessel at the time of survey.

Recommendation - Advisory: All required documentation is obtained from the seller/broker and examined carefully prior to purchase and acted upon as necessary.

V.A.T Status & Proof of Ownership

The original invoice for the vessel was not found therefore there was no evidence that United Kingdom V.A.T has been paid. There was no proof of ownership found on the vessel.

The vessel was built after July 1998 and therefore the requirements of the Recreational Craft Directive do apply.

Surveying conditions

The conditions on the day of the survey was conducted were fair/poor for obtaining moisture readings within structural components of the vessel, with changeable conditions being showery throughout the day.

The conditions when readings were taken were as follows.

Air Temperature	7.1°C
Humidity	65.2%
Dew Point	2.4°C
Precipitation / Cloud	Showery

2. General Description

XXXXXX was a flybridge motor yacht built by Sealine in 2002. The yacht consists of a stepped down cabin and heads compartment. The wheelhouse is comprised of a helm & navigation station and saloon. The aft deck consists of seating with a stairs allowing access to the flybridge above.

3. Hull below Waterline

The hull was of a solid GRP construction. The hull forms a deep V with a hard chine and spray rails on the underbody. There was no keel, and there was a transom at the stern.

A visual inspection of the hull found her to be true, with no obvious unfairness of the hull. The Hull was percussion tested, with areas of significant stress where one might expect the hull to flex given additional attention. No evidence of delamination of the structure or major voids were sounded, however, no guarantee can be given that such voids do not exist. Several coatings of anti-foul were identified as part of the survey with over 40 coupons of anti-foul scraped away to enable moisture meter readings to be taken. The anti-fouling was in good condition, and provided good protection against fouling.

Suggest anti-fouling all areas where coupons were removed as part of the survey when the vessel is next lifted ashore.

Over 40 moisture meter readings were taken over the underbody of the vessel. The table below shows the range of moisture readings taken.

Mode	Range Below Waterline	Range Above Waterline
Shallow Mode	32 - 76	15 - 21
Deep Mode	31 - 86	13 - 23

Despite the vessel having only been lifted out immediately prior to the readings being taken, the levels across the underbody of the hull are considered to be high. No visual signs of osmotic blistering or wicking were noted.

The above figures do not indicate percentage moisture content, but are on a relative scale 0-100 on the meter. Hulls exhibiting visual evidence of osmotic blistering or severe wicking generally give readings within the range of 45-100 on the Sovereign scale.

* see Appendix I for explanation of moisture readings

[Recommendation - Caution: The vessel should be lifted ashore and placed on the hard standing for a number of weeks and moisture measurements taken again to gain a greater insight and fairer assessment of how significant the moisture content within the laminate of the hull might be.](#)

4. Topsides above Waterline

Topside and transom were visually inspected and hammer sounded to the height of the cove line and no defects were identified. The condition of the topsides above the waterline was considered to be good, with only some slight signs of abrasion noted.

A small indentation was noted at the bow to the black PVC type rubbing band set in an alloy carrier which was seen attached to the topsides around the hull and deck join, where the vessel had come into contact with something hard.

5. Structural Stiffening

Access to the internal structure was limited due to lining, cabinets and carpentry. Where access was possible in the lazarette and the engine bay, the internal skin was stiffened with integral top hat stringers moulded in GRP. A transverse GRP web was also seen and where accessible plywood bulkheads and stringers were all well bonded. Structural members were hammer sounded and no defects were detected.

6. Hull to Deck Join

The hull to deck join was only partially visible due to linings and cupboards inside the vessel and was seen to be sound.

7. Decks

The foredeck and coachroof of the forward superstructure were laminated of one single deck with a moulded tread. It is believed that the decks in some areas are of a cored construction giving insulation and strength for backing plates. The decks were hammer sounded and no areas were identified where suspected voids were detected. Moisture readings were difficult to obtain due to the adverse weather conditions on the day of survey. Where readings were taken these were between 19-37.

The grab rail which ran around the deck were found to be secure. The stanchion posts were securely fastened down, and flush to the deck. On the bow the cleats and fairlead were forcefully tested and found to be securely mounted. Midships & stern cleats were hammer sounded and found to be secure.

The aft deck was hammer sounded and consisted of a teak laid deck bonded onto the GRP. The decking was in good condition and adhered well to the GRP beneath.

8. Superstructure

The superstructure, including the wheelhouse were constructed as a single moulded structure. This was hammer sounded & moistures tested and the overall condition was good, with only minor chips to the gelcoat noted. The windows around the wheel house were clear of any major abrasion.

Some discolouration to the gelcoat was noted either side of the forward windows, and deemed to be cosmetic.

9. Flybridge

The stairs leading up to the flybridge were integral to the superstructure, and were found to be secure with teak laid steps in good condition. The structure of the flybridge consisted of a securely fastened helm and instrument panel. Aft mounted integrated radar tower with instruments, all found securely fastened. The flybridge deck was hammer sounded and found to be in serviceable condition, with only light signs of wear.

10. Cathodic Protection

The following cathodic protection was noted on the vessel at the time of survey. All anodes were visually inspected, hammer sounded and found to be secure. These were found flush mounted and securely bolted.

Anode Location	Anode Type	Mounted	% Wasted
Port Trim Tab	Disc	Upper trim tab	60%
Starboard Trim Tab	Disc	Upper trim tab	60%
Port Outdrive	Tophat	Propeller Tip	10%
Starboard Outdrive	Tophat	Propeller Tip	10%
Port Outdrive	Bar	Lower housing	10%
Starboard Outdrive	Bar	Lower housing	10%

Recommendation - Priority: The vessels anodes have not protected the outdrives and propellers from severe galvanic corrosion. The correct anodes should be fitted for the type of mooring location the vessel finds itself in.

Note: Sacrificial anodes on GRP vessels help to protect only a limited area around each anode. Care should be taken to use anodes of the appropriate material for the mooring location; zinc for salt water, magnesium for fresh water & aluminium for brackish water.

11. Through Hull Apertures

No skin fittings or valves were dismantled as part of this survey but the following routine tests were carried out on the below waterline skin fittings and valves, where access allowed.

- Examination from outside and inside the boat.
- All valves opened & closed to their full extent where possible.
- Any fixing bolts hammer tested where accessible.
- Bodies of metal valves or seacocks tested with a hammer inside the boat and external parts hammer tested outside the boat.
- Fittings aggressively tested inside the boat for security in the hull.
- Hose clamps inspected and hoses aggressively tested for security.

Recommendation - Priority: all below waterline and near waterline skin fittings use two stainless steel hose clamps.

12. Swimming Platform

The swim platform and boarding ladder were visually inspected and aggressively tested and found to be secure. The teak decking was in good condition and adhered well to the GRP beneath.

13. Outdrive Visual Inspection only

The vessel came to survey with the Starboard Outdrive not running. The vessel had not been pressure washed and the visual inspection of the outdrives was severely hindered by the amount of marine growth surrounding the outdrive. It was not possible to inspect the bellows as the case housing was in place and it was not possible to visually or physically gain access to the bellows, and so no comment can be made on their state. It was noted that the anodes on the outdrives were in near pristine condition whilst the casing, legs, and propellers had suffered severe galvanic corrosion.

Recommendation - Urgent: The outdrives should be inspected by a qualified marine engineer to access the serviceability of the outdrives. The damage to the outdrives is deemed significant as the galvanic corrosion has been extensive to both legs and propellers.

14. Conclusions, Recommendations & Suggestions

The hull survey did not find any structural defects affecting the hull, however, moisture measurements of the hull were considered to be significantly high. Measurements were taken at the start and finish of the survey and they were not found to have dropped as significantly as one might have expected, given time to dry. No visual signs of osmosis were noted, however, without destructive testing it is not possible to rule out the possibility of moisture within the laminate.

The outdrives have suffered from galvanic corrosion and this has led to the paint coatings bubbling up and corrosion forming beneath. Both legs have suffered from this, as had the casings and propellers which would need to be replaced.

The recommendations should be acted upon in a timely manner, and prior to the vessel being used for extended navigation.

The overall condition of the vessel was fair, with period out of the water undoubtedly being of benefit, as well as work required to make good the corrosion issues to the stern gear. The suggestions noted within the body of the report, would bring the vessel in line with previous maintenance, and help preserve the value of the vessel.

Rolf Thuncke

Greenwich Yacht Surveys
17/3/18

List of Recommendations

1. Recommendation - Advisory: All required documentation is obtained from the seller/broker and examined carefully prior to purchase and acted upon as necessary.
2. Recommendation - Priority: The vessels anodes have not protected the outdrives and propellers from severe galvanic corrosion. The correct anodes should be fitted for the type of mooring location the vessel finds itself in.
3. Recommend all below waterline and near waterline skin fittings use two stainless steel hose clamps.

Appendix I - Moisture Meter Reading Key

Moisture Meter Readings	Considerations
0 - 14	Considered to be dry.
15 - 18	Considered to be limited moisture.
19 - 25	Considered to be a medium reading. Higher level approaching point where occurrence of moisture defects developing may become significant.
25 - 30	Considered high and at a level where moisture related defects may be considerable, but not yet physically detected.
> 30	Considered to denote high levels of moisture which will usually accompany physically detectable defects.

Appendix II - Photographs

