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May 16, 2013 File No.: 13-0356

Pol. No.:

emarled 3 **CONDITION & VALUATION** SURVEY REPORT

VESSEL

: MISTY BLUE

OFFICIAL NO.

: 1043789

OWNER

: B & C Bait Company, Inc.

215 Palomino Drive

Barnstable, MA, 02630

LENGTH : 69.5' BREADTH : 22.0' **DEPTH** : 8.0' **GROSS TONS** : 81 **NET TONS** : 65

PROPULSION : Single oil screw **FUEL CAPACITY** : 6,200 (approx.) BUILT : 1996 / Chauvin, LA.

THIS IS TO CERTIFY THAT the undersigned surveyor did, on May 2, 2013 and subsequent dates, at the request of International Marine Underwriters, conduct a survey of the F/V MISTY BLUE while afloat at New Bedford, MA in order to ascertain the general condition and valuation of the vessel and its suitability for service in fisheries for insurance underwriting purposes.

The survey was conducted accompanied by the vessels Engineer, Mr. Doug Capak. Recommendations made during the survey were discussed with him at that time and are also attached.

DESCRIPTION/GENERAL ARRANGEMENT

The F/V MISTY BLUE is a single oil screw, all welded steel constructed, flush deck western rigged offshore fishing vessel that was built in Chauvin, LA in 1996. The vessel features a raked stem, single hard chine displacement hull and tunnel recess for the propeller aft, with a flush deck aft and a

deckhouse/pilothouse structure forward. A large square tubing box gantry supporting a clam dredge is configured to the aftermost portion of the main work deck.

The vessel is reportedly constructed of 5/16" mild steel plate, butt welded on a transverse and longitudinal framing system. Transverse frames are 3" x $\frac{1}{4}$ " flat bar located on 21" centers. Longitudinal frames are 3" x $\frac{1}{4}$ " located on 28" longitudinal centers.

The vessel is subdivided into five (5) compartments by four (4) transverse steel watertight bulkheads. Compartmentalization from forward to aft is as follows: Forepeak water tank, forepeak void space, engine room, port and starboard clam tanks and the lazarette/steering compartment.

The vessel underwent a retrofit from being outfitted as an offshore crab fishing vessel, to offshore surf clam and ocean quahog vessel. During the conversion, the crab tanks were converted to wet sump clam tanks and the addition of the clam dredge frame gantry aft and dredge pump and auxiliary systems installed.

The vessel is documented at the National Vessel Documentation Center and is licensed to operate in the offshore surf clam and ocean quahog fisheries trades, and operates primarily with a Captain/Owner and three (3) additional deckhands.

UNDERWATER BODY

An examination of the underwater body was not made, inasmuch as the survey was conducted aboard the vessel while afloat. The vessel was last hauled at Fairhaven Shipyard, Fairhaven MA., in June 2012 as the result of grounding. During this yard period, the vessel received a remanufactured marine transmission and new shaft.

The 64" x 52" RHP, four (4)-bladed bronze propeller was also damaged and repaired as a result of the incident. Hull maintenance was also undertaken at this time, including power-washing and bottom paint, zincs and a new cutlass bearing installed.

During a previous haulout the owner reports that 3' x 5' x 5/16" doubler plates were installed on both the port and starboard sides of the aft engine room bottom plating to either side of the keel. Additional work at the time of the last haul out was the installation of a 12" x 1" heavy walled sea chest on the port side of the aft passageway for the raw water intake of the clam pump and a 10" x 3/4" heavy walled sea chest opposite to starboard for raw water cooling purposes for the pump engine and other auxiliary engines on board.

HULLABOVE WATERLINE AND WEATHER DECKS

The vessels' foredeck is protected by a 48" steel bulwark with a 3"OD steel cap rail. The foredeck bulwarks are reinforced with steel stanchions and longitudinal framing. The deck is covered with a good condition non-skid coating. Forward is a 26" cruciform bitt with a potable water tank fill.

The main deck on the port and starboard side outboard of the deckhouse is protected by raised steel bulwarks with steel rail atop. The overall height of the rail system is 52". The deck is finished with a fair condition painted non-skid coating. A single eight (8) dog, quick acting watertight door is installed on the aft bulkhead of the deck house, port side providing access to the main work deck. There are two (2) watertight doors port and starboard providing access to the pilothouse.

The vessels' work deck is protected by a 31" H steel bulwarks fitted with a 3"OD pipe steel cap rail. Four (4) large freeing ports, which measure 8" x 15", are installed on the port and starboard sides. The vessel transom has been modified from being enclosed to having a 10' wide opening made for the installation of the dredge frame gantry system, which extends off the transom to the waters edge and is fitted with a heavy solid steel roller bar at the bottom edge to assist in the recovery of the clam dredge. Work deck lighting is provided by three (3) large 115V metal halide lights.

The vessels' crab tanks have been modified to have 10" high coaming's around each tanks access on the main work deck aft. The reported capacity of each tank is 12,000lbs, including the clam cages where product is stored. Each clam tank measures 18' in length, by 6' wide and is fitted with a 4" stainless steel sump drain connected to the vessels bilge manifold.

Between the clam tanks on the midships line is a passageway which leads from the engine room to the lazarette. The forward bulkhead of the passage way is fitted with a two (2) dog watertight door. The passageway between the engine room and lazarette also provides access to the newly installed sea chest intakes and cut out valves, in addition to the stuffing box, shaft line bearing and access to the lazarette space.

The bulkhead between the aft passageway and lazarette is not yet fitted with a watertight hatch, however the owner reports they intend to install such a door providing additional watertight integrity to the vessel upon completion of the final outfitting.

The lazarette is accessed by a 28" x 27" hatch aft on the starboard side with an 18" raised steel coarning and aluminum cover. This hatch is fitted with gasket material and can be made watertight with the aid of two dogging mechanisms.

SUPERSTRUCTURE/PILOTHOUSE

Vessels' pilothouse is constructed of mild steel plate on an angle steel framing system and is located forward and raised of the main deckhouse structure. The space is finished-out with a Formica paneled overhead, bead board and wood panel sides, and a very good condition linoleum non-skid over wood deck.

There are seven (7) forward facing 22" x 27" x 3/8" Lexan ports installed. Forward ports were in good condition. Access to the pilothouse is through a 3-step internal ladderwell from the galley area and through port and starboard two (2) dog watertight doors which were found to be in good condition.

Window and watertight door gaskets have been recently replaced and are found in excellent condition. Central heat and air conditioning is provided for the pilothouse and lighting is 115V luminescent. Forward is the vessels' steering console.

Visibility for the vessel's operator is considered good, with the exception over the aft deck house and work deck which is obscured by the deck house design/location and the vessels large dredge frame gantry installed at the transom.

NAVIGATION AND ELECTRONICS

The vessel is fitted with navigation and communications electronics equipment which appear to be in good working order. The owner reports that all the equipment is operating satisfactorily.

The following is a list of the equipment aboard this vessel:

RADAR : (1) Furuno Navnet C-Map NT (New)

LORAN / GPS : (1) Furuno GP 32 GPS

: (1) Koden KGP 98 GPS

VHF COMMS : (1) Standard Horizon Eclipse+

: (1) Standard Horizon Quest

SOUNDER / PLOTTER : (1) Furuno RD-30 (New)

: (1) JRC JFV 700 sounder

AUTOPILOT : (1) Comnav 1201

COMPASSES : (1) 4" Dirigo magnetic compass

LOUD HAILER : (1) Standard Horizon VLH-3000 (New)

N.M.F.S. MONITORING : (1) SkyMate

COMPUTER : (1) Custom computer running PSea Winplot II software

STEREO : (1) Sony AM/FM/CD and XM satellite radio

MISCELLANEOUS : (1) Last Watch bridge watch system

: (1) Closed circuit Haier LCD TV for engine room/deck monitoring.

: (1) Kobelt jog steering lever : (1) Kobelt engine controls

: (1) Caterpillar engine monitoring panel

: (1) Radio Shack CCTV monitoring system with Samsung LCD

: (1) Accurate weather monitor (New)

Additional equipment provided for the navigation of the vessel includes an appropriate double trumpet pneumatic horn, bell, navigation and fishing lights, charts, documents and publications required for navigation in the Atlantic Ocean.

A segregated 12V DC power supply for emergency communications was noted during the survey and appears to be in compliance with the Commercial Fishing Vessel Safety Act.

The navigation station is fitted with Rule bilge alarms for below deck spaces including the engine room, shaft alley and lazarette. Along the aft bulkhead, starboard side of the pilothouse, a custom built control panel has been installed for the operation of the vessels Detroit series 60 clam pump, hydraulic controls for the raising and lowering of the clam dredge and engine monitoring gauges.

There is a West Marine heater/defroster (New) installed in the overhead over the navigation station to ensure good visibility in the forward ports.

Additionally, the vessels pilothouse is fitted with a closed circuit television (CCTV) for the monitoring of the engine room space, aft work deck, lazarette and aft lower deck passageway.

FIRE PROTECTION AND LIFE SAVING

The vessel is fitted with the following life saving and fire fighting equipment:

	Туре	Location	Date Tagged
1 -	BC Size II	Pilothouse	Sep 2012
3 -	BC Size II	Galley/Crews mess area	Sep 2012
1 -	BC Size II	Lazarette	Sep 2012
1.	BC Size III	Aft engine room access trunk	Sep 2012
1	BC Size III	Forward machinery space	Sep 2012

Installed portable hand held fire extinguishers are fitted with pressure gauges that show proper charge and were found to be in the green at the time of survey.

The vessel is equipped with a deck wash down system as part of the bilge pumping system, and said deck wash down hose can be used for fire fighting purposes in an emergency.

Life saving equipment consists of the following:

Life raft

: (1) Revere four (4) person inflatable life raft with SOLAS "A" pack stored in a float free bracket on the deck house overhead. Last inspected; 12/2012. HRU expires 11/2014. Raft DOM 11/2010. (New)

EPIRB

: (1) ACR Globalfix Satellite 406. Reg. No: ADCD02094500801. Reg. Exp. 8/2012 (See Recommendations). Battery expires 11/2015, HRU expires 9/2014.

Survival suits

: (7) U. S. Coast Guard approved immersion suits, with vessels name, retroreflective material and strobe lights (New) attached.

PFD's

: (5) USCG approved Type I PFD's with vessels name stenciled on them

Distress signal kits

: (1) Offshore service kit with;

3 Parachute flares, expire 08/2013 6 Handheld, expire 10/2013 3 Smoke, expire 1/2014

Life ring buoys

: (3) 30" Coast Guard approved life rings, with vessels name and retroreflective material. Two (2) are fitted with floating strobe marker lights and 60° of line.

First aid kit

: (1) North, industrial size and one (1) Zee Industries kit. Each is stocked and a First Aid manual located in the pilothouse.

MAIN PROPULSION

Main propulsion is provided one (1) Caterpillar 3408 eight (8) cylinder turbo charged marine diesel engine rated at approx. 475hp, 24V DC start, fresh water keel cooled, after cooled engine, with a dry vertical exhaust. The main engine is bedded on longitudinal steel plate frames with a ¾"x 4" steel cap. Vessel engineer reports that the main engine received a complete overhaul in 2011. There were approx. 8773 hours recorded on the engine at the time of survey.

The main engine is equipped with an engine mounted expansion tank with Murphy L-150 liquid level switch gauge and low oil pressure, high water temperature, low gear oil pressure and pyrometer gauges equipped with alarms and shut downs. The main engine is equipped with an air starter, 12 volt belt driven alternator

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The engine is fitted with a newly-installed remanufactured Twin Disc model 514 marine reverse/reduction gear with a 6.1 to 1 ratio. Fuel lines are made up of steel pipe, flexible fuel hose and four (4) Racor, Model: FFG-1000 fuel filter water separators to main engine secondary filter.

The engine room is fitted with a diamond plate deck material around the perimeter of the engine room space.

The engine room is in very good condition with all systems labeled, well lit and organized.

ELECTRICAL

The vessel is provided with a 12 and 24V DC and a 110-208V AC electrical system. There are two (2) 12V 8D batteries wired in series aft on the starboard side of the engine room to provide main engine starting and general 24V service. Batteries were stowed in ventilated boxes and covered. Charging is provided by a Newmar model PT 24-24 battery charger. A battery master disconnect switch is located for each battery system.

There is a 12V 8D battery installed forward on the port side of the engine room which provides starting service for the auxiliary diesel engine. This battery was boxed and covered and charging is provided by an alternator on the auxiliary diesel engine and a Newmar Phase 3 battery charger. AC power is provided by the onboard Detroit Diesel three (3) cylinder marine diesel engine is the prime mover for a 45kW generator.

This engine is 12V DC start, keel cooled and fitted with a dry vertical exhaust. A secondary Scandia marine diesel engine is the prime mover for a 50kW generator, located on the port side forward of the engine room. This engine is 24V DC start and keel cooled.

An additional Cummins 3855 4-cylinder marine diesel engine (New) is installed in the lazarette space and is the prime mover for a 50kW Onan generator, used primarily for general in port electrical service needs. This engine is 12V DC start, raw water/heat exchanger cooled and fitted with a dry vertical exhaust exiting through the clam dredge frame system at the starboard quarter.

Two (2) 12V 8D batteries are boxed and covered forward on centerline in the engine room for generator starting and general 12V service. A Cole Hersee master disconnect switch is installed and charging is provided by a Newmar Phase Three model PT 24-20 battery charger.

There is a 12V emergency communications battery installed in the pilothouse with a Lewco 12V battery charger and battery selector switch.

AUXILIARY MACHINERY

A Detroit series 60, eight (8) cylinder marine diesel engine is utilized as the clam dredge pump engine and is rated at 470HP. This engine is 12V DC start, raw water/heat exchanger cooled and fitted with a

dry vertical exhaust exiting the lazarette space up through the clam dredge gantry framework. This engine is coupled to a Cornell 10" x 8" inch centrifugal pump, rated at 4,00 gallons per minute to the dredge.

TANKAGE/FUEL SYSTEM

The vessel has a reported fuel oil capacity of 6,200 gallons. Fuel is carried in integral steel fuel tanks, one located outboard on either side of the engine compartment. Fuel tanks feature fill and vent above main deck level and feature bottom draw.

Bolted inspection plates are installed in each tank, as are sight gauges which return to the tank. Fuel supply lines are 1" neoprene. Dual Racor water separators are installed for the main engine with a single Racor water separator installed for the auxiliary diesel engine. All components of the vessels' fuel system appeared to be in satisfactory condition.

A hydraulic oil tank on the starboard side of the engine compartment has a reported capacity of 270 gallons. Integral to the port and starboard side aft of each fuel tank are locations for a Quincy 70 gallon air receiver (port side) and two (2) hydraulic charge pumps and motors, situated into alcoves built abaft each tank.

BILGE PUMPING/ALARMS

There are two (2) 2" Pacer bilge pumps with Baldor AC drive motors installed aft on the starboard side of the engine compartment atop a stainless steel bilge manifold. The 5" x 5" steel manifold features suction lines to the forward void space, engine room, clam tanks, and lazarette and is plumbed to the starboard main sea chest. Ball and check valves are installed in the system. The manifold was clearly labeled.

There is a 3" Baldor raw water engine cooling pump and the main engine PTO features a hydraulic pump servicing the vessel's main winch.

Two (2) Rule 3700 automatic bilge pumps are installed in the lazarette, one on either side of the shaft tunnel, with cross connections to allow for isolation to a side and to a single discharge line to port. An addition Rule bilge pump is located forward in the aft midships passageway and another in the engine room. Each is fitted with float switches which when activated set an alarm at the pilothouse console. All bilge alarms were tested as part of this survey and tested satisfactory.

The vessel is fitted with a general alarm system which is pilothouse activated and has flashing lights located in the accommodations space, forward machinery room, engine room and aft midships passageway. The alarms was tested during this survey and tested satisfactory.

ACCOMMODATION SPACES

Accommodation spaces for the crew consist of the vessels galley and accommodations are located in the main deck house aft of the pilothouse. Forward on the starboard side is the crews head with sink, porcelain head and shower stall and vanity. Forward on the port side is a settee dining area for approx. six persons.

Opposite the galley area to starboard is a two-person berthing area in a bunk bed state room. Abaft the forward state room, a secondary two (2) person stateroom with lockers and drawers is located.

The dining area consists of a pedestal mounted table fitted with a "U" shaped bench styled upholstered seat. The galley area is immediately aft and is fitted with the following equipment:

- 1 Whirlpool 4-burner electric stove with oven
- 1 Wolfgang Puck commercial rotisserie oven
- 1 GE Spacemaker microwave oven
- 1 GE Select refrigerator/freezer
- 1 Keurig coffee maker
- 1 Danby icemaker
- 1- Danby chest freezer
- 1 Sanyo 20" flat panel TV
- 1 Toshiba VCR

The kitchen area is fitted wood cabinets for storage of goods. The counter is fitted with a double basin stainless steel sink.

The interior spaces are finish with linoleum tile decks and Marlite paneled bulkheads and overheads. Fluorescent lighting fixtures provide ample lighting for the accommodations spaces.

CARGO SPACES

As previously described, the vessels clam tanks have a reported capacity of 12,00lbs each, including the clam cage weight. There are two (2) fore and aft clam tanks on either side of centerline, each measuring approx. 18'L x 6'W and each is fitted with a 4" wet sump drain connected to the bilge manifold system. Each clam tank has a ten inch (10") raised coaming around the perimeter.

The vessel will reportedly have an additional deck loading capacity of ten (10) clam cages when the lower clam tanks are filled.

DECK, CARGO AND MOORING EQUIPMENT

Within the clam dredge gantry system, a single Pullmaster H-18 hydraulic winch with 250 feet of 1-inch cable which serves as the hoist for the clam dredge. A stainless steel clam sorting table sits beneath the

dredge recovery area and is connected to a conveyor system for the loading of the clam cages in clam tanks.

The vessel is fitted with a 9"-OD steel mast, which is deckhouse top stepped. Mast stands approximately 18' above the deckhouse top and features a single crosstree, which supports navigation lights and antennas. The mast is stayed forward to the pilothouse top with two (2) 3"-OD pipe steel struts.

There are two (2) 35-foot fluted galvanized steel outriggers installed with a clevis and pin to the deckhouse top, which are stepped on the port and starboard sides at the mast base. Outriggers are raised and lowered by Pullmaster PL 5 hydraulic winches. Outriggers are stayed forward to the deckhouse top with 3" box tubing stays and vinyl coated cable stays forward to the bow chain plate.

There are sufficient cleats and bitts around the periphery of the vessel for mooring and handling of lines.

STABILITY

The owners engaged the services of Farrell & Norton Naval Architects to conduct an intact stability test, performed on August 12, 2009, with operating limitations issued.

The operating restrictions issued to the vessel outlines the U.S Coast Guard's intact stability criteria as outlined in 46 CFR Part 28, to the carriage of ten (10) extra clam cages on deck with fuel tanks maintained at 50% or greater while engaged in fishing operations

A secondary option to operating restriction would be the addition of 8,300 pounds of ballast in the forepeak, not having to maintain the fuel tanks at 50% capacity. The owners have opted to utilize the first operating restriction parameter.

The winter icing conditions for both of the operating restrictions placed to the vessel were removed with the understanding that the vessel not operate North of 42 degrees latitude between the April 15th and November 15th, North of Cape Cod.

A copy of the intact stability letter issued by Farrell & Norton is retained on board the vessel and available for review. The owners have provided this office with a copy of the intact stability test performed and issuing letter to be retained on file.

COMMERCIAL FISHING VESSEL INDUSTRY SAFETY ACT

The Fishing Vessel Safety Act of 1988 and subsequent federal regulations outline safety practices that have been employed by the commercial fishing fleet in this region for many years. This law and the regulations have served to bring regulatory force to the industry in order to enhance and protect property and lives aboard commercial fishing vessels.

The regulations apply to all U.S. uninspected commercial fishing, fish tender, and fish processing vessel, whether documented or state registered. Compliance with specific regulations is based upon a combination of type and length of vessel, length of operations, seasonal conditions, number of persons on board, whether documented or state registered, and the date the vessel was built or converted.

The U.S. Coast Guard has initiated a voluntary dockside examination program, specifically intended to help the fishermen understand the safety regulations. These voluntary examinations focus on education and are conducted in a non-adversarial manner. The Coast Guard inspector advises the owner of the requirements necessary to bring his vessel into compliance with the regulations. At this time there are no penalty actions being taken by the government for any violations noted during the voluntary examinations.

Once an examination has been conducted and the vessel owner complies with all of the Coast Guard's recommendations, they will issue a sticker to be placed in a prominent location in the pilothouse, confirming that the vessel meets the U.S. Coast Guard's Commercial Fishing Industry Safety Act requirements.

The undersigned surveyor conducted this survey using generally accepted surveying practices using the contents of the new federal regulations as a guideline. Our opinions stated herein do not carry the same force as the U.S. Coast Guard's and should not be construed as regulatory force.

The undersigned surveyor is of the opinion that this vessel is in compliance with the federal regulations pertaining to commercial fishing vessel safety. During the course of our survey we ascertained that this vessel has been recently inspected by the Coast Guard and therefore, has been issued a compliance decal issued February 2, 2012.

RECOMMENDATIONS/REMARKS

Originally an offshore crab fishing vessel, the vessel has undergone extensive modification and upgrades for service in offshore surf clam and ocean quahog operations. Modifications included addition of auxiliary machinery systems upgrades and clam dredge gantry system aft at a significant cost.

The overall condition of this vessel is considered very good. Upgrades were made to the vessels fish hold, main propulsion, bilge pumps, auxiliary systems and electrical systems. The bilge and pumping system piping was built/installed using stainless steel and adds significant service life to the vessels pumping systems.

Vessel stability was addressed throughout the conversion process as owners engaged Farrell & Norton Naval Architects to ensure stability criteria remained intact. As such, the vessel is considered a well built, well engineered vessel that should many more years of productive service life in commercial fisheries.

From a general examination of the vessel while afloat, as far as practical, without making removal to expose concealed parts at the time of survey and without witnessing operation of the vessel, it is the opinion of the undersigned surveyor that the vessel is in satisfactory condition for operation in the fisheries trade, provided the attached recommendation is complied with.

VALUATION

Subject to consideration of the preceding remarks, and considering the age of the vessel, its condition in comparison to vessels of like size, age and service, and in consideration of the current market, the following estimated values are considered appropriate.

FAIR MARKET HULL VALUE

: \$425,000.00

HULL REPLACEMENT COST

: \$1,100,000.00

This report is based on examination of the vessel, and of those parts, spaces and equipment that could be sighted without removals or operation, and is rendered without bias or prejudice. In accepting same, it is agreed that the extent of obligation of this surveyor, with respect thereto, is limited to furnishing a competent survey, and in the making of this report, this surveyor is acting on behalf of the person or firm requesting same and no liability shall attach to this surveyor, for the accuracy, errors and/or omissions therefore.

Naval architecture and marine engineering analysis as usually performed in the design stage of the vessel's construction were not part of this survey and typical subjects such as adequacy of stability and seakeeping were not within the scope of this survey.

Submitted without prejudice,
MARINE SAFETY CONSULTANTS, INC.

MARK A. BISNETTE Marine Surveyor

Enclosures:

1. Recommendations

2. Photographs

3. MSC, Inc. invoice

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SURVEYOR'S RECOMMENDATIONS

VESSEL : MISTY BLUE FILE NO. : 13-0356

OFFICIAL NO. : 1043789 DATE OF SURVEY : May 2, 2013

1. It is recommended that the owners ensure that the vessel's EPIRB registration is current prior to engaging in commercial fishing operations.

MARK A. BISNETTE Marine Surveyor