



BALLARD
MARINE CONSTRUCTION

Project Report Prepared For:

M/V Nenita Inspection

Ardent



Report Date: November 20, 2016



Prepared By:

Ballard Marine Construction, Inc.

, Diving Supervisor



November 20, 2016

[REDACTED], Commercial Manager
Ardent
[REDACTED]

RE: M/V Nenita Inspection

Mr. [REDACTED]

Attached is our report summarizing the findings of the inspection Ballard Marine Construction divers performed at the M/V Nenita. Underwater video was recorded during the course of the project and a copy of the DVD is included with this report.

Should you have any questions and/or comments please feel free to contact myself or Adam Litt at the phone numbers and/or emails listed below. Thank you for allowing us to provide these services for you and we look forward to working with you again in the near future.

Sincerely,

[REDACTED]
Diving Supervisor
Ballard Marine Construction
[REDACTED]
[REDACTED]

[REDACTED]
Ballard Marine Construction
[REDACTED]
[REDACTED]

Introduction

Ballard Marine Construction performed underwater inspection diving operations on November 20th, 2016 at the MV Nenita in general accordance with the U.S. Coast Guard (USCG)-accepted Association of Diving Contractors International, Inc. (ADCI) *Consensus Standards for Commercial Diving and Underwater Operations* (6th Ed.), the U.S. & Oregon Occupational Safety and Health Administration (OSHA) 29 CFR Part 1910, *Subpart T – Commercial Diving Operations* (Dir. CPL 02-00-151; 2011), Washington State's *Standards for Commercial Diving Operations* (Chapter 296-37 WAC; 2008), and the *U.S. Navy Dive Manual*, Rev. 6 (April 2008).

Project Location

The Nenita Vessel was located at the Port of Kalama, WA North Dock, tied bow upriver, port to dock.



Scope of Work

Vessel went aground on the morning of 11-19-16, flooding the fore peak hold. Ballard Marine Construction responded for Ardent, to inspect the area of fore peak damage, and inspect the remainder of the hull, including running gear. Documentation of the underwater work was done using an underwater video system and recorded on DVD for subsequent viewing by the project Dive Supervisor, Dana Gordon, and the Client, Ardent.

Inspection Methods

Ballard performed a visual inspection of the outer shell of the forepeak void after verifying that the space was equalized to the surrounding river level, and that no ballast pumps or suctions were running in the area of the inspection. Once the area of the damage and extend of the damage was mapped, Ballard performed an underwater visual inspection of the hull, bilge keels, and running gear. An underwater video system was used to document the diver's inspection.

Inspection Findings

The Bulbous bow exhibited damage, including 2-3 upset deep web frames, at least 3 tears approximately 4-6’ in length, several smaller fractures, and seven areas of folded vessel shell. This damaged area extended from the bulbous bow aft to Frame 253, after which no more indications of damage were noted, and above Longitudinal frame 23, no major damage was noted.

Forward end of bilge keels exhibited no signs of damage.

Seachest 1 and Seachest 2 were both clear of occlusions or damage.

Running gear showed no indications of recent damage.

Summary For review of the entire video footage, please refer to the DVD provided with this report. Ballard thanks you for your business and please don’t hesitate to contact me should you have any questions or comments.

Sincerely,

[Redacted]
Diving Supervisor
Ballard Marine Construction
[Redacted]

Project Photographs



Photo #1: Hull Damage Near Turn of the Bulbous Bow



Photo #2: Tear Near Bulbous Bow



Photo #3: Folds and small tear near bulbous bow.



Photo #4: Bilge Keel



Photo #5: Bilge Keel



Photo #6: Sea Chest 2



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CH1

01/01/00
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Photo #7: Sea Chest 1



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Photo #8: Seachest 1