



Stability Letter

25 February 2013

Person-in-Charge, "POLAR TRADER", U.S. ON: 1244212  
 Gunderson Marine Inc., Hull 99  
 380.0' x 96.0' x 23.0'  
 Unmanned Deck Cargo Barge [J]

You are responsible for maintaining this barge in a satisfactory stability condition at all times and for following the instructions and precautions listed below. All log entries required by 46 CFR 42.07-20 shall be made prior to getting underway for each voyage.

A stability test witnessed by ABS Americas on behalf of the U.S. Coast Guard was conducted on the "POLAR TRADER", at Gunderson Marine Dock, Portland OR on 11 February 2013. On the basis of that test, stability calculations have been performed. Results indicate that the stability of the barge "POLAR TRADER", as presently outfitted and equipped, is satisfactory for operation on Exposed Waters, provided that the following restrictions are observed.

OPERATING RESTRICTIONS

1. ROUTE: Operation on Exposed Waters is permitted for unmanned operations only.
2. FREEBOARD AND DRAFT: A freeboard of a least 5 feet 3 inches from the main deck measured at amidships (located at 3'-11-3/16" Aft of Frame 22), must be maintained. This corresponds to a molded draft of 17 feet 9-3/4 inches (17 feet 10-7/16 inches extreme). Trim shall be minimized.
3. DECK CARGO: Deck cargo must be positively secured against shifting prior to leaving protected water. The height and VCG of the deck cargo above the main deck shall not exceed the following:

<u>Extreme Draft ( ft )</u>	<u>Max Allowable Cargo VCG above Main Deck ( ft )</u>	<u>Max Allowable Cargo Height above Main Deck ( ft )</u>
Up to 3.5	149'-1"	298'-3"
4.0	139'-6"	279'-1"
5.0	121'-4"	242'-9"
6.0	106'-0"	212'-0"
7.0	93'-1"	186'-3"
8.0	82'-3"	164'-7"
9.0	73'-3"	146'-6"

**AMERICAS DIVISION**

ABS PLAZA, 16855 NORTHCHASE DRIVE, HOUSTON, TX 77060 USA  
 TEL: 1-281-877-6000 FAX: 1-281-877-6795 WEBSITE: www.eagle.org



"POLAR TRADER"  
 U.S. ON: 1244212  
 Gunderson Marine Inc., Hull 99  
 25 February 2013  
 Page: 2

<u>Extreme Draft ( ft )</u>	<u>Max Allowable Cargo VCG above Main Deck ( ft )</u>	<u>Max Allowable Cargo Height above Main Deck ( ft )</u>
10.0	65'-7"	131'-3"
11.0	58'-11"	117'-11"
12.0	53'-8"	107'-5"
13.0	49'-0"	98'-0"
14.0	43'-10"	87'-8"
15.0	36'-1"	72'-2"
16.0	28'-8"	57'-4"
17.0	21'-3"	42'-7"
17.87	15'-4"	30'-9"

The maximum VCG's for intermediate draft values may be interpolated, or use the maximum VCG for the higher draft.

4. HULL OPENINGS: Any openings that could allow water to enter into the hull shall be kept closed when underway.
5. WATERTIGHT BULKHEADS: No watertight bulkheads may be removed or altered without the authorization and supervision of the cognizant Officer in Charge, Marine Inspection (OCMI).
6. WEIGHT CHANGES: This stability letter has been issued based upon the following light ship parameters:

Displacement:	2627.92	Long Tons
VCG:	14.07	Feet above Baseline*
LCG:	188.89	Feet Aft Frame 0

Note: There is no permanent ballast installed on the vessel.

\*The VCG is conservatively calculated at more than 60% of the vessel's molded depth.

Any alteration resulting in a change in these parameters will invalidate this letter. No fixed ballast or other such weights may be added, removed, altered, and or relocated without the authorization and supervision of the cognizant OCMI. The barge is not fitted with permanent ballast.

**AMERICAS DIVISION**

ABS PLAZA, 16855 NORTHCHASE DRIVE, HOUSTON, TX 77060 USA  
 TEL: 1-281-877-6000 FAX: 1-281-877-6795 WEBSITE: www.eagle.org




"POLAR TRADER"  
U.S. ON: 1244212  
Gunderson Marine Inc., Hull 99  
25 February 2013  
Page: 3

7. BILGES/VOIDS: The vessel's bilges and voids shall be kept pumped to minimum content at all times consistent with pollution prevention requirements.
8. LIST: You should make every effort to determine the cause of any list of the vessel before taking corrective action.
9. TANKS: Up to six (6) ballast tanks may be simultaneously loaded at any level. Any cross connections between port and starboard tank pairs shall be kept closed at all times while underway.

This stability letter, along with the Load Line Certificate, shall be maintained in a suitable location onboard the barge.

Very truly yours,

Matthew D. Tremblay  
Vice President of Engineering  
ABS Americas

By:   
Mahmood Billah  
Sr. Managing Principal Engineer  
Ship Engineering Department

**AMERICAS DIVISION**

ABS PLAZA, 16855 NORTHCHASE DRIVE, HOUSTON, TX 77060 USA  
TEL: 1-281-877-6000 FAX: 1-281-877-6795 WEBSITE: [www.eagle.org](http://www.eagle.org)