



Stability Letter

13 February 2012

Person-in-Charge, “344”, U.S. ON: 674179
 Marine Power & Equipment Co., Hull 362
 330.00’ x 86.00’ x 20.75’
 Unmanned Deck Cargo Barge [I]

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 “344”, at Duwamish River in Seattle, Washington on 31 January 2012. On the basis of that test, stability calculations have been performed. Results indicate that the stability of the barge “344”, 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 4 feet 5-5/8 inches from the main deck measured at amidships (located at 2 feet 9-13/16 inches Aft of Frame 16), must be maintained. This corresponds to a molded draft of 16 feet 4 inches (16 feet 4-1/2 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 Deck (ft)</u>	<u>Max Allowable Cargo Height above Deck (ft)</u>	<u>Deadweight (LT)</u>
Up to 6.000	132.88	265.76	1524.23
7.000	97.40	194.80	2234.22
8.000	77.24	154.48	2955.65
9.000	63.52	127.04	3685.55
10.000	53.11	106.22	4425.21
11.000	44.59	89.18	5174.15
12.000	37.23	74.46	5932.28
13.000	30.66	61.32	6699.36
14.000	24.60	49.20	7475.34
15.000	18.92	37.84	8259.83
16.000	13.50	27.00	9053.20
16.375	11.51	23.02	9355.86

AMERICAS DIVISION

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150 years
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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:	2461.52	Long Tons
VCG:	12.45	Feet above Molded Baseline
LCG:	160.00	Feet Aft Fr 0

Note: The subject vessel has 6" thick concrete wear deck which extends from the end of the Focslsle at Fr 1 (located 13' aft of the bow) to 36 inches from Stern (located 327 Ft aft of bow) for a total length of 314 Ft. The overall width is 81 feet 6 inches. There are 7 lashing rails running longitudinally set into the concrete. The lashing rails are centered at centerline and 10 ft off center, 20 ft off center and 30 ft off center of centerline Port & Stbd. There is no permanent ballast installed on the vessel. The VCG is calculated at 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.

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.

This stability letter, along with the Load Line Certificate, shall be maintained in a suitable location onboard the barge. It supersedes any stability information previously issued to the vessel.

Mahmood Billah
Sr. Managing Principal Engineer
Stability & Load Line Group, SED
ABS Americas

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