OPN: 2018555
TASK: 435925/SDM

10 March 2009

Columbia-Sentinel Engineers, Inc
4000 Delridge Way SW, Suite 300
Seattle, Washington 98106
Attention: Paul Zankich

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SUBJECT: "ALASKA TRADER" ABS VID: 0039967 Gunderson Marine Hull 053 \(343.5^{\prime} \times 94.0^{\prime} \times 21.0^{\prime}\)
Unmanned Deck Cargo Barge (U.S. ON 1088188)
Stability Review on behalf of the U.S.C.G. - NVIC 3-97
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Dear Mr. Zankich,
We have your letter of 13 February 2009 submitting (3) copies of the following documents:

1. Deadweight Survey Data
2. Max VCG (Long Ton)
3. Max VCG (Short Ton)
for our stability review of the subject barge in association with a molded draft to the summer load line of $16^{\prime}-7-1 / 8^{\prime \prime}$ (16'-7-3/4" extreme), corresponding to a 1966 Type "B-25\%" vessel freeboard of 4'-5-1/2", pursuant to Regulation 10 of the International Convention on Load Lines, 1966.

Having completed our review of the Deadwight Survey, submittal item 1, conducted on the subject barge on 11 February 2009 at Northland Services Terminal in Seattle, Washington, the following lightship characteristics have been found acceptable:

| Weight: | 2798.73 | Long Tons |
| :--- | ---: | :--- |
| VCG: | 14.34 | Feet Above Baseline |
| LCG: | 170.83 | Feet Aft of FP |

There is no permanent ballast on the barge.
Submittal item 1 is stamped "Approved".
Having completed our review of the stability calculations, submittal items 2 and 3 , we wish to advise that provided the subject barge is operated in accordance with the enclosed Stability Letter, the barge will satisfy the requirements of the following regulations:
a) 46 CFR 170.170 -
b) 46 CFR 174 Subpart B
Weather Criterion
Special Rules Pertaining to Deck Cargo Barges

Columbia-Sentinel Engineers, Inc

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AMERICAS DIVISION
Submittal items 2 and 3 are stamped "Examined".
Enclosed is the stability letter for the subject barge, issued by ABS Americas in accordance with USCG NVIC 3-97. It the owner's responsibility to ensure that a copy of this letter, along with the Load Line certificate is maintained in a suitable location onboard the barge for the guidance of the Master.

The following comment will be placed on the face of the Load Line certificate:
"This certificate is valid only so long as the operating restrictions in the vessel's stability letter, issued by ABS Americas and dated 10 March 2009, are observed. This certificate is valid for unmanned operations only."

Electronic copies of the document have been stamped to indicate our review and returned via email. One copy of each submittal shall be forwarded to the USCG Marine Safety Center upon their request. We have kept the remaining copy for our record and file.

Should you have any questions or we can be of any further assistance, please feel free to contact this office at any time.

Very truly yours,

Thomas M. Gruber
Principal Engineer, Stability \& Load Line Group
Ship Engineering Department
ABS Americas

Encl.
CC: USCG (G-MSC) w/p

## Stability Letter

March 10, 2009

Person in Charge, "ALASKA TRADER", O.N. 1088188<br>Gunderson Marine, Hull 053<br>$340.5^{\prime} \times 94.0^{\prime} \times 21.0^{\prime}$ 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 97.35 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 "ALASKA TRADER", at Northland Services Terminal, Seattle, Washington on 11 February 2009. On the basis of that test, stability calculations have been performed. Results indicate that the stability of the barge "ALASKA 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 $4^{\prime}-5-1 / 2^{\prime \prime}$ from the main deck measured at amidships, must be maintained. This corresponds to a molded draft of 16 feet $7-1 / 8$ inches ( 16 feet $7-3 / 4$ 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:

| Molded Draft (ft) | Max Allowable Cargo VCG above Deck ( ft ) | Max Allowable Cargo Height above Deck ( ft ) | Deadweight (ST) |
| :---: | :---: | :---: | :---: |
| Up to 4.5 | 134.12 | 268.24 | 178.01 |
| 5.0 | 125.00 | 249.99 | 572.70 |
| 5.5 | 116.66 | 233.31 | 972.00 |
| 6.0 | 108.99 | 217.98 | 1375.72 |
| 6.5 | 101.90 | 203.81 | 1783.45 |
| 7.0 | 95.50 | 191.00 | 2195.59 |
| 7.5 | 89.68 | 179.35 | 2612.05 |
| 8.0 | 84.37 | 168.73 | 3032.87 |
| 8.5 | 79.36 | 158.72 | 3457.67 |
| 9.0 | 74.93 | 149.87 | 3886.46 |


| 9.5 | 70.86 | 141.72 | 4319.45 |
| :--- | :--- | :--- | :--- |
| 10.0 | 66.62 | 133.24 | 4756.66 |
| 10.5 | 61.04 | 122.07 | 5198.05 |
| 11.0 | 55.98 | 111.96 | 5643.36 |
| 11.5 | 51.29 | 102.57 | 6092.54 |
| 12.0 | 46.94 | 93.87 | 6545.67 |
| 12.5 | 42.86 | 85.73 | 7002.71 |
| 13.0 | 38.99 | 77.99 | 7463.65 |
| 13.5 | 35.28 | 70.57 | 7928.40 |
| 14.0 | 31.71 | 63.42 | 8396.79 |
| 14.5 | 28.27 | 56.54 | 8868.91 |
| 15.0 | 24.92 | 49.85 | 9344.76 |
| 15.5 | 21.66 | 43.32 | 9824.42 |
| 16.0 | 18.55 | 37.10 | 10307.84 |
| 16.5 | 15.42 | 30.84 | 10795.16 |
| $16^{\prime}-7-1 / 8^{\prime \prime}$ | 14.45 | 28.90 | 10948.13 |

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: | 12496.38 | Long Tons |
| :--- | ---: | :--- |
| VCG: | 14.34 | Feet Above the Baseline |
| LCG: | 170.83 | Feet Aft of FP |

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: 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.
"ALASKA TRADER"
O.N. 1088188

Gunderson Marine Hull 053
March 10, 2009
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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 barge.

Thomas M. Gruber
Principal Engineer
ABS Americas

DATE: 10 March 2009
PAGE: $\quad 1$ of 1
TO: ABS Seattle
ATTN: Mr. Frank Zink
FAX NO: (by email)
OPN: 2018555
TASK: 435925/SDM

FROM: Thomas M. Gruber
SUBJECT: "ALASKA TRADER"
VID: 0039967
CC: Columbia-Sentinel Engineers, Inc Mr. Paul Zankich

The 1966 type "B-25\%" freeboard assignment for the subject vessel, corresponding to the ABS stability letter dated 10 March 2009, is as follows:

| Center of Ring below upper edge of Deck Line | $: 4^{\prime}-5-1 / 2^{\prime \prime}$ |
| :--- | :--- |
| Deck line located opposite top of steel upper deck at side |  |
| Tropical-Fresh above Center of Ring | $: 8-5 / 16^{\prime \prime}$ |
| Fresh above Center of Ring | $: 4-1 / 8^{\prime \prime}$ |
| Tropical above Center of Ring | $: 4-1 / 8^{\prime \prime}$ |
| Summer through Center of Ring | $:---1 / 8^{\prime \prime}$ |
| Winter below Center of Ring | $: 6-1 / 8^{\prime \prime}$ |

Midship point located is $1^{\prime}-10^{\prime \prime}$ AFT of Frame 20
Load Line Length:
324 '
Corresponding Molded Draft:
16'-7-1/8"
Corresponding Extreme Draft: 16'-7-3/4"

The Survey Department advises that provided you have taken a status and reviewed any outstanding recommendations with your lead Surveyor, it will be in order to conduct the necessary surveys for the issuance of a Load Line certificate to the subject vessel.

Provided the form LL-11-D and the ABS stability letter dated 10 March 2009 are sighted on board the vessel, a Load Line certificate may be issued to the vessel reflecting the above marks. The following comment is to be placed on the face of the Load Line certificate:
"This certificate is valid only so long as the operating restrictions in the vessel's stability letter, issued by the ABS Americas and dated 10 March 2009 are observed. This certificate is valid only for unmanned operations."

VIM has been updated accordingly.


Thomas M. Gruber
Principal Engineer,
Ship Engineering Department

