



DEPARTMENT OF TRANSPORTATION  
UNITED STATES COAST GUARD

NAKNOX  
TRADER

Dist  
4126

RECEIVED  
22 FEB 1982  
A. B. S.

16705/FMC 22, 23, 24  
16 February 1982

Zidell Exploration, Inc.  
Attn: Mr. Canulette, Jr.  
3121 S. W. Moody Avenue  
Portland, Oregon 97201

Subj: FMC 22, 23, & 24  
285' x 78' x 18' Deck Cargo Barge  
Oceans  
Stability Review

Ref: (a) Your letter of 5 February 1982

Gentlemen:

Enclosures (1) through (3) have been marked, examined, and filed for information.

The stability of subject vessels has been reviewed with respect to loadline assignment. The subject vessel has adequate intact stability for all normal operating conditions in ocean service for a loadline draft of 14.33 provided the following conditions are adhered to:

1. The vertical center of gravity of the cargo above the main deck shall not exceed the following values, for the given ballast tank loading conditions:

A. When the ballast tanks are slack or empty:

Draft (ft)	CVCG (ft)	Minimum Required Ballast in Each Slack Tank	
		Long Tons S.W.	Sounding (ft)
14.33	9.95	253.78	5.0
14	12.13	253.78	5.0
13	19.74	202.97	4.0
12	27.73	152.16	3.0
11	36.22	152.16	3.0
10	37.50	152.16	3.0
9	37.50	No minimum required	
8	37.50	"	
6	37.50	"	
4	37.50	"	

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B. When one transverse pair of ballast tanks is completely full and the other pair slack:

<u>Draft (ft)</u>	<u>CVCG (ft)</u>	<u>Minimum Required Ballast In</u>	
		<u>Each Slack Tank</u>	<u>Soundings (ft)</u>
		<u>Long Tons S.W.</u>	
14.33	16.95	253.78	5.0
14	20.27	253.78	5.0
13	32.50	202.97	4.0
12	37.50	152.16	3.0
11	37.50	No minimum required	
10	37.50	"	"
8	37.50	"	"

C. When both pair of ballast tanks are completely full (914.32 long tons of water per tank at a sounding of 18 feet):

<u>Draft (ft)</u>	<u>CVCG(ft)</u>
14.33	32.125
14.00 & less	37.50

The last column in Loading Tables A and B requires a minimum amount of ballast to be carried anytime a tank(s) is/are carried slack for a given draft. The soundings are given for saltwater.

2. The maximum height of deck cargo shall not exceed twice the height of the allowed cargo's center of gravity (CVCG) above the main deck.
3. When the ballast tanks are carried dry, flanges are to be installed on the seachest valves.
4. For intermediate drafts between tabulated values, the allowable CVCG must be interpolated, or the value of the deeper draft must be utilized.

The above restrictions (1) through (4) shall be placed on or attached to the Loadline Certificate.

Sincerely,

GEORGE J. BUFFLEBEN  
Commander, U. S. Coast Guard  
Chief, Merchant Marine Technical Branch  
By direction of the District Commander