

Lampiran 4

LOADING PLAN

Ship's Name	Loading Port	Max. Draft Available (Hw)	Max Air Draft In Berth	Assumed SF Of Cargo	Ballast Pumping Rate
MV. KT 05	GARONGKONG			42 Cuft	
Use Of Loaders	Max Sailing Draft	Min. Draft Available (Lw)	Dock Water Density	Last Cargo	Load. / Disch. Rate
			1.020	<i>clinker in Bulk</i>	

Voy. No. 001L-KSE	5	4	3	2	1
Tons	89.5 % 8200 MT	90.2 % 9400 MT	89.9 % 9000 MT	90.2 % 9400 MT	90.4 % 8000 MT
Grade					

Grade : ___ Tons, Grade : ___ Tons, Grade : ___ Tons, Grade : ___ Tons

13th APRIL 2017

Pour No.	Cargo		Ballast Operations	Time Req'd (Hrs)	Comments	Calculated Valves				Calculated Valves			Observed Valves		
	Hold No.	Tons				Draft F	Draft A	Max *BM	Min *SF	Air Draft	Draft Min	Trim	Draft		
													F	A	Mid
1	3	5000	PO BWT No.3 P/S=0 %		BALANCE = 4000 MT	3.19	6.25	22.16	-30.61	13.61	4.72	3.05			
2	1	4000	PO BWT No.1 P/S=0 %		BALANCE = 4000 MT	5.17	5.15	28.83	26.01	13.42	5.16	-0.02			
3	5	5000	PO BWT No.5 P/S=0 %		BALANCE = 3200 MT	4.17	7.84	36.81	34.57	11.58	6.01	3.67			
4	2	5000	PO BWT No.2 P/S=0 %		BALANCE = 4400 MT	5.80	7.42	36.86	34.04	12.32	6.61	1.62			
5	4	5000	PO BWT No.4 P/S=0 %		BALANCE = 4400 MT	5.74	9.18	16.38	-6.42	10.73	7.46	3.44			
6	3	4000	STRIPPING ALL BWT		COMPLETED LOADING	6.77	9.78	-31.14	-32.83	10.45	8.28	3.01			
7	1	3000			BALANCE = 1000 MT FOR TRIMMING	9.10	8.60	15.53	-26.06	9.56	8.85	-0.49			
8	5	2200			BALANCE = 1000 MT FOR TRIMMING	8.56	10.10	11.99	-23.61	8.84	9.33	1.54			
9	4	4400			COMPLETED LOADING	8.66	11.79	-27.31	36.21	8.00	10.23	3.13			
10	2	4400			COMPLETED LOADING	10.98	11.26	-29.28	-20.14	7.53	11.12	0.28			
11	5	1000			COMPLETED LOADING	10.78	11.85	-27.28	20.05	6.98	11.31	1.07			
12	1	1000			COMPLETED LOADING	11.52	11.72	-19.11	19.72	7.04	11.62	0.20			
					SEA GOING CONDITION	11.52	11.72	-35.04	21.72		11.62	0.20			
Total		44000	* No deviations from above plan without prior approval of chief mate.												

Signed on behalf of stevedores / Terminal: _____ Signed Master: Capt. DAMRIZAL

Signed chief mate: Amrizal

Example Loading/Unloading Plan

The loading or unloading plan should be prepared in a form such as shown below. A different form may be used provided it contains the essential information enclosed in the heavy line box.

LOADING OR UNLOADING PLAN Version No. 1		Date 96-03-24	Vessel BARBICAN			Voyage No. 044						
Load/Unload Port BOCA GRANDE	Cargo (m) IRON ORE	Assumed stowage factor of cargo (FINE) 1.0 t/cu m	Ballast pumping rate 4000 t/hr	Dock water density 1.025	Max draught available (D-W) 17.88 m	Max air draught in berth N/A						
To/From Port JAPAN F.O.	Least cargo IRON ORE & COAL	No. of loaders/dischargers 1	Load/discharge rate 4500 t/hr	Min draught available (LW) 9.42 m	Max sailing/arrival draught 17.88 m							
Tonnes		11	10	14756	17000	17382	16382	16382	16900	15382	18766	13050
Grade				FINES	LUMP	LUMP	LUMP	LUMP	FINES	LUMP	LUMP	FINES
Totals:		Grade: FINES = 44706 Tonnes		Grade: LUMP = 98294 Tonnes			Grade: Tonnes			Total: 143000 Tonnes		

Pour No.	Cargo		Ballast operations	Time required (hours)	Comments	Calculated values				Calculated values			Observed Values		
	Hold No.	Tonnes				Draught		Maximum		Air draught	Draught mid	Trim	Draught		
						Fwd	Aft	BM*	SF				Fwd	Aft	Mid
1	4	10000	GO 123 UWT's	2.22	FINES	9.99	10.77	73	49		10.38	0.78			
2	1	7000	GO Upper Fore Peak PO 2 Hold	1.56	FINES changeover 2 Hold	10.10	10.68	66	53		10.31	0.34			
3	4	8000	GO 5 UWT's PO Aft peak	1.78	FINES	9.42	12.15	63	59		10.79	2.73			
4	4	6900	PO 1 DB's	1.53	FINES	10.12	12.50	80	43		11.81	2.38			
5	9	6756	PO 5 DB's	1.50	FINES	9.56	13.74	80	45		11.65	4.18			
6	1	6050	PO Lower FP GO 2 UWT's	1.36	FINES	9.61	13.57	75	49		11.59	3.96			
					Change grade to LUMP										
7	7	10000	GO 6 Hold to 50%	2.22	LUMP	9.94	14.38	-58	55		11.66	5.43			
8	5	10000	PO 6 Hold	2.22	LUMP	9.63	13.67	-67	49		11.63	4.00			
9	7	7382	Educt 6 Hold	1.64	LUMP changeover 6 Hold	9.57	15.24	-64	47		12.41	5.67			
10	3	10000	PO 2 & 3 DB's	2.22	LUMP	10.41	14.65	-49	38		12.53	4.24			
11	8	10000	GO 4 UWT's	2.22	LUMP	9.58	16.44	-50	43		13.12	7.08			
12	5	6382	PO 4 DB's	1.62	LUMP	10.28	16.24	58	37		13.26	5.96			
13	8	6000	Educt as required	1.33	LUMP	9.90	17.98	53	38		13.89	7.98			
14	2	8000	Educt as required	1.78	LUMP	12.51	16.63	-65	46		14.60	4.17			
15	6	9000	Educt as required	2.00	LUMP	13.14	17.80	42	-21		15.47	4.66			
16	2	6000	Educt as required	1.28	LUMP	15.06	16.98	33	-14		16.02	1.92			
17	6	7382	Educt ballast lines	1.64	LUMP	15.39	17.88	48	-20		16.74	2.29			
18	3	5882	Shut down ballast	1.20	LUMP	16.95	17.54	44	-27		17.02	0.59			
					Trim check										
19	8	1000		0.22	LUMP	16.94	17.72	49	-30		17.33	0.79			
20	2	1766		0.39	LUMP	17.51	17.51	46	-27		17.51	0.00			
			DRAUGHT SURVEY		SEAGOING CONDITION	17.51	17.51	62	-36		17.51	0.00			
	TOTAL	143000													

NO DEVIATION FROM ABOVE PLAN WITHOUT PRIOR APPROVAL OF CHIEF MATE
 Pours to be numbered 1A, 1B, 2A, 2B, etc when using two loaders
 Abbreviations: M - Pump In; OI - Overboard In; F - Fwd; PO - Pump Out; GO - Gravelate Out; ME - Empty
 All entries within the box must be completed as far as possible. The entries outside the box are optional.

Signed Terminal *H. H. H.*

Signed Ship *A. Smith*

*Bending moments (BM) & shear forces (SF) are to be expressed as a percentage of maximum permitted report values for intermediate stages, and of maximum permitted stress values for the final stage. Every step in the loading/unloading plan must remain within the allowable limits for hull girder shear forces, bending moments and tonnage per hold, where applicable. Loading/unloading operations may have to be paused to allow for ballasting/deballasting in order to keep actual values within limits.

Example Loading/Unloading Plan

The loading or unloading plan should be prepared in a form such as shown below. A different form may be used provided it contains the essential information enclosed in the heavy line box.

UNLOADING PLAN Vers No. 1	Date 96-05-15	Vessel BARBICAN	Voyage No. 044			
Load/Unload Port CHIBA	Cargo(es) IRON ORE	Assumed stowage factor of cargo(es) $\frac{FINES}{15.00 t/cu m}$ $\frac{LUMP}{10.00 t/cu m}$	Ballast pumping rate 6000 t/hr	Dock water density 1.025	Max draught available (B+W) 17.35m	Max air draught in berth 60m
From Port BOCA GRANDE	Last cargo IRON ORE & COAL	No. of loaders & dischargers 2	Load/discharge rate 1250 t/hr per grab	Min draught available (LW) 7.59m	Max sailing/ arrival draught 17m	
Tonnes	Grade	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes
		14756	16910	17382	16382	16382
		FINES	LUMP	LUMP	LUMP	LUMP
Total: Grade FINES = 44706 Tonnes		Grade LUMP = 97908 Tonnes		Grade: _____ Tonnes		Total 142614 Tonnes

Port No.	Cargo		Ballast operations	Time required (hours)	Comments	Calculated values				Calculated values			Observed Values			
	Hold No.	Tonnes				Draught		Maximum		Air draught	Draught mid	Trim	Draught			
						Fwd	Aft	BM*	SF*				Fwd	Aft	Mid	
1A	2	15470	GI 1A2 DB's PI 2UWT's	13.2	LUMP 286 Holds MT	13.82	16.29	-72	48			2.47				
1B	6	16382														
2A	5	10000	GI 4DB's PI 4 UWT's	8.0	LUMP	13.66	14.54	71	56			1.10				
2B	8	10000														
3A	3	9000	GI 3DB's	7.2	LUMP	12.19	13.68	77	78			1.69				
3B	7	9000														
4A	5	6382	GI 5DB's	5.5	LUMP 588 Holds MT	12.67	15.22	68	38			2.55				
4B	8	6910	PI 6 Hold to 0.5m ullage													
5A	3	6382		6.7	LUMP 327 Holds MT	11.05	13.94	-91	59			2.89				
5B	7	8382														
Draught survey and change grade to FINES																
6A	1	6000	PI 1B5 UWT's	4.8	FINES	9.75	14.01	83	42			4.26				
6B	9	6000														
7A	4	8756		7.0	FINES	9.38	10.64	80	52			1.26				
7B	9	8756														
8A	1	7050	GI 8 PI Lower Forepeak	6.5	FINES	7.89	11.30	84	-82			3.71				
8B	4	8146	PI Upper Forepeak & 3 UWT's													
Instructions: ① Please empty No.6 Hold and leave as clean as possible. This will then be used for ballast during stage 6.																
② Grab and buff for blades must not be allowed to strike the ship's structure. Please instruct drivers to take special care.																
③ Please note door or bilge and eductor places in the starboard corner of each hold. Care required in these areas.																
④ All damage to be reported. Holds to be surveyed on cargo completion.																
SEAGOING CONDITION						7.59	11.30	84	-82			3.31				
TOTAL		142614				Signed Terminal <i>DEBkamar</i>										

NO DEVIATION FROM ABOVE PLAN WITHOUT PRIOR APPROVAL OF CHIEF MATE.
 Ports to be numbered 1A, 1B, 2A, 2B, etc when using two loaders.
 Abbreviations: PI - Pans in GI - Gyro in F - Full PD - Pans Out SO - Discharge Out MI - Empty
 All entries within the box must be completed as far as possible. The entries outside the box are optional.

Signed Ship *A. Smith*

*Bending moments (BM) & shear forces (SF) are to be expressed as a percentage of maximum permitted in-port values for intermediate stages, and of maximum permitted at-sea values for the final stage. Every step in the loading/unloading plan must remain within the allowable limits for hull girder shear forces, bending moments and tonnages per hold, where applicable. Loading/unloading operations may have to be paused to allow for ballasting/deballasting in order to keep actual values within limits.