Chief Engineer's Log Book

Voyage No 0738 From PUSAN To LONG BEACH Date 01-NOV-07

Main Engine

Watch	Hours	Minutes	Revolution Counter	Revolution Rpm	Fuel Oil Flow meter	Fuel Oil Cons	Hrs L O Pur	Lub Oil Level S'mp Tk	Lub Oil Level RG Tk	Lub Oil Con ME Tk	B Con/E Con	Governor Control	L Indicator
12:00 16:00	4	00						68					
16:00 20:00	4							68					
20:00 24:00	3	40						68					
00:00 04:00	3	40						68					
04:00 08:00	3	40			925-623			68					
08:00 12:00	4		1026605/49.0		355946			68					
Total			Total Ho/Do					Total					

Temperatures in °C

Watch	M E Exhaust 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Inlet	Jacket Cooling Water (Outlet) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	FVC In/Out
12:00 16:00	319	314	330	317	330	310	312	310	313	308							75	82	83	83	83	83	83	83	83	83	83							
16:00 20:00	321	316	341	318	326	310	316	316	322	313							71	82	82	83	83	83	83	83	83	83	83							
20:00 24:00	322	319	340	318	331	330	317	314	315	312							75	82	82	83	83	83	83	83	83	83	83							
00:00 04:00	320	319	340	318	331	330	316	316	315	310							75	82	82	83	83	83	83	83	83	83	83							
04:00 08:00	320	314	340	320	326	330	313	312	314	313							75	82	82	83	83	83	83	83	83	83	82							
08:00 12:00	319	315	336	319	323	331	314	320	319	311							75	82	82	83	83	83	83	83	83	83	82							

Main Turbo Blowers

Watch	RPM x 100 No1	RPM x 100 No2	Exh Gas Inlet No1	Exh Gas Inlet No2	Exh Gas Inlet No1	Exh Gas Inlet No2	Cooler-Air No1 In/Out	Cooler-Air No2 In/Out	Lub Oil No1 T	Lub Oil No1 B	Lub Oil No2 T	Lub Oil No2 B	Cig Water No1 In/Out	Cig Water No2 In/Out	Pressure Drop in MMH2O Air Suc Fil No1	Pressure Drop in MMH2O Air Suc Fil No2	Pressure Drop in MMH2O Air Cooler No1	Pressure Drop in MMH2O Air Cooler No2	S Air Man (mmHg)	Back Pressure
12:00 16:00	9.5 10.2	9.7	400 407	414	271 265	277	37 40	41	75 75	74							250 220	180		
16:00 20:00	9.7 10.0	9.1	401 410	415	272 266	277	37 41	41	75 75	74							250 220	190		
20:00 24:00	9.3 10.1	9.6	403 410	415	273 267	278	37 40	41	75 74	73							250 220	200		
00:00 04:00	9.8 10	9.5	400 410	410	271 265	277	37 40	41	75 74	73							250 220	190		
04:00 08:00	9.7 9.9	9.5	399 407	412	272 266	277	37 40	41	74 74	73							250 220	185		
08:00 12:00	9.8 10.2	9.6	398 409	411	272 266	276	37 40	41	74 74	73							250 220	180		

Miscellaneous

Watch	H Oil Lev Settle TK	H Oil Lev Serv TK	Hrs Steer No 1	Hrs Steer No 2	Thrust Bear °C	Stern Tube Lub Oil °C	Sea Water °C	Eng Room °C	HO Ser Tk °C	HO Set Tk °C	Air Bott F/A Kg/cm²
12:00 16:00	7.0	12.1		4	67	50	12	22	91	60	
16:00 20:00	7.0	12.3		4	43	36.6	13	21	91	60	
20:00 24:00	6.8	12.4		3.40	43	36	16	24	91	60	
00:00 04:00	6.8	12.5		3.40	43	36	16	25	91	60	
04:00 08:00	6.2	12.5		3.40	43	37	17	25	92	61	
08:00 12:00	6.0	12.5		4	43	37	18	26	92	61	

Generator Engines

Watch	Gen No	Running Hours	Exhaust Gas 1	2	3	4	5	6	Cool Wtr In/Out	Lub Oil In/Out	Boost Air	Pedestal Bearing	Bearing Oil Level	Cooling Water	Boost Air	Fuel Oil	Amp/KW	DO Serv
12:00 16:00	1	4	310	300	340	283	340	325/302	32/68	75	40	57	5.6	3.5	0.8	4.5	620	
	2																	
	3	4	292	277	300	297	322	332/300	33/70	75	40	57	7.2	3.5	0.8	4.6	640	
16:00 20:00	1	4	299	293	334	279	318	323/306	34/69	75	36		5.7	3.4/2.8	0.7	4.6	600	
	3	4	157	145	200	161	176	190/186										
	4	4	278	272	298	285	311	306/298	35/66	75	36		7.3	4.2/3.1	0.7	4.6	550	
20:00 24:00	1	2		222	200		STOPPED											
	2																	
	3	3.40	357	360	377	366	364	339/304	34/75	79	39		4.9	3.7/3.2	1.78	4.6	125	
00:00 04:00	1																	
	2																	
	3	3.40	350	360	380	343	360	340/300	35/70	79	36	55	5.0	3.5	1.6	4.6	1200	
04:00 08:00	1																	
	2																	
	3	3.40	349	313	368	338	319	328/323	34/70	79	38		4.7	3.6/3.1	1.6	4.6	1210	
08:00 12:00	1	1.5	303	288	333	280	333	300/298	33/71	74	36		5.6	3.8/2.8	0.7	4.9	700	
	2																	
	3	4	287	276	328	287	312	305/291	33/60	75	35		5.4	3.8/3.1	0.7	4.7	700	
Total		11.5	19	8														
			1	3	4													

Air Conditioning Plant

Watch	Pressure Kg/cm² Suction	Pressure Kg/cm² Disch	Pressure Kg/cm² Lub Oil	Pressure Kg/cm² Cool W	Temp °C P In/Out	Temp °C Sb In/Out
12:00 16:00						
16:00 20:00						
20:00 24:00						
00:00 04:00						
04:00 08:00						
08:00 12:00						

Refrigeration Plant

Watch	Pressure Kg/cm² Suction	Pressure Kg/cm² Disch	Pressure Kg/cm² Lub Oil	Pressure Kg/cm² Cool W	Temp °C Meat	Temp °C Veg	Temp °C Lobby
12:00 16:00							
16:00 20:00							
20:00 24:00							
00:00 04:00							
04:00 08:00							
08:00 12:00							

Freshwater Generator

Watch	Operating Hours	Heating Water °C In/Out	Sea Water °C In/Out	Vacuum Cm Hg	Shell Temp °C	Salinity PPM	Dis Water Flowmeter	Quantity Produced
12:00 16:00								
16:00 20:00								
20:00 24:00								
00:00 04:00								
04:00 08:00								
08:00 12:00	4	80/60	13/30	29/30	50	1	5800/210	
Total	23							

Boiler

Watch	Oil Firing Hours	°C Feed Water	Back Pressure mm W
12:00 16:00			
16:00 20:00			
20:00 24:00			
00:00 04:00			
04:00 08:00			
08:00 12:00		50	
Total			

MV COSCO BUSAN.

Main Engine

Watch	Remarks of Engineer Officer on Watch	LO Supp Type/Ltrs/For Mach	Hrs Pur HO	Hrs Pur DO	Sig Rank
12:00 16:00	E/R PATROL CARRIED OUT & FOUND IT NORMAL				[redacted] 3/E
16:00 20:00	EIR WATCH CARRIED OUT S/G ROOM INSPECTED				[redacted] [redacted]
20:00 24:00	E/R PATROL CARRIED OUT & FOUND NORMAL CONDITION.				4/E [redacted]
00:00 04:00	E/R PATROL CARRIED OUT & FOUND IT NORMAL				[redacted] [redacted]
04:00 08:00	EIR WATCH CARRIED OUT S/G ROOM INSPECTED				[redacted] [redacted]
08:00 12:00	E/R PATROL CARRIED OUT & FOUND NORMAL CONDITION.				[redacted]

Heat Exchangers °C	J Cooler				LO Cooler				FVCW Cooler				RGLO Cooler				Pressure Kg/cm²									
	SW In	SW Out	FW In	FW Out	SW In	SW Out	FW In	FW Out	SW In	SW Out	FW In	FW Out	SW In	SW Out	FW In	FW Out	Sea Water	Jacket Water	Bearing Oil	Camshaft LO	FV Cooling	Scav Air No1	Scav Air No2	Fuel Oil	R Arm Oil	Control Air	Service Air
12:00	33	42	72	40			33	36	12	24	40	43					3.0	4.0	2.4	2.5		2.5		7.6		7.0	6.7
16:00	36	42	73	42			31	37	15	23	40	46						4.0	2.5	2.1		2.4		7.5		6.3	6.5
20:00	35	42	73	42			31	37	16	24	40	46						4.0	2.5	2.3		2.4		7.6		6.2	6.7
24:00	36	42	73	42			31	36	16	26	40	46					3.0	4.0	2.5	2.5		2.5		7.6		7.0	6.7
04:00	36	41	74	43			30	36	17	25	40	46						4.0	2.6	2.2		2.4		7.6		6.2	6.5
08:00	36	42	74	41			31	37	18	26	40	46						4.0	2.6	2.3		2.4		7.6		6.4	6.7

Lub Oil & Greases Daily Account

Type of Oil	MEC	AEC	MECYL									
Remaining Yesterday Noon	47370	6216	99593			L.O.C	L.O.C²	M/E F.O	A/E F.O			
Consumed	—	—	1119			46698	33818	3206	30824			
Remaining Today Noon	47370	6216	98474	256522		46723	33858	3221	30868			
Remarks In use for/Recd												

Fuel Oil Daily Account MT

Used for	HO	DO		HO	DO
M/E	222.8	—	Previous	3089.9	95.3
Aux Eng	7.1	—	Consumption Noon to Noon	229.9	—
Boiler	—	—	Received		—
Total	229.9	—	Remaining Today Noon	2860.	95.3

Water Daily Account

MT	Remaining Yesterday Noon	Total Consumption	Remaining	Produced by Evaporator	Remaining Today Noon
Drinking Water					
Wash Water					

Noon Report

Daily Performance			
Total Revs from Noon to Noon		Distance By Observation	572
Hours Full Speed	23	Slip %	11.1
Hours Reduced Speed		Observation Speed	24.8
Hours Stopped		Total Distance Made	4443
Average Rpm	99.4	Total Distance To Go	787
Distance by Engine Speed	28.0/643.6	ETA	

Remarks from Chief Engineer:

E/R & DECK ROUNDS TAKEN & 1630 CARRIED OUT SOPEP DRILL & ISPS DRILL (Level 1 CHANG TO Level 2) Sewage facility working condition inspected. found normal.

Working Hours	Previous	Noon to Noon	Total
M/E	39059	23	39082
A/E-1	24052	12	24064
A/E-2	18863	0	18863
A/E-3	24357	19	24376
A/E-4	~~20516~~ 239	8	21247

Date 01-NOV-07

[redacted]

Chief Engineer

M/E. 1252623 A/E. 855946 BLR. 2711930 CYL. 256522

A member of The Noble Group

Chief Engineer's Log Book

Voyage No 073E From PUSAN To LONG BEACH Date 02-NOV-07

Main Engine

Watch	Hours	Minutes	Revolution Counter	Revolution Rpm	Fuel Oil Flow meter	Fuel Oil Cons	Hrs L O Pur	Lub Oil Level S'mp Tk	Lub Oil Level RG Tk	Lub Oil Con ME Tk	B Con/E Con	Governor Control	L Indicator
12:00 16:00	4	00						68					
16:00 20:00	4							68					
20:00 24:00	3	40						68					
00:00 04:00	3	40						68					
04:00 08:00	3	40			94249.9			68					
08:00 12:00	4		88278234	89.4	84394.7			68					
Total	23		Total Ho/Do					Total					

Temperatures in °C

Watch	M E Exhaust 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Inlet
12:00 16:00	310	308	320	310	320	320	300	300	315	300							75
16:00 20:00	317	316	324	320	324	320	308	311	323	307							75
20:00 24:00	310	303	319	317	327	296	304	311	308	302							75
00:00 04:00	310	304	313	313	316	320	300	302	307	300							75
04:00 08:00	311	305	314	309	317	320	298	304	312	302							77
08:00 12:00	320	312	319	315	322	321	309	314	322	304							75

Watch	Jacket Cooling Water (Outlet) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	FVC In/Out
12:00 16:00	82	82	83	83	83	83	83	83	83	82							
16:00 20:00	81	81	82	82	82	82	82	82	82	82							
20:00 24:00	82	82	83	83	83	82	83	82	83	82							
00:00 04:00	81	81	82	82	82	82	82	82	82	82							
04:00 08:00	83	83	84	84	83	84	84	84	84	83							
08:00 12:00	81	81	82	82	82	81	82	81	82	82							

Main Turbo Blowers

Watch	RPM x 100 No1	RPM x 100 No2	Exh Gas Inlet No1	Exh Gas Inlet No2	Exh Gas Inlet No1	Exh Gas Inlet No2	Cooler-Air No1 In/Out	Cooler-Air No2 In/Out	Lub Oil No1 T	Lub Oil No1 B	Lub Oil No2 T	Lub Oil No2 B	Cig Water No1 In/Out	Cig Water No2 In/Out	Pressure Drop in MMH2O Air Suc Fil No1	Pressure Drop in MMH2O Air Suc Fil No2	Pressure Drop in MMH2O Air Cooler No1	Pressure Drop in MMH2O Air Cooler No2	S Air Man (mmHg)	Back Pressure
12:00 16:00	8.5 8.9	8.4	273 276	278	273 268	276	34 36	36	66 65	65							250 230	180		
16:00 20:00	7.7 7.8	7.5	276 279	280	294 298	297	33 34	34	60 59	59							190 180	180		
20:00 24:00	8.4 8.7	8.3	271 276	276	271 265	274	34 36	36	66 65	65							230 220	150		
00:00 04:00	8.5 8.7	8.2	270 276	277	271 266	274	34 36	36	66 65	65							200 180	150		
04:00 08:00	8.6 8.8	8.4	272 277	276	271 267	274	34 36	36	66 65	65							210 180	150		
08:00 12:00	7.6 7.8	7.5	274	279	275	278	32	34	59	59							200 160	125		

Miscellaneous

Watch	H Oil Lev Settle TK	H Oil Lev Serv TK	Hrs Steer No 1	Hrs Steer No 2	Thrust Bear °C	Stern Tube Lub Oil °C	Sea Water °C	Eng Room °C	HO Ser Tk °C	HO Set Tk °C	Air Bott F/A Kg/cm²
12:00 16:00	5.7	12.5		4	43	40	18	26	61	91	
16:00 20:00	1.8	12.6		4	42	34	17	25	91	61	
20:00 24:00	4.7	12.7		3.40	42	35	18	25	92	68	
00:00 04:00	4.0	12.6		3.40	42	40	18	25	91	66	
04:00 08:00	4.7	12.6		3.40	42	36	18	26	93	61	
08:00 12:00	5.3	12.6		4	42	34	16	28	93	61	

Generator Engines

Watch	Gen No	Running Hours	Exhaust Gas 1	2	3	4	5	6	Cool Wtr In/Out	Lub Oil In/Out	Boost Air	Pedestal Bearing	Bearing Oil Level	Cooling Water	Boost Air	Fuel Oil	Amp/KW	DO Serv
12:00 16:00	1	4	303	293	342	282	340	340/297	34/76	77	36		5.6	3.1	0.7	4.6	607	
	2																	
	3	4	297	294	340	285	316	300/289	34/76	73	36		5.1	3.2	0.8	4.6	609	
16:00 20:00	1	4	310	296	342	284	340	314/300	33/73	78	36		5.4	3.3/2.9	0.75	4.6	610	
	2																	
	3	4	297	291	328	278	309	323/299	33/68	78	36		4.2	3.8/3.1	0.67	4.8	590	
20:00 24:00	1	3		22:50			570 RPM											
	2																	
	3	3.40	345	359	371	327	349	337/340	34/71	77	38		5.3	3.8/3.1	1.6	4.5	1200	
00:00 04:00	1																	
	2																	
	3	3.40	358	367	383	337	360	335/340	35/71	78	39		5.2	3.5	1.9	4.5	1200	
04:00 08:00	1																	
	2																	
	3	3.4	345	317	373	337	347	323/310	35/72	78	39		1.4	3.7/3.0	1.6	4.5	1150	
08:00 12:00	1																	
	3	3.4	308	309	340	302	322	312/312	33/76	74	35		5.6	3.9/3.2	0.74	4.6	650	
	4	3	276	265	299	295	309	303/298	33/79	77	36		4.9	4.3/3.3	0.76	4.5	650	
Total		7		2	8		3											
			1	2	3		4											

Air Conditioning Plant

Watch	Pressure Kg/cm² Suction	Disch	Lub Oil	Cool W	Temp °C P In/Out	Sb In/Out
12:00 16:00						
16:00 20:00						
20:00 24:00						
00:00 04:00						
04:00 08:00						
08:00 12:00						

Refrigeration Plant

Watch	Pressure Kg/cm² Suction	Disch	Lub Oil	Cool W	Temp °C Meat	Veg	Lobby
12:00 16:00							
16:00 20:00							
20:00 24:00							
00:00 04:00							
04:00 08:00							
08:00 12:00							

Freshwater Generator

Watch	Operating Hours	Heating Water °C In/Out	Sea Water °C In/Out	Vacuum Cm Hg	Shell Temp °C	Salinity PPM	Dis Water Flowmeter	Quantity Produced
12:00 16:00								
16:00 20:00								
20:00 24:00								
00:00 04:00								
04:00 08:00								
08:00 12:00								
Total	4	80/60	16/35	95	46	1	8835	

Boiler

Watch	Oil Firing Hours	°C Feed Water	Back Pressure mm W
12:00 16:00			
16:00 20:00			
20:00 24:00			
00:00 04:00			
04:00 08:00			
08:00 12:00			
Total		80	

REV.0 12/94 B

...-07 MV ...500 BUSAN

Main Engine

								Heat Exchangers °C																Pressure Kg/cm²									
						FVC	FO Inlet	J Cooler				LO Cooler				FVCW Cooler				RGLO Cooler													
13	14	15	16		In/Out		SW In	SW Out	FW In	FW Out	SW In	SW Out	FW In	FW Out	SW In	SW Out	FW In	FW Out	SW In	SW Out	FW In	FW Out	Sea Water	Jacket Water	Bearing Oil	Camshaft LO	FV Cooling	Scav Air No1	Scav Air No2	Fuel Oil	R Arm Oil	Control Air	Service Air
							36	46	70	40			32	36	18	26	40	46					3.0	4.0	2.4	2.3		1.7		7.9		6.5	6.7
							36	39	74	42			32	34	17	22	35	46					3.0	4.0	2.6	2.3		1.6		8		6.2	6.5
							34	42	70	40			30	36	18	24	37	46					3.0	4.0	2.6	2.3		1.7		7.9		6.2	6.7
							34	40	72	40			30	36	18	20	36	46					3.0	4.0	2.6	2.3		1.7		7.8		6.2	6.7
							32	40	73	40			32	35	18	23	37	47					3.0	4.0	2.6	2.3		1.7		7.8		6.7	6.8
							33	38	72	38			30	36	16	20	36	46					3.0	4.0	2.6	2.3		1.3		7.9		6.7	6.7

Lub Oil & Greases Daily Account

Type of Oil	MZCC	AZCC	MZCYL									
Remaining Yesterday Noon	47370	6056	98474			LO. No	LO No²	M/E F.O	A/E F.O			
Consumed	—	15°	928			46723	33856	3221	30868			
Remaining Today Noon	47370	6056	97546	257350		46747	33878	3236	30891			
Remarks / use for/Recd												

...essure Kg/cm²					DO Le...	
Cooling Water	Boost Air	Fuel Oil	Amp/KW		Serv	
3.1	0.7	4.6	607			
3.2	0.8	4.6	609			
3.3/2.9	0.75	4.6	610			
3.3/3.1	0.67	4.8	590			
3.8/3.1	1.6	4.5	1200			
23.5	1.9	4.5	1200			
3.7/3.0	1.6	4.5	1150			
3.2/3.1	0.74	4.6	1150			
3.3/3.3	0.76	4.5	1150			

Fuel Oil Daily Account MT

Used for	HO	DO		HO	DO
M/E	167.1	—	Previous	2860	95.3
Aux Eng	6.8	—	Consumption Noon to Noon	1739	—
Boiler	—	—	Received		
Total	173.9	—	Remaining Today Noon	2686.1	95.3

Water Daily Account

MT	Remaining Yesterday Noon	Total Consumption	Remaining	Produced by Evaporator	Remaining Today Noon
Drinking Water					
Wash Water					

Watch	Remarks of Engineer Officer on Watch	LO Supp Type/Ltrs/For Mach	Hrs Pur HO	Hrs Pur DO	Sig Rank
12:00 16:00	E/R PATROL CARRIED OUT & FOUND IT NORMAL				[redacted]
16:00 20:00	E/R WATCH CARRIED OUT SIG ROUND INSPECTION				[redacted]
20:00 24:00	E/R PATROL CARRIED OUT & FOUND NORMAL CONDITION				[redacted]
00:00 04:00	E/R PATROL CARRIED OUT & FOUND IT NORMAL.				4/E
04:00 08:00	E/R WATCH CARRIED OUT SIG ROUND INSPECTED				[redacted] 3/E
08:00 12:00	E/R PATROL CARRIED OUT & FOUND NORMAL CONDITION				2/E [redacted] 4/E

Noon Report

Daily Performance		
Total Revs from Noon to Noon	Distance By Observation	516
Hours Full Speed 23	Slip %	10.8
Hours Reduced Speed	Observation Speed	22.4
Hours Stopped	Total Distance Made	4959
Average Rpm 89.5	Total Distance To Go	271
Distance by Engine Speed 5738 / 35.7	ETA	

Remarks from Chief Engineer

E/R & DECK ROUNDS TAKEN. D. M/E TRIED IN AHD & AST DIRECTION FROM BRIDGE ECR & LOCAL EMERG STAND SATISFACTORY. ALL CHECK AS PER VSLG CTR 23. 1645 CARRIED OUT. EMERGENCY STEER. TRIED OUT ALL SATISFACTORY. TIME — 1620 HRS TO 1500 HRS

Working Hours			
Mach	Previous	Noon to Noon	Total
M/E	39082	23	39105
A/E-1	24064	7	24071
A/E-2	18863	—	—
A/E-3	24376	22	24398
[illegible]	21247	3	21250

Date 02-NOV-07

[redacted]

Chief Engineer

M/E 9426939 A/E 5639017 CYL. 257350 BLR 2711930

Pre-bunker meeting carried out at 16.30.

2/E: [redacted] T&R: [redacted]

REV 0 12/94 BE-11

Chief Engineer's Log Book

Voyage No 013B From PUSAN To LONG BEACH Date 03-NOV-07

Main Engine

Watch	Hours	Minutes	Revolution Counter	Revolution Rpm	Fuel Oil Flow meter	Fuel Oil Cons	Hrs L O Pur	Lub Oil Level S'mp Tk	Lub Oil Level RG Tk	Lub Oil Con ME Tk	B Con/E Con	Governor Control	L Indicator
12:00 16:00	4	00						68					
16:00 20:00	4							68					
20:00 24:00	4							68					
00:00 04:00	4	00						68					
04:00 08:00													
08:00 12:00													
Total			Total Ho/Do					Total					

Temperatures in °C

Watch	M E Exhaust 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Inlet
12:00 16:00	330	320	317	323	321	320	329	334	335	317							78
16:00 20:00	330	318	317	321	320	320	327	339	337	317							78
20:00 24:00	331	324	311	317	319	330	332	334	335	324							78
00:00 04:00	201	193	182	181	187	180	195	220	240	230							82
04:00 08:00																	
08:00 12:00																	

Watch	Jacket Cooling Water (Outlet) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	FVC In/Out	FO Inlet
12:00 16:00	83	83	83	83	83	83	83	83	83	83								
16:00 20:00	83	83	83	84	83	83	83	83	84	83								
20:00 24:00	82	83	83	83	83	83	83	83	83	83								
00:00 04:00	83	83	84	84	83	84	84	84	84	83								
04:00 08:00																		
08:00 12:00																		

Main Turbo Blowers

Watch	RPM x 100 No1	RPM x 100 No2	Exh Gas Inlet No1	Exh Gas Inlet No2	Exh Gas Inlet No1	Exh Gas Inlet No2	Cooler-Air No1 In/Out	Cooler-Air No2 In/Out	Lub Oil No1 T	Lub Oil No1 B	Lub Oil No2 T	Lub Oil No2 B	Cig Water No1 In/Out	Cig Water No2 In/Out	Pressure Drop in MMH2O Air Suc Fil No1	Pressure Drop in MMH2O Air Suc Fil No2	Pressure Drop in MMH2O Air Cooler No1	Pressure Drop in MMH2O Air Cooler No2	S Air Man (mmHg)	Back Pressure
12:00 16:00	4.8	4.8	350	355	337	343	31	31	49	49							200 160	180		
16:00 20:00	4.9	1.0	379	374	335	340	31	31	49	49							110 90	80		
20:00 24:00	5.0	5.1	377	372	333	338	31	31	49	49							110 85	80		
00:00 04:00	1.9	2.0	216	203	302	201	31	31	43	43							100	80		
04:00 08:00																				
08:00 12:00																				

Miscellaneous

Watch	H Oil Lev Settle TK	H Oil Lev Serv TK	Hrs Steer No 1	Hrs Steer No 2	Thrust Bear °C	Stern Tube Lub Oil °C	Sea Water °C	Eng Room °C	HO Ser Tk °C	HO Set Tk °C	Air Bott F/A Kg/cm²
12:00 16:00	7.7	12.6		4	45	60	18	27	91	60	
16:00 20:00	8.6	12.5		4	42	31	17	31	91	60	
20:00 24:00	6.9	12.5		4	42	31	18	28	90	67	
00:00 04:00	9.0	12.6		4	42	31	18	28	90	66	
04:00 08:00	12.2	12.6		3	39	22	18	32	90	63	
08:00 12:00	12.2	12.6					18	30	89	59	

Air Conditioning Plant

Watch	Pressure Kg/cm² Suction	Pressure Kg/cm² Disch	Pressure Kg/cm² Lub Oil	Pressure Kg/cm² Cool W	Temp °C P In/Out	Temp °C Sb In/Out
12:00 16:00						
16:00 20:00						
20:00 24:00						
00:00 04:00						
04:00 08:00						
08:00 12:00						

Refrigeration Plant

Watch	Pressure Kg/cm² Suction	Pressure Kg/cm² Disch	Pressure Kg/cm² Lub Oil	Pressure Kg/cm² Cool W	Temp °C Meat	Temp °C Veg	Temp °C Lobby
12:00 16:00							
16:00 20:00							
20:00 24:00							
00:00 04:00							
04:00 08:00							
08:00 12:00							

Freshwater Generator

Watch	Operating Hours	Heating Water °C In/Out	Sea Water °C In/Out	Vacuum Cm Hg	Shell Temp °C	Salinity PPM	Dis Water Flowmeter	Quantity Produced
12:00 16:00								
16:00 20:00								
20:00 24:00								
00:00 04:00								
04:00 08:00								
08:00 12:00								
Total								

Boiler

Watch	Oil Firing Hours	°C Feed Water	Back Pressure mm W
12:00 16:00			
16:00 20:00			
20:00 24:00			
00:00 04:00			
04:00 08:00			
08:00 12:00			
Total			

Generator Engines

Watch	Gen No	Running Hours	Exhaust Gas 1	Exhaust Gas 2	Exhaust Gas 3	Exhaust Gas 4	Exhaust Gas 5	Exhaust Gas 6	Cool Wtr In/Out	Lub Oil In/Out	Boost Air	Pedestal Bearing	Bearing Oil Level	Cooling Water	Boost Air	Fuel Oil	Amp/KW	DO Lev Serv
12:00 16:00	1																	
	4	4	298	291	329	300	322	320/300	35/76	79	38		5.6	3.5	1.0		800	
	3	4	319	330	350	300	336	320/300	35/76	76	38		5.6	3.5	1.0		780	
16:00 20:00	1																	
	3	4	326	329	359	297	335	314/300	34/76	76	37		5.6	3.4/3.2	0.97		700	
	4	4	286	256	328	276	313	310/300	35/74	79	37		4.8	4.2/3.2	1.0		720	
20:00 24:00	1																	
	3	4	331	322	347	303	332	314/300	34/76	75	36		5.5	3.7/3.2	0.93		800	
	4	4	292	296	312	306	314	333/300	35/79	79	37		4.8	4.4/3.2	1.0		800	
00:00 04:00	1																	
	3	4	257	311	322	301	317	308/297	35/76	75	36		5.6	2.8	0.7		716	
	4	4	278	278	300	302	311	306/292	34/77	78	37		4.9	2.6	1.8		730	
04:00 08:00	1																	
	2																	
	4	4	322	326	340	333	335	356/338	35/79	81	39		4.7	3.9/3.1	1.6	1.9	1120	
08:00 12:00	1																	
	2																	
	4	4	313	317	335	328	330	306/330	35/79	80	38		4.8	3.5/3.2	1.5		1050	
Total				16	24													
	1	2	3	4														

-07 MV COSCO BUSAN.

Main Engine

14	15	16	FVC In/Out	FO Inlet	J Cooler SW In	J Cooler SW Out	J Cooler FW In	J Cooler FW Out	LO Cooler SW In	LO Cooler SW Out	LO Cooler FW In	LO Cooler FW Out	FVCW Cooler SW In	FVCW Cooler SW Out	FVCW Cooler FW In	FVCW Cooler FW Out	RGLO Cooler SW In	RGLO Cooler SW Out	RGLO Cooler FW In	RGLO Cooler FW Out	Sea Water	Jacket Water	Bearing Oil	Camshaft LO	FV Cooling	Scav Air No1	Scav Air No2	Fuel Oil	R Arm Oil	Control Air	Service Air
				1	33	38	72	40			30	36	18	26	36	46					3.0	4.0	2.5	2.3		0.6		8.2		6.3	6.5
					34	40	83	40			31	34	17	20	34	47					3.0	4.0	2.7	2.4		0.6		8.1		6.6	7.2
					34	40	84	38			30	34	18	20	34	46					3.0	4.0	2.5	2.3		0.7		8.1		6.6	6.8
					34	40	78	38			30	36	18	26	34	46					3.0	4.0	2.5	2.3		0.35		8.5		6.5	6.8

Lub Oil & Greases Daily Account

Type of Oil	MECC	AECC	MECYL									
Remaining Yesterday Noon	47370	6056	97546			L.O No1	L.O No2	M/E F.O	A/E F.O			
Consumed	—	—	475.			46747	33878	3236	30891			
Remaining Today Noon	47370	6056	97071									
Remarks In use for/Recd												

Fuel Oil Daily Account MT

Used for	HO	DO		HO	DO
M/E	59.6		Previous	2686.1	95.3
Aux Eng	0.9	5.8	Consumption Noon to Noon	62.1	5.8
Boiler	1.6		Received	1500.13	
Total	62.1	5.8	Remaining Today Noon	4120.13	89.5

Water Daily Account

MT	Remaining Yesterday Noon	Total Consumption	Remaining	Produced by Evaporator	Remaining Today Noon
Drinking Water					
Wash Water					

Watch	Remarks of Engineer Officer on Watch	LO Supp Type/Ltrs/For Mach	Hrs Pur HO	Hrs Pur DO	Sig Rank
12:00 16:00	E/R patrol carried out & found it normal				[redacted] 3/6
16:00 20:00	E/R WATCH CARRIED OUT & FOUND NORMAL CONDITION				[redacted] 2/6
20:00 24:00	TAKE A PATROL NOTICE & FOUND NORMAL CONDITION				[redacted]
00:00 04:00	E/R patrol carried out & found it normal.				[redacted] 3/6
04:00 08:00	E/R WATCH CARRIED OUT & FOUND NORMAL CONDITION				[redacted] 2/6
08:00 12:00	E/R PATROL CARRIED OUT & FOUND NORMAL CONDITION				[redacted] 4/6

Noon Report

Daily Performance		Remarks from Chief Engineer
Total Revs from Noon to Noon	Distance By Observation	Bunker received 270 380 cst 1500.13 M/E.
Hours Full Speed 2	Slip %	
Hours Reduced Speed	Observation Speed	
Hours Stopped	Total Distance Made	
Average Rpm 89.8	Total Distance To Go	
Distance by Engine Speed 50.6	ETA	

Working Hours			
Mach	Previous	Noon to Noon	Total
M/E	39105	18	39123
A/E-1	24071	—	24071
A/E-2	18863	—	18863
A/E-3	24398	16	24414
A/E-4	21250	24	21274

Date 3rd/Nov/07

[redacted]

Chief Engineer

M/E 9490598 A/E 873367 CYL 257849 BLR 2713610.

REV 0 12/94 BE-11

Chief Engineer's Log Book

Voyage No 013 From Longbeach. To Date 4/nov/07

Main Engine

Watch	Hours	Minutes	Revolution Counter	Revolution Rpm	Fuel Oil Flow meter	Fuel Oil Cons	Hrs L O Pur	Lub Oil Level S'mp Tk	Lub Oil Level RG Tk	Lub Oil Con ME Tk	B Con/E Con	Governor Control	L Indicator
12:00 16:00													
16:00 20:00													
20:00 24:00													
00:00 04:00													
04:00 08:00													
08:00 12:00													
Total			Total Ho/Do				Total						

Temperatures in °C

Watch	M E Exhaust 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Inlet	Jacket Cooling Water (Outlet) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
12:00 16:00																																	
16:00 20:00																																	
20:00 24:00																																	
00:00 04:00																																	
04:00 08:00																																	
08:00 12:00																																	

Main Turbo Blowers

Watch	RPM x 100 No 1	RPM x 100 No 2	Temp Exh Gas Inlet No 1	Temp Exh Gas Inlet No 2	Temp Exh Gas Inlet No 1	Temp Exh Gas Inlet No 2	Temp Cooler-Air No 1 In/Out	Temp Cooler-Air No 2 In/Out	Temp Lub Oil No 1 T	Temp Lub Oil No 1 B	Temp Lub Oil No 2 T	Temp Lub Oil No 2 B	Temp Cig Water No 1 In/Out	Temp Cig Water No 2 In/Out	Pressure Kg/cm² Pressure Drop in MMH₂O Air Suc Fil No 1	Pressure Kg/cm² Pressure Drop in MMH₂O Air Suc Fil No 2	Pressure Kg/cm² Pressure Drop in MMH₂O Air Cooler No 1	Pressure Kg/cm² Pressure Drop in MMH₂O Air Cooler No 2	Pressure Kg/cm² S Air Man (mmHg)	Pressure Kg/cm² Back Pressure
12:00 16:00																				
16:00 20:00																				
20:00 24:00																				
00:00 04:00																				
04:00 08:00																				
08:00 12:00																				

Miscellaneous

Watch	H Oil Lev Settle TK	H Oil Lev Serv TK	Hrs Steer No 1	Hrs Steer No 2	Thrust Bear °C	Stern Tube Lub Oil °C	Sea Water °C	Eng Room °C	HO Ser Tk °C	HO Set Tk °C	Air Bott F/A Kg/cm²
12:00 16:00											
16:00 20:00											
20:00 24:00											
00:00 04:00											
04:00 08:00											
08:00 12:00											

Generator Engines

Watch	Gen No	Running Hours	Temp Exhaust Gas 1	2	3	4	5	6	Cool Wtr In/Out	Lub Oil In/Out	Boost Air	Pedestal Bearing	Pressure Bearing Oil Level	Cooling Water	Boost Air	Fuel Oil	Amp/KW
12:00 16:00	1																
	2																
	3	4	297	297	320	307	316	327	34/32	78	36		4.8	4.9/3.2	1.0	1.9	800
16:00 20:00	1																
	2																
	4	4	298	299	322	309	317	329	35/32	78	37		4.8	4.9/3.2	1.1	1.5	830
20:00 24:00	1																
	2																
	4	4	294	297	319	307	316	329/329	35/34	77	36		4.9	5.0/3.2	1.0	6.0	750
00:00 04:00	1																
	2																
	4	4	283	286	305	298	312	309/297	35/32	77	37		5.0	3.2	0.9	5.7	750
04:00 08:00	1																
	2																
	4	5	282	283	305	298	311	309/298	35/38	76	36		5.2	4.1/3.0	1.0	6.1	790
08:00 12:00	1								35/31	77	36		5.1	4.9/3.2	0.7	5.6	780
	2																
	4	4	281	278	299	309	308	309/297	35/31	77	36		5.1	4.9/3.2	0.7	5.6	700
Total					25												
	1	2	3	4													

Air Conditioning Plant

Watch	Pressure Kg/cm² Suction	Pressure Kg/cm² Disch	Pressure Kg/cm² Lub Oil	Pressure Kg/cm² Cool W	Temp °C P In/Out	Temp °C Sb In/Out
12:00 16:00						
16:00 20:00						
20:00 24:00						
00:00 04:00						
04:00 08:00						
08:00 12:00						

Refrigeration Plant

Watch	Pressure Kg/cm² Suction	Pressure Kg/cm² Disch	Pressure Kg/cm² Lub Oil	Pressure Kg/cm² Cool W	Temp °C Meat	Temp °C Veg	Temp °C Lobby
12:00 16:00							
16:00 20:00							
20:00 24:00							
00:00 04:00							
04:00 08:00							
08:00 12:00							

Freshwater Generator

Watch	Operating Hours	Heating Water °C In/Out	Sea Water °C In/Out	Vacuum Cm Hg	Shell Temp °C	Salinity PPM	Dis Water Flowmeter	Quantity Produced
12:00 16:00								
16:00 20:00								
20:00 24:00								
00:00 04:00								
04:00 08:00								
08:00 12:00								
Total								

Boiler

Watch	Oil Firing Hours	°C Feed Water	Back Pressure mm W
12:00 16:00			
16:00 20:00			
20:00 24:00			
00:00 04:00			
04:00 08:00			
08:00 12:00			
Total			

/07 V Cosco Busan.

Main Engine

14	15	16	FVC In/Out	FO Inlet	Heat Exchangers °C: J Cooler SW In	SW Out	FW In	FW Out	LO Cooler SW In	SW Out	FW In	FW Out	FVCW Cooler SW In	SW Out	FW In	FW Out	RGLO Cooler SW In	SW Out	FW In	FW Out	Pressure Kg/cm²: Sea Water	Jacket Water	Bearing Oil	Camshaft LO	FV Cooling	Scav Air No1	Scav Air No2	Fuel Oil	R Arm Oil	Control Air	Service Air

...ure Kg/cm²: ...Water	Boost Air	Fuel Oil	Amp/KW	DO Le... Serv
4.0/3.2	1.0	1.9	800	
4.1/3.2	1.1	5.5	830	
4.1/3.2	1.0	6.0	750	
3.2	0.9	5.7	750	
4.1/3.2	1.0	6.1	790	
4.2/3.2	0.7	5.6	780	
4.2/3.2	0.7	5.6	700	

Lub Oil & Greases Daily Account

Type of Oil	MZcc	AZcc	MZcYC							
Remaining Yesterday Noon	47370	6056	97071							
Consumed		✓								
Remaining Today Noon	47370	6056	97071							
Remarks In use for/Recd										

Fuel Oil Daily Account MT

Used for	HO	DO		HO	DO
M/E			Previous	4124.13	89.5
Aux Eng		6.6	Consumption Noon to Noon	3.73	6.6
Boiler	3.73		Received		
Total	3.73	6.6	Remaining Today Noon	4120.4	82.9

Water Daily Account

MT	Remaining Yesterday Noon	Total Consumption	Remaining	Produced by Evaporator	Remaining Today Noon
Drinking Water					
Wash Water					

Watch	Remarks of Engineer Officer on Watch	LO Supp Type/Ltrs/For Mach	Hrs Pur HO	Hrs Pur DO	Sig / Rank
12:00 16:00	E/R PATROL CARRIED OUT & S/G AND A/C ROOM INSPECTED				[redacted] 3/E
16:00 20:00	E/R PATROL CARRIED OUT & S/G AND A/C ROOM INSPECTED				[redacted] 2/E
20:00 24:00	E/R PATROL CARRIED OUT & FOUND NORMAL CONDITION				[redacted] 2/E
00:00 04:00	E/R PATROL CARRIED OUT & S/G AND A/C ROOM INSPECTED				[redacted] 2/E
04:00 08:00	E/R PATROL CARRIED OUT & S/G AND A/C ROOM INSPECTED				[redacted] 2/E
08:00 12:00	E/R PATROL CARRIED OUT & S/G AND A/C ROOM INSPECTED				[redacted] 2/E

Noon Report

Daily Performance			
Total Revs from Noon to Noon		Distance By Observation	
Hours Full Speed		Slip %	
Hours Reduced Speed		Observation Speed	
Hours Stopped		Total Distance Made	
Average Rpm		Total Distance To Go	
Distance by Engine Speed		ETA	

Remarks from Chief Engineer:
M/E No 9 cyl unit overhauled. all piston ring replaced
the piston replaced with spare piston.
Stuffing box sealing ring renewed.

Working Hours: Mach	Previous	Noon to Noon	**Total**
M/E	39123	–	39123
A/E-1	24071	–	24071
A/E-2	18863	–	18863
A/E-3	24414	–	24414
A/E-4	21274	24	21298

Date 4th NOV 07

[redacted]

Chief Engineer

M/E. 949098 A/E 880310 CYL. 247869 BLR. 2717440

A Member of the Noble Group

Chief Engineer's Log Book

Voyage No 073 From Long beach To Date 5th-Nov-07

Main Engine

Watch	Hours	Minutes	Revolution Counter	Revolution Rpm	Fuel Oil Flow meter	Fuel Oil Cons	Hrs L O Pur	Lub Oil Level S'mp Tk	Lub Oil Level RG Tk	Lub Oil Con ME Tk	B Con/E Con	Governor Control	L Indicator
12:00 16:00													
16:00 20:00													
20:00 24:00													
00:00 04:00													
04:00 08:00													
08:00 12:00													
Total			Total Ho/Do				Total						

Temperatures in °C

Watch	M E Exhaust 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Inlet
12:00 16:00																	
16:00 20:00																	
20:00 24:00																	
00:00 04:00																	
04:00 08:00																	
08:00 12:00																	

Watch	Jacket Cooling Water (Outlet) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	FVC In/Out	FO Inlet
12:00 16:00																		
16:00 20:00																		
20:00 24:00																		
00:00 04:00																		
04:00 08:00																		
08:00 12:00																		

Main Turbo Blowers

Watch	RPM x 100 No 1	RPM x 100 No 2	Exh Gas Inlet No 1	Exh Gas Inlet No 2	Exh Gas Inlet No 1	Exh Gas Inlet No 2	Cooler-Air No 1 In/Out	Cooler-Air No 2 In/Out	Lub Oil No 1 T	Lub Oil No 1 B	Lub Oil No 2 T	Lub Oil No 2 B	Cig Water No 1 In/Out	Cig Water No 2 In/Out	Pressure Drop in MMH2O Air Suc Fil No 1	Pressure Drop in MMH2O Air Suc Fil No 2	Pressure Drop in MMH2O Air Cooler No 1	Pressure Drop in MMH2O Air Cooler No 2	S Air Man (mmHg)	Back Pressure
12:00 16:00																				
16:00 20:00																				
20:00 24:00																				
00:00 04:00																				
04:00 08:00																				
08:00 12:00																				

Miscellaneous

Watch	H Oil Lev Settle TK	H Oil Lev Serv TK	Hrs Steer No 1	Hrs Steer No 2	Thrust Bear °C	Stern Tube Lub Oil °C	Sea Water °C	Eng Room °C	HO Ser Tk °C	HO Set Tk °C	Air Bott F/A Kg/cm²
12:00 16:00											
16:00 20:00											
20:00 24:00											
00:00 04:00											
04:00 08:00											
08:00 12:00											

Generator Engines

Watch	Gen No	Running Hours	Exhaust Gas 1	Exhaust Gas 2	Exhaust Gas 3	Exhaust Gas 4	Exhaust Gas 5	Exhaust Gas 6	Cool Wtr In/Out	Lub Oil In/Out	Boost Air	Pedestal Bearing	Bearing Oil Level	Cooling Water	Boost Air	Fuel Oil	Amp/KW	DO Level Serv
12:00 16:00	1																	
	2																	
	3	4	298	300	320	312	317	324/315	33/75	75	37		5.1	3.2	1.1	5.6	900	
16:00 20:00	1																	
	2																	
	4	4	296	301	319	308	313	324/316	34/73	78	37		5.0	4.1/3.3	1.2	5.7	900	
20:00 24:00	1																	
	2																	
	4	4	296	301	319	313	315	323/318	35/72	77	37		5.0	4.2/3.1	1.1	5.4	900	
00:00 04:00	1																	
	2																	
	4	4	305	313	329	317	322	327/321	35/72	78	38		5.0	3.2	1.1	5.6	900	
04:00 08:00	1																	
	2																	
	4	4	323	319	317	317	332	341/333	36/79	80	40		4.1	4.2/3.0	1.5	[illegible]	1152	
08:00 12:00	1																	
	2																	
	3	4	329	322	345	330	337	346/340	36/79	81	39		4.1	4.2/3.1	1.6	5.4	1170	
Total					24													
			1	2	3	4												

Air Conditioning Plant

Watch	Pressure Kg/cm² Suction	Pressure Kg/cm² Disch	Pressure Kg/cm² Lub Oil	Pressure Kg/cm² Cool W	Temp °C P In/Out	Temp °C Sb In/Out
12:00 16:00						
16:00 20:00						
20:00 24:00						
00:00 04:00						
04:00 08:00						
08:00 12:00						

Refrigeration Plant

Watch	Pressure Kg/cm² Suction	Pressure Kg/cm² Disch	Pressure Kg/cm² Lub Oil	Pressure Kg/cm² Cool W	Temp °C Meat	Temp °C Veg	Temp °C Lobby
12:00 16:00							
16:00 20:00							
20:00 24:00							
00:00 04:00							
04:00 08:00							
08:00 12:00							
Total							

Freshwater Generator

Watch	Operating Hours	Heating Water °C In/Out	Sea Water °C In/Out	Vacuum Cm Hg	Shell Temp °C	Salinity PPM	Dis Water Flowmeter	Quantity Produced
12:00 16:00								
16:00 20:00								
20:00 24:00								
00:00 04:00								
04:00 08:00								
08:00 12:00								
Total								

Boiler

Watch	Oil Firing Hours	°C Feed Water	Back Pressure mm W
12:00 16:00			
16:00 20:00			
20:00 24:00			
00:00 04:00			
04:00 08:00			
08:00 12:00			
Total			

th-Nov-07 COSCO BUSAN

Main Engine

13	14	15	16	FVC In/Out

Heat Exchangers °C																Pressure Kg/cm²									
J Cooler				LO Cooler				FVCW Cooler				RGLO Cooler									Scav Air				
SW In	SW Out	FW In	FW Out	SW In	SW Out	FW In	FW Out	SW In	SW Out	FW In	FW Out	SW In	SW Out	FW In	FW Out	Sea Water	Jacket Water	Bearing Oil	Camshaft LO	FV Cooling	No1	No2	Fuel Oil	R Arm Oil	Control Air	Service Air

Lub Oil & Greases Daily Account

Type of Oil	MBCC	ABCC	MBCYL									
Remaining Yesterday Noon	4737	6956	97021									
Consumed	—	100	—									
Remaining Today Noon	4737	6856	97021									
Remarks Use for/Recd			0									

Pressure Kg/cm²			Amp/KW	DO L	
Cooling Water	Boost Air	Fuel Oil			Serv
3.2	1.1	5.6	900		
4.1/3.3	1.2	6.7	900		
4.2/3.2	1.1	5.4	900		
3.2	1.1	5.6	100		
4.2/3.3	1.5	6.7	1150		
4.2/3.2	1.6	5.4	1170		

Fuel Oil Daily Account MT

Used for	HO	DO		HO	DO
M/E			Previous	412.4	82.9
Aux Eng	4.6	6.5	Consumption Noon to Noon	4.6	6.5
Boiler			Received		
Total			Remaining Today Noon	415.8	76.4

Water Daily Account

MT	Remaining Yesterday Noon	Total Consumption	Remaining	Produced by Evaporator	Remaining Today Noon
Drinking Water					
Wash Water					

Watch	Remarks of Engineer Officer on Watch	LO Supp Type/Ltrs/For Mach	Hrs Pur HO	Hrs Pur DO	Sig Rank
12:00 16:00	E/R patrol carried out & S/G. A/C Room inspected.				[redacted] 3/E
16:00 20:00	E/R patrol carried out & S/G. A/C Room inspected.				[redacted] 3/E
20:00 24:00	E/R PATROL CARRIED OUT & FOUND IT OK				[redacted] 3/E
00:00 04:00	E/R patrol carried out & S/G. A/C room inspected.				[redacted] 3/E
04:00 08:00	E/R patrol carried out & S/G A/C room inspected.				[redacted] 3/E
08:00 12:00	E/R patrol carried out & S/G A/C room inspected.				[redacted] 3/E

Noon Report

Daily Performance		Remarks from Chief Engineer
Total Revs from Noon to Noon	Distance By Observation	Safety & emergency equipments checked and tested, found all in normal condition.
Hours Full Speed	Slip %	
Hours Reduced Speed	Observation Speed	
Hours Stopped	Total Distance Made	
Average Rpm	Total Distance To Go	
Distance by Engine Speed	ETA	

Working Hours			
Mach	Previous	Noon to Noon	Total
M/E	39123	—	39123
A/E-1	24071	—	24071
A/E-2	18863	—	18863
A/E-3	24414	—	24414
A/E-4	21298	24	21322

Date 6th - Nov - 07

[redacted]

Chief Engineer

M/E. 949338 A/E. 887253 CYL. 257938 BLR. 2721270

Chief Engineer's Log Book

Voyage No 063G From Long Beach To Oakland Date 6th/Nov-97

Main Engine

Watch	Hours	Minutes	Revolution Counter	Revolution Rpm	Fuel Oil Flow meter	Fuel Oil Cons	Hrs L O Pur	Lub Oil Level S'mp Tk	Lub Oil Level RG Tk	Lub Oil Level ME Tk	Lub Oil Con	B Con/E Con	Governor Control	L Indicator
12:00 16:00														
16:00 20:00														
20:00 24:00	3							70						
00:00 04:00	4	00						70						
04:00 08:00	4				897/908			70						
08:00 12:00	4		822/828	82.2	909/910			70						
Total			Total Ho/Do				Total							

Temperatures in °C

Watch	M E Exhaust 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Inlet
12:00 16:00																	
16:00 20:00																	
20:00 24:00	205	200	190	187	199	229	208	237	252	265							80
00:00 04:00	313	312	320	308	326	326	300	309	315	306							75
04:00 08:00	311	309	318	308	319	350	298	302	309	300							76
08:00 12:00	321	313	333	312	323	326	308	313	316	312							75

Watch	Jacket Cooling Water (Outlet) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
12:00 16:00																
16:00 20:00																
20:00 24:00	83	83	83	83	83	84	84	82	84	83						
00:00 04:00	81	81	82	82	82	82	82	82	83	82						
04:00 08:00	82	82	83	83	82	83	83	83	83	82						
08:00 12:00	82	82	83	83	83	83	83	83	83	82						

Main Turbo Blowers

Watch	RPM x 100 No1	RPM x 100 No2	Exh Gas Inlet No1	Exh Gas Inlet No2	Exh Gas Inlet No1	Exh Gas Inlet No2	Cooler-Air No1 In/Out	Cooler-Air No2 In/Out	Lub Oil No1 T	Lub Oil No1 B	Lub Oil No2 T	Lub Oil No2 B	Cig Water No1 In/Out	Cig Water No2 In/Out	Pressure Drop in MMH2O Air Suc Fil No1	Pressure Drop in MMH2O Air Suc Fil No2	Pressure Drop in MMH2O Air Cooler No1	Pressure Drop in MMH2O Air Cooler No2	S Air Man (mmHg)	Back Pressure
12:00 16:00																				
16:00 20:00																				
20:00 24:00	1.7	2.1	214	205	200	200	31	31	43	43							165	190		
00:00 04:00	3.6	8.4	374	277	274	277	34	36	65	63							170	150		
04:00 08:00	8.5	8.4	372	376	271	274	34	36	66	66							210	150		
08:00 12:00	9.8	9.6	396	411	270	276	37	41	74	73							220	190		

Miscellaneous

Watch	H Oil Lev Settle TK	H Oil Lev Serv TK	Hrs Steer No 1	Hrs Steer No 2	Thrust Bear °C	Stern Tube Lub Oil °C	Sea Water °C	Eng Room °C	HO Ser Tk °C	HO Set Tk °C	Air Bott F/A Kg/cm²
12:00 16:00											
16:00 20:00											
20:00 24:00	12.0	10.7	3	3	41	26	18	30	84	72	
00:00 04:00	12.2	8.7	4	4	42	36	18	30	85	72	
04:00 08:00	12.1	8.3	4		42	35	17	28	86	70	
08:00 12:00	12.2	7.5	4		42	36	18	26	89	68	

Generator Engines

Watch	Gen No	Running Hours	Temperature in °C Exhaust Gas 1	2	3	4	5	6	Cool Wtr In/Out	Lub Oil In/Out	Boost Air	Pedestal Bearing	Pressure Kg/cm² Bearing Oil Level	Cooling Water	Boost Air	Fuel Oil	Amp/KW	DC Serv
12:00 16:00	1																	
	2																	
	4	4	332	323	347	334	339	348/343	35/76	81	49		4.7	3.5	2.6	5.8	1300	
16:00 20:00	1	2	301	296	337	298	314	312/310	33/77	77	36		5.5	3.4/3.7	0.7	4.7	1175	
	3	2	301	302	326	278	312	316/316	30/75	74	36		5.0	3.7/3.2	0.6	5.5	1400	
	4	4	277	271	294	292	328	346/338	34/79	76	36		6.1	3.3/3.2	0.7	6.9	1800	
20:00 24:00	1																	
	3	4	316	328	350	302	336	334/338	35/77	77	37		5.0	3.9/3.2	0.9	5.9	900	
	4	4	276	291	316	312	340	332/338	35/79	77	37		4.9	4.3/3.2	1.0	5.2	800	
00:00 04:00	1																	
	3	4	304	306	334	286	309	310/291	35/76	77	36		5.2	3.5	0.9	5.8	700	
	4	4	280	276	302	296	310	314/294	35/77	77	37		5.1	5.3	0.9	5.9	670	
04:00 08:00	1																	
	3	4	304	303	331	286	308	310/291	33/76	76	36		5.2	3.7/3.1	0.75	5.7	700	
	4	4	278	271	297	295	307	298/291	34/79	77	36		5.1	4.9/3.2	0.8	5.4	706	
08:00 12:00	1																	
	3	4	299	293	327	261	306	309/291	35/75	75	35		5.2	3.9/3.1	0.74	5.5	700	
	4	4	274	271	300	295	307	297/291	35/79	76	36		5.3	4.3/3.2	0.8	5.7	750	
Total	2		18	24														
	1		2	3	4													

Air Conditioning Plant

Watch	Pressure Kg/cm² Suction	Disch	Lub Oil	Cool W	Temp °C P In/Out	Sb In/Out
12:00 16:00						
16:00 20:00						
20:00 24:00						
00:00 04:00						
04:00 08:00						
08:00 12:00						

Refrigeration Plant

Watch	Pressure Kg/cm² Suction	Disch	Lub Oil	Cool W	Temp °C Meat	Veg	Lobby
12:00 16:00							
16:00 20:00							
20:00 24:00							
00:00 04:00							
04:00 08:00							
08:00 12:00							

Freshwater Generator

Watch	Operating Hours	Heating Water °C In/Out	Sea Water °C In/Out	Vacuum Cm Hg	Shell Temp °C	Salinity PPM	Dis Water Flowmeter	Quantity Produced
12:00 16:00								
16:00 20:00								
20:00 24:00								
00:00 04:00								
04:00 08:00								
08:00 12:00								
Total								

Boiler

Watch	Oil Firing Hours	°C Feed Water	Back Pressure mm W
12:00 16:00			
16:00 20:00			
20:00 24:00			
00:00 04:00			
04:00 08:00			
08:00 12:00			
Total			

/Nov-07 COSCO BUSAN

3	14	15	16	FVC In/Out

Cooling Water	Boost Air	Fuel Oil	Amp/KW	DO L… Serv
3.5	2.0	5.8	1300	
3.4/2.7	0.7	4.7	675	
3.3/2.2	0.6	1.5	440	
3.3/3.2	0.7	5.9	68	
3.9/3.2	0.9	5.9	900	
4.2/3.2	1.0	5.2	900	
3.5	0.9	5.8	700	
3.3	0.9	5.9	670	
3.7/3.1	0.75	5.7	700	
4.9/3.2	2.8	5.4	706	
3.9/3.1	0.74	5.5	700	
4.3/3.2	0.8	5.7	750	

Main Engine

J Cooler SW In	J Cooler SW Out	J Cooler FW In	J Cooler FW Out	LO Cooler SW In	LO Cooler SW Out	LO Cooler FW In	LO Cooler FW Out	FVCW Cooler SW In	FVCW Cooler SW Out	FVCW Cooler FW In	FVCW Cooler FW Out	RGLO Cooler SW In	RGLO Cooler SW Out	RGLO Cooler FW In	RGLO Cooler FW Out	Sea Water	Jacket Water	Bearing Oil	Camshaft LO	FV Cooling	Scav Air No1	Scav Air No2	Fuel Oil	R Arm Oil	Control Air	Service Air
2	36	78	34			31	33	18	20	30	48					3.0	4.0	2.6	2.3		1.3		3.0		6.3	6.6
2	36	78	33			31	34	18	20	30	48					3.0	4.0	2.6	2.3		1.7		7.6		6.5	6.6
5	40	84	42			31	34	17	21	37	47					3.0	4.0	2.8	2.3		1.6		7.5		6.1	6.6
6	44	84	42			30	38	18	24	40	46					3.0	4.0	2.8	2.3		2.4		7.4		6.1	6.8

(Heat Exchangers °C; Pressure Kg/cm²)

Watch	Remarks of Engineer Officer on Watch	LO Supp Type/Ltrs/For Mach	Hrs Pur HO	Hrs Pur DO	Sig Rank
12:00 16:00	E/R patrol carried out & S/G A/C room inspected				[redacted] 3/E
16:00 20:00	E/R PATROL CARRIED OUT & S/G A/C ROOM INSPECTED				[redacted] 2/E
20:00 24:00	E/R PATROL TAKEN OUT & FOUND NORMAL CONDITION				[redacted] 4/E
00:00 04:00	E/R patrol carried out & found it normal condition.				[redacted] 3/E
04:00 08:00	E/R PATROL CARRIED OUT & S/G A/C ROOM INSPECTED				[redacted] 2/E
08:00 12:00	E/R PATROL TAKEN OUT & FOUND NORMAL CONDITION				[redacted] 4/E

Lub Oil & Greases Daily Account

Type of Oil	MZCC	AZCC	MZCYL									
Remaining Yesterday Noon	47370	5950	97071			L.O No1	L.O No2	M/E F.O	A/E F.O			
Consumed	/	50	557			4674	33878	3236	30891			
Remaining Today Noon	47370	5900	96514	258500		4684	33963	3302	30988			
Remarks In use for/Recd												

Fuel Oil Daily Account MT

Used for	HO	DO		HO	DO
M/E	87		Previous	4158	76.4
Aux Eng		8.4	Consumption Noon to Noon	88.8	8.4
Boiler	1.8		Received		
Total	88.8	8.4	Remaining Today Noon	4027	68.0

Water Daily Account

MT	Remaining Yesterday Noon	Total Consumption	Remaining	Produced by Evaporator	Remaining Today Noon
Drinking Water					
Wash Water					

Noon Report

Daily Performance			Remarks from Chief Engineer
Total Revs from Noon to Noon		Distance By Observation	Departure Long Beach 05/Nov/07. FO: 4146. DO: 768.
Hours Full Speed	15	Slip %	MZCC: 47370. AZCC: 5950. MZCYL: 97071 STBY: 18:18
Hours Reduced Speed		Observation Speed	COP: 21:00 FO: 4111.6 DO: 73.5 MZCC 47370 AZCC: 5950
Hours Stopped		Total Distance Made	MZCYL: 97013 Counter: 1828 5283
Average Rpm	85.2	Total Distance To Go	
Distance by Engine Speed	240/3598	ETA	

Working Hours			
Mach	Previous	Noon to Noon	Total
M/E	39123	17	39140
A/E-1	24071	2	24073
A/E-2	18863	–	18863
A/E-3	24414	18	24442
A/E-4	21298	24	21322

Date 6th – Nov – 07

[redacted]

Chief Engineer

M/E 358761C A/E 897448 C/L 258500 BLR: 274410

Chief Engineer's Log Book

Voyage No | From: Long beach | To: Oakland | Date: 7th-nov-07

Main Engine

Watch	Hours	Minutes	Revolution Counter	Revolution Rpm	Fuel Oil Flow meter	Fuel Oil Cons	Hrs L O Pur	Lub Oil Level S'mp Tk	Lub Oil Level RG Tk	Lub Oil Con ME Tk	B Con/E Con	Governor Control	L Indicator	Temperatures in °C M E Exhaust 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Inlet	Jacket Cooling Water (Outlet) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	FV In Ou
12:00 16:00								06-Nov-07						ARRIVE OAKLAND : 13:00 S/B. M/E . 17:54 F/E .																																		
16:00 20:00																																																
20:00 24:00																																																
00:00 04:00																																																
04:00 08:00																																																
08:00 12:00			182963420																																													
Total			Total Ho/Do					Total																																								

Main Turbo Blowers

Watch	RPM x 100 No1	RPM x 100 No2	Temperature in °C Exh Gas Inlet No1	Exh Gas Inlet No2	Exh Gas Inlet No1	Exh Gas Inlet No2	Cooler-Air No1 In/Out	Cooler-Air No2 In/Out	Lub Oil No1 T	Lub Oil No1 B	Lub Oil No2 T	Lub Oil No2 B	Cig Water No1 In/Out	Cig Water No2 In/Out	Pressure Drop in MMH2O Air Suc Fil No1	Air Suc Fil No2	Air Cooler No1	Air Cooler No2	S Air Man (mmHg)	Back Pressure
12:00 16:00																				
16:00 20:00																				
20:00 24:00																				
00:00 04:00																				
04:00 08:00																				
08:00 12:00																				

Miscellaneous

Watch	H Oil Lev Settle TK	H Oil Lev Serv TK	Hrs Steer No 1	Hrs Steer No 2	Thrust Bear °C	Stern Tube Lub Oil °C	Sea Water °C	Eng Room °C	HO Ser Tk °C	HO Set Tk °C	Air Bott F/A Kg/cm²
12:00 16:00	12	8.5	4	4			16	26	91	68	
16:00 20:00											
20:00 24:00											
00:00 04:00											
04:00 08:00											
08:00 12:00											

Generator Engines

Watch	Gen No	Running Hours	Temperature in °C Exhaust Gas 1	2	3	4	5	6	Cool Wtr In/Out	Lub Oil In/Out	Boost Air	Pedestal Bearing	Pressure Kg/cm² Bearing Oil Level	Cooling Water	Boost Air	Fuel Oil	Amp/KW	DC Serv
12:00 16:00	1																	
	3	4	294	290	322	372	301	298/377	35/76	75	36		5.3	3.5	0.7	5.6	600	
	4	4	268	263	294	290	306	295/387	35/76	76	35		5.0	3.5	0.7	5.9	700	
16:00 20:00	1																	
	2																	
	4	4	313	310	331	328	326	327/323	36/79	79	38		1.1	3.8/2.1	1.1	6.1	1130	
20:00 24:00	1																	
	2																	
	4	4	305	297	324	318	319	325/317	35/78	80	38		5.0	4.5/3.1	1.3	5.4	950	
00:00 04:00	1	2																
	2	2																
	4	4	320	316	340	326	329	325/329	35/78	80	39		5.0	3.5	1.7	5.9	1000	
04:00 08:00	1	2	271	274	315	278	274	276/372	33/65	74	35		5.7	3.6/3.8	0.6	6.5	1600	
	3	2	286	282	319	266	300	295/368	33/72	75	35		5.0	3.4/3.1	0.5	6.7	525	
	4	4	263	258	280	280	279	289/378	35/79	76	36		4.3	3.4/3.2	0.6	5.9	600	
08:00 12:00	1	4	283	286	332	291	306	295/382	33/66	76	35		5.5	3.5/3.5	0.6	5.7	550	
	3	4	286	285	320	268	303	297/357	34/66	75	35		5.4	3.7/3.5	0.6	5.4	600	
	4	4	271	262	291	293	306	289/388	35/79	76	36		5.3	3.5/3.7	0.7	5.8	600	
Total	6		10	24														
	1		2	3	4													

Air Conditioning Plant

Watch	Pressure Kg/cm² Suction	Disch	Lub Oil	Cool W	Temp °C P In/Out	Sb In/Out
12:00 16:00						
16:00 20:00						
20:00 24:00						
00:00 04:00						
04:00 08:00						
08:00 12:00						

Refrigeration Plant

Watch	Pressure Kg/cm² Suction	Disch	Lub Oil	Cool W	Temp °C Meat	Veg	Lobby
12:00 16:00							
16:00 20:00							
20:00 24:00							
00:00 04:00							
04:00 08:00							
08:00 12:00							

Freshwater Generator

Watch	Operating Hours	Heating Water °C In/Out	Sea Water °C In/Out	Vacuum Cm Hg	Shell Temp °C	Salinity PPM	Dis Water Flowmeter	Quantity Produced
12:00 16:00								
16:00 20:00								
20:00 24:00								
00:00 04:00								
04:00 08:00								
08:00 12:00								
Total								

Boiler

Watch	Oil Firing Hours	°C Feed Water	Back Pressure mm W
12:00 16:00			
16:00 20:00			
20:00 24:00			
00:00 04:00			
04:00 08:00			
08:00 12:00			
Total			

MV *Cosco busan*

Fuel Oil	Amp/KW	Serv
5.6	600	
5.9	700	
6.1	1130	
5.4	950	
5.9	1200	
6.6	66	
6.7	525	
5.9	522	
5.7	850	
5.4	600	
5.8	600	

Main Engine

16	FVC In/Out	FO Inlet	J Cooler SW In	J Cooler SW Out	J Cooler FW In	J Cooler FW Out	LO Cooler SW In	LO Cooler SW Out	LO Cooler FW In	LO Cooler FW Out	FVCW Cooler SW In	FVCW Cooler SW Out	FVCW Cooler FW In	FVCW Cooler FW Out	RGLO Cooler SW In	RGLO Cooler SW Out	RGLO Cooler FW In	RGLO Cooler FW Out	Sea Water	Jacket Water	Bearing Oil	Camshaft LO	FV Cooling	Scav Air No1	Scav Air No2	Fuel Oil	R Arm Oil	Control Air	Service Air
			36	42	76	42			30	38	18	22	40	46					3.0	4.0	2.6	2.3		0.3		8.4		6.7	6.5

Heat Exchangers °C / Pressure Kg/cm²

Lub Oil & Greases Daily Account

Type of Oil	MZCC	MZCC	MZCYL		
Remaining Yesterday Noon	47370	5900	96514		
Consumed	2900	80	280		
Remaining Today Noon	44470	5820	96234	~~59770~~	259770
Remarks In use for/Recd					

Fuel Oil Daily Account MT

Used for	HO	DO		HO	DO
M/E			Previous	4027	68.0
Aux Eng		8.6	Consumption Noon to Noon	26.9	8.6
Boiler			Received		
Total	26.9		Remaining Today Noon	4000.1	59.4

Water Daily Account

MT	Remaining Yesterday Noon	Total Consumption	Remaining	Produced by Evaporator	Remaining Today Noon
Drinking Water					
Wash Water					

Watch	Remarks of Engineer Officer on Watch	LO Supp Type/Ltrs/For Mach	Hrs Pur HO	Hrs Pur DO	Sig Rank
12:00 16:00	E/R patrol carried out & found it normal condition.				[redacted] 3/E
16:00 20:00	E/R PATROL CARRIED OUT & FOUND NORMAL CONDITION				[redacted] 2/E
20:00 24:00	E/R PATROL CARRIED OUT & FOUND NORMAL CONDITION				[redacted] 4/E
00:00 04:00	E/R patrol carried out & S/G - A/C room inspected.				[redacted] 3/E
04:00 08:00	E/R PATROL CARRIED OUT & S/G AND A/C ROOM INSPECTED				[redacted] 2/E
08:00 12:00	E/R PATROL CARRIED OUT & FOUND NORMAL CONDITION				[redacted] 4/E

Noon Report

Daily Performance		Remarks from Chief Engineer	Mach	Previous	Noon to Noon	**Total**
Total Revs from Noon to Noon	Distance By Observation	Departure OAKLAND 07/11/07. ST/BY M/E: 06:30				
Hours Full Speed	Slip %	AT. LT 08:30, WHILE Departure From port OAKLAND	M/E	39140	11	39151
Hours Reduced Speed	Observation Speed	V/V. port side contact with OAKLAND BRIDGE DELTA TOWER.	A/E-1	24073	6	24079
Hours Stopped	Total Distance Made	oil spill in water noticed. immediately F.O transfer from	A/E-2	18863	–	18863
Average Rpm	Total Distance To Go	NO3P&S NO4P Bunker tank to E/R D.B. TANK Started	A/E-3	24442	10	24452
Distance by Engine Speed	ETA	F/E: 1124	A/E-4	21322	24	21346

Date: 7th – Nov – 07

[redacted]

Chief Engineer

N/E 9613530 A/E 907700 CYL 258770 BLR 2728590 P/C 182943420

A member of The Noble Group

Chief Engineer's Log Book

Voyage No 013W From OAKLAND To Date 8th NOV 2007

Main Engine

Watch	Hours	Minutes	Revolution Counter	Revolution Rpm	Fuel Oil Flow meter	Fuel Oil Cons	Hrs L O Pur	Lub Oil Level S'mp Tk	Lub Oil Level RG Tk	Lub Oil Con ME Tk	B Con/E Con	Governor Control	L Indicator
12:00 16:00													
16:00 20:00													
20:00 24:00													
00:00 04:00													
04:00 08:00													
08:00 12:00													
Total			Total Ho/Do				Total						

Temperatures in °C

Watch	M E Exhaust 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Inlet
12:00 16:00																	
16:00 20:00																	
20:00 24:00																	
00:00 04:00																	
04:00 08:00																	
08:00 12:00																	

Watch	Jacket Cooling Water (Outlet) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	FVC In/Out
12:00 16:00																	
16:00 20:00																	
20:00 24:00																	
00:00 04:00																	
04:00 08:00																	
08:00 12:00																	

Main Turbo Blowers

Watch	RPM x 100 No1	RPM x 100 No2	Exh Gas Inlet No1	Exh Gas Inlet No2	Exh Gas Inlet No1	Exh Gas Inlet No2	Cooler-Air No1 In/Out	Cooler-Air No2 In/Out	Lub Oil No1 T	Lub Oil No1 B	Lub Oil No2 T	Lub Oil No2 B	Cig Water No1 In/Out	Cig Water No2 In/Out	Pressure Drop in MMH2O Air Suc Fil No1	Pressure Drop in MMH2O Air Suc Fil No2	Pressure Drop in MMH2O Air Cooler No1	Pressure Drop in MMH2O Air Cooler No2	S Air Man (mmHg)	Back Pressure
12:00 16:00																				
16:00 20:00																				
20:00 24:00																				
00:00 04:00																				
04:00 08:00																				
08:00 12:00																				

Miscellaneous

Watch	H Oil Lev Settle TK	H Oil Lev Serv TK	Hrs Steer No 1	Hrs Steer No 2	Thrust Bear °C	Stern Tube Lub Oil °C	Sea Water °C	Eng Room °C	HO Ser Tk °C	HO Set Tk °C	Air Bott F/A Kg/cm²
12:00 16:00											
16:00 20:00											
20:00 24:00											
00:00 04:00											
04:00 08:00											
08:00 12:00											

Generator Engines

Watch	Gen No	Running Hours	Exhaust Gas 1	2	3	4	5	6	Cool Wtr In/Out	Lub Oil In/Out	Boost Air	Pedestal Bearing	Bearing Oil Level	Cooling Water	Boost Air	Fuel Oil	Amp/KW	DO Lev Serv
12:00 16:00	1																	
	3	4	308	313	338	291	321	312/294	28/76	76	36		5.3	3.5/0.9	6.0		700	
	4	4	289	280	310	303	314	298/278	28/76	77	37		5.4	2.5/0.9	5.7		800	
16:00 20:00	1																	
	2																	
	4	4	318	33	331	324	326	328/319	34/79	78	38		5.0	4.3/3.2	1.6	5.7	1190	
20:00 24:00	1																	
	2																	
	2	4	316	308	332	322	326	330/324	35/79	79	38		5.0	3.9/3.1	1.6	5.6	1050	
00:00 04:00	1																	
	2																	
	4	4	319	308	330	324	326	329/323	35/79	80	39		5.0	3.5	1.6	5.5	1100	
04:00 08:00	1																	
	2																	
	4	4	304	305	323	315	321	326/318	34/79	79	38		5.0	3.4/3.1	1.6	6.2	1040	
08:00 12:00	1																	
	2																	
	2	4	317	309	330	323	327	333/324	35/79	79	38		4.5	4.6/3.1	1.5	5.5	1050	
Total					4	24												
			1	2	3	4												

Air Conditioning Plant

Watch	Pressure Kg/cm² Suction	Pressure Kg/cm² Disch	Pressure Kg/cm² Lub Oil	Pressure Kg/cm² Cool W	Temp °C P In/Out	Temp °C Sb in/Out
12:00 16:00						
16:00 20:00						
20:00 24:00						
00:00 04:00						
04:00 08:00						
08:00 12:00						

Refrigeration Plant

Watch	Pressure Kg/cm² Suction	Pressure Kg/cm² Disch	Pressure Kg/cm² Lub Oil	Pressure Kg/cm² Cool W	Temp °C Meat	Temp °C Veg	Temp °C Lobby
12:00 16:00							
16:00 20:00							
20:00 24:00							
00:00 04:00							
04:00 08:00							
08:00 12:00							

Freshwater Generator

Watch	Operating Hours	Heating Water °C In/Out	Sea Water °C In/Out	Vacuum Cm Hg	Shell Temp °C	Salinity PPM	Dis Water Flowmeter	Quantity Produced
12:00 16:00								
16:00 20:00								
20:00 24:00								
00:00 04:00								
04:00 08:00								
08:00 12:00								
Total								

Boiler

Watch	Oil Firing Hours	°C Feed Water	Back Pressure mm W
12:00 16:00			
16:00 20:00			
20:00 24:00			
00:00 04:00			
04:00 08:00			
08:00 12:00			
Total			

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Main Engine

Heat Exchangers °C																Pressure Kg/cm²										
J Cooler				LO Cooler				FVCW Cooler				RGLO Cooler									Scav Air					
SW In	SW Out	FW In	FW Out	SW In	SW Out	FW In	FW Out	SW In	SW Out	FW In	FW Out	SW In	SW Out	FW In	FW Out	Sea Water	Jacket Water	Bearing Oil	Camshaft LO	FV Cooling	No1	No2	Fuel Oil	R Arm Oil	Control Air	Service Air

14	15	16	FVC In/Out

Lub Oil & Greases Daily Account

Type of Oil	MZCC	AZCC	MZCYL									
Remaining Yesterday Noon	44470	5820	96234									
Consumed	–	60	0									
Remaining Today Noon												
Remarks in use for/Recd	44470	5760	96237	258777								

Water	Boost Air	Fuel Oil	Amp/KW	Serv
.5	0.9	6.0	700	
.5	0.9	5.7	800	
3.2	1.6	5.7	1190	
3.1	1.6	5.6	1050	
3.5	1.6	5.5	1100	
3.8/3.1	1.4	6.2	1040	
3.1	1.5	5.5	1050	

Fuel Oil Daily Account MT

Used for	HO	DO		HO	DO
M/E	~~31.1~~		Previous	4000.1	59.4
Aux Eng		6.8	Consumption Noon to Noon	3.6	6.8
Boiler	3.6		Received	-200.4 (spilled)	
Total	3.6	6.8	Remaining Today Noon	3796.1	52.6

Water Daily Account

MT	Remaining Yesterday Noon	Total Consumption	Remaining	Produced by Evaporator	Remaining Today Noon
Drinking Water					
Wash Water					

Watch	Remarks of Engineer Officer on Watch	LO Supp Type/Ltrs/For Mach	Hrs Pur HO	Hrs Pur DO	Sig Rank
12:00 16:00	E/R patrol carried out & S/G. A/C room inspected.				[redacted] 3/E
16:00 20:00	E/R PATROL CARRIED OUT & S/G AND A/C ROOM INSPECTED				[redacted] 2/E
20:00 24:00	E/R patrol carried out & found normal				[redacted] 3/E
00:00 04:00	E/R patrol carried out & S/G A/C room inspected.				[redacted] 3/E
04:00 08:00	E/R PATROL CARRIED OUT & S/G AND A/C ROOM INSPECTED				[redacted] 2/E
08:00 12:00	E/R patrol carried out & S/G A/C Room inspected				[redacted] 4/E

Noon Report

Daily Performance		Remarks from Chief Engineer	Working Hours			
Total Revs from Noon to Noon	Distance By Observation	Keep continous sounding and mornitoring F.O tank condition.	Mach	Previous	Noon to Noon	Total
Hours Full Speed	Slip %		M/E	39151	–	39151
Hours Reduced Speed	Observation Speed		A/E-1	24079	–	24079
Hours Stopped	Total Distance Made		A/E-2	18863	–	18863
Average Rpm	Total Distance To Go		A/E-3	24452	4	24456
Distance by Engine Speed	ETA		A/E-4	21341	24	21370

Date 08 – Nov – 07

[redacted]

Chief Engineer

REV 0 12/94 BE/Z 96161390 A/Z 915770 CYL 2587770 B/R 2732400