

From: [CONTI PERIDOT](#)
To: [Wisniewski Luke](#); pul@bbg-shipmanagement.com
Subject: Re: M.V. CONTI PERIDOT Document Request from NTSB Engineering
Date: Tuesday, July 07, 2015 2:20:52 AM
Attachments: [Arvl Houston.RTF](#)

Dear Sir's

Good day

Please find attached 


Brgds,
Master/Conti Peridot

-- Original message --

From: Wisniewski Luke <luke.wisniewski@ntsb.gov>
To: Henning Pulmer <pul@bbg-shipmanagement.com>, CONTI Peridot
<owner.cpe@skyfile.com>
Date: Mon, 6 Jul 2015 16:55:58 +0000
Subject: M.V. CONTI PERIDOT Document Request from NTSB Engineering
>Capt. Henning Pulmer, Master,
>
>Good day. Respectfully request the Loading Summary and Stability Report for the
>CONTI PERIDOT on the morning of 3/9/2015.
>
>Thank you in advance for your assistance.
>
>Best Regards,
>
>Luke Wisniewski
>
>Marine Engineer
>Office of Marine Safety
>National Transportation Safety Board
>490 L'Enfant Plaza East, S.W.
>Washington, DC 20594
>Office: (202) 314-6112
>Cell: (202) 236-8564
>Fax: (240) 752-6328
>
>
>
>
>From: Henning Pulmer [<mailto:pul@bbg-shipmanagement.com>]
>Sent: Monday, April 20, 2015 2:20 AM
>To: Wisniewski Luke
>Subject: AW: M.V. CONTI PERIDOT Document Request from NTSB Engineering
>
>Dear Luke Wisniewsky,
>Please find attached final class report.
>
>With kind regards,
>i.V. Capt. Henning Pulmer
>

>Designated Management Representative hbv
>Fleet Safety/ Security Officer
>Senior DPA/CSO
>--
>Bremer Bereederungs-gesellschaft mbH & Co. KG
>Phn: +49 421 33 88 3-26
>Personal Fax: +49 421 33 88 3-726
>mobile: +49 174 158 4444
>P Please consider the environment before printing.
>
>Von: Wisniewski Luke [<mailto:luke.wisniewski@ntsb.gov>]
>Gesendet: Donnerstag, 16. April 2015 18:58
>An: Henning Pulmer
>Betreff: RE: M.V. CONTI PERIDOT Document Request from NTSB Engineering
>
>Thank you Capt. Pulmer.
>
>
>
>Best Regards,
>
>Luke Wisniewski
>
>Marine Engineer
>Office of Marine Safety
>National Transportation Safety Board
>490 L'Enfant Plaza East, S.W.
>Washington, DC 20594
>Office: (202) 314-6112
>Fax: (240) 752-6328
>
>
>-----Original Message-----
>From: Henning Pulmer [pul@bbg-shipmanagement.com<<mailto:pul@bbg-shipmanagement.com>>]
>Sent: Thursday, April 16, 2015 10:09 AM Eastern Standard Time
>To: Wisniewski Luke; CONTI Peridot
>Subject: AW: M.V. CONTI PERIDOT Document Request from NTSB Engineering
>
>Dear Luke Wisniewski,
>regarding the requested documents I will ask them from our technical department.
>Will revert as soon as practicably possible.
>
>With kind regards,
>i.V. Capt. Henning Pulmer
>
>Designated Management Representative hbv
>Fleet Safety/ Security Officer
>Senior DPA/CSO
>--
>Bremer Bereederungs-gesellschaft mbH & Co. KG
>Phn: +49 421 33 88 3-26
>Personal Fax: +49 421 33 88 3-726
>mobile: +49 174 158 4444
>P Please consider the environment before printing.
>
>Von: Wisniewski Luke [<mailto:luke.wisniewski@ntsb.gov>]
>Gesendet: Donnerstag, 16. April 2015 15:51
>An: Henning Pulmer; CONTI Peridot
>Betreff: M.V. CONTI PERIDOT Document Request from NTSB Engineering

>
>Master, Capt. Henning Pulmer,
>
>Good day sirs. Thank you for all the information received to date. Respectfully
>request the following documents for the Conti Peridot, IMO# 9452634:
>
>
>1. The Class Annual Machinery Survey in 2013, 2014 conducted by ABS.
>
>2. ABS Damage Survey conducted post-accident.
>
>3. Third Party Collision Damage Survey P&I Club conducted post-accident.
>
>4. All PMS Maintenance Done & Overdue on Main Engine, MAN B&W, 6S50MC-C
>(MARK) Work Orders Last 90 Days. December 9th 2014-March 9th 2015.
>
>5. All PMS Maintenance Done & Overdue on Steering Gear, Yoonwon Rotary
>Vane, YVS-500/2 Work Orders Last 90 Days. December 9th 2014-March 9th 2015.
>
>6. Trim and Stability Booklet.
>
>Request documents electronically if possible. Alternate means available include
>fax number, winzip, or mail. Fax number and mailing address listed below.
>
>Best Regards,
>
>Luke Wisniewski
>
>Marine Engineer
>Office of Marine Safety
>National Transportation Safety Board
>490 L'Enfant Plaza East, S.W.
>Washington, DC 20594
>Office: (202) 314-6112
>Fax: (240) 752-6328

Mv Conti peridot

Floating Status

Draft FP	9.217 m	Heel	port 0.35 deg.	GM(Solid)	8.304 m
Draft MS	9.230 m	Equil	Yes		
Draft AP	9.243 m	Wind	Off		
Trim	0.03/185.00	Wave	No	KMT	14.440 m
LCG	5.736f m	VCG	6.136 m	TPcm	56.38
Displacement	47050.5 MT	WaterSpgr	1.025		

MAXVCG Status

Maximum allowable VCG: 14.108 meter

VCG corr. for free surface effect: 6.766732 meter

Margin to maximum allowable VCG: 7.341268 meter

NOTE: The VCG check is against the MaxVCG curve for intact and damage conditions

LOADING CONDITION

Loading Summary

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
Light Ship	10680.4	9.378a	0.000	11.323
Deadweight	36370.1	10.174f	0.066p	4.613
Displacement	47050.5	5.736f	0.051p	6.136

Weight Status

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
LIGHT SHIP				
LIGHT SHIP	10680.4	9.378a	0.000	11.323
Subtotal:	10680.4	9.378a	0.000	11.323
CONSTANT WEIGHT	0.0	0.000	0.000	11.323
GROUP003				
1	400.0	85.000a	0.000	0.000
3	200.0	80.000f	0.000	0.000
Subtotal:	600.0	30.000a	0.000	0.000
Total:	11280.4	10.475a	0.000	10.721

Tank Status

CARGOBULK

Tank Name	Spgr (MT/CU.M)	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m³)	FSM (MT-m)
CARGOHOLD1.C	2.331002	6.51%	1974.9	67.212f	0.000s	2.538	847.2	0.00
CARGOHOLD2.C	2.331002	13.24%	4733.0	38.454f	0.000s	3.147	2030.4	0.00
CARGOHOLD3.C	2.331002	17.08%	5792.9	8.195f	0.000s	3.521	2485.1	0.00
CARGOHOLD4.C	2.331002	24.97%	8926.2	22.027a	0.000s	4.194	3829.3	0.00
CARGOHOLD5.C	2.331002	12.76%	3986.2	50.669a	0.000p	3.337	1710.1	0.00
Subtotals:		15.22%	25,413.2 7	1.432a	0.000	3.583	10,902.2	0.00

WATER BALLAST

Tank Name	Spgr	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m³)	FSM (MT-m)
FPT.C	1.025	87.48%	1810.0	87.048f	0.014p	7.071	1765.9	3,978.55
APT.C	1.025	30.55%	350.0	88.327a	0.143p	10.069	341.5	7,016.06
BSWBT1.P	1.025	100.00%	880.3	68.306f	8.287p	1.908	858.8	0.00
BSWBT1.S	1.025	99.83%	878.8	68.293f	8.278s	1.899	857.4	4.74
TSWBT1.P	1.025	100.00%	494.0	67.677f	13.097p	16.713	482.0	0.00
TSWBT1.S	1.025	100.00%	494.0	67.677f	13.097s	16.713	482.0	0.00
BSWBT2.P	1.025	100.00%	1073.5	39.239f	10.039p	1.496	1047.3	0.00
BSWBT2.S	1.025	100.00%	1073.5	39.239f	10.039s	1.496	1047.3	0.00
TSWBT2.P	1.025	100.00%	616.8	39.340f	13.378p	16.569	601.7	0.00
TSWBT2.S	1.025	100.00%	616.8	39.340f	13.378s	16.569	601.7	0.00
BSWBT3.P	1.025	68.22%	700.0	8.994f	8.532p	0.833	682.9	8,117.26
BSWBT3.S	1.025	29.24%	300.0	8.985f	8.111s	0.366	292.7	7,427.82
TSWBT3.P	1.025	52.63%	307.5	8.994f	14.143p	15.687	300.0	523.75
TSWBT3.S	1.025	52.63%	307.5	8.994f	14.121s	15.687	300.0	540.76
BSWBT5.P	1.025	0.29%	3.0	44.322a	7.868p	0.016	2.9	924.76
BSWBT5.S	1.025	0.29%	3.0	50.715a	3.055s	0.013	2.9	403.73
Subtotals:		59.18%	9,908.67	46.491f	0.369p	7.082	9,666.9	28,937.44

FUEL OIL

Tank Name	Spgr	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m³)	FSM (MT-m)
HSFOT1.P	0.980	1.24%	5.0	22.207a	14.471p	14.489	5.1	1.11
HSFOT1.S	0.980	1.24%	5.0	22.207a	14.468s	14.489	5.1	1.15
HSFOT2.P	0.980	2.89%	11.0	50.885a	14.334p	14.647	11.2	3.73
HSFOT2.S	0.980	2.89%	11.0	50.885a	14.330s	14.647	11.2	3.85
LSFOT.P	0.980	1.02%	2.0	71.036a	12.244p	9.192	2.0	1.33
LSFOT.S	0.980	0.62%	2.0	77.402a	9.072s	9.042	2.0	40.59
HSFOSERTK.S	0.980	87.90%	22.8	72.180a	8.842s	15.030	23.3	6.86
LSFOSERTK.S	0.980	87.12%	22.6	73.820a	8.842s	15.013	23.1	6.86
HSFOSETTK.S	0.980	74.03%	28.8	70.130a	8.839s	14.725	29.4	10.28
LSFOSETTK.S	0.980	72.10%	18.7	75.460a	8.838s	14.682	19.1	6.86
Subtotals:		5.86%	128.91	65.036a	6.321s	14.617	131.5	82.61

DIESEL OIL

Tank Name	Spgr	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m³)	FSM (MT-m)
MDOT.S	0.850	30.54%	24.1	81.995a	10.130s	13.704	28.4	58.86
MDOSERTK.S	0.850	78.23%	17.6	77.920a	8.840s	14.817	20.7	5.95
MDOSETTK.S	0.850	55.55%	12.5	79.560a	8.831s	14.318	14.7	5.95
Subtotals:		43.74%	54.20	80.110a	9.411s	14.207	63.8	70.75

LUBE OIL

Tank Name	Spgr	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m³)	FSM (MT-m)
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FRESH WATER

Tank Name	Spgr	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m³)	FSM (MT-m)
DISTILLWT.S	1.000	88.00%	28.0	88.300a	5.352s	15.420	28.0	1.30
FWT.P	1.000	57.58%	134.0	88.840a	8.936p	14.695	134.0	352.68
FWT.S	1.000	51.28%	103.0	88.930a	9.446s	14.540	103.0	231.45
Subtotals:		56.94%	265.00	88.818a	0.282p	14.712	265.0	585.42

MISC

Tank Name	Spgr	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m³)	FSM (MT-m)
-----------	------	----------	-------------	---------	---------	---------	-------------	------------

All Tanks

	Spgr	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m³)	FSM (MT-m)
Totals:		19.07%	35,770.07	10.848f	0.067p	4.690	21,029.5	29,676.22

* FSM Notes

FSM with * Means Maximum Free Surface Moment of current tank is applied, vice versa may be the current FSM.

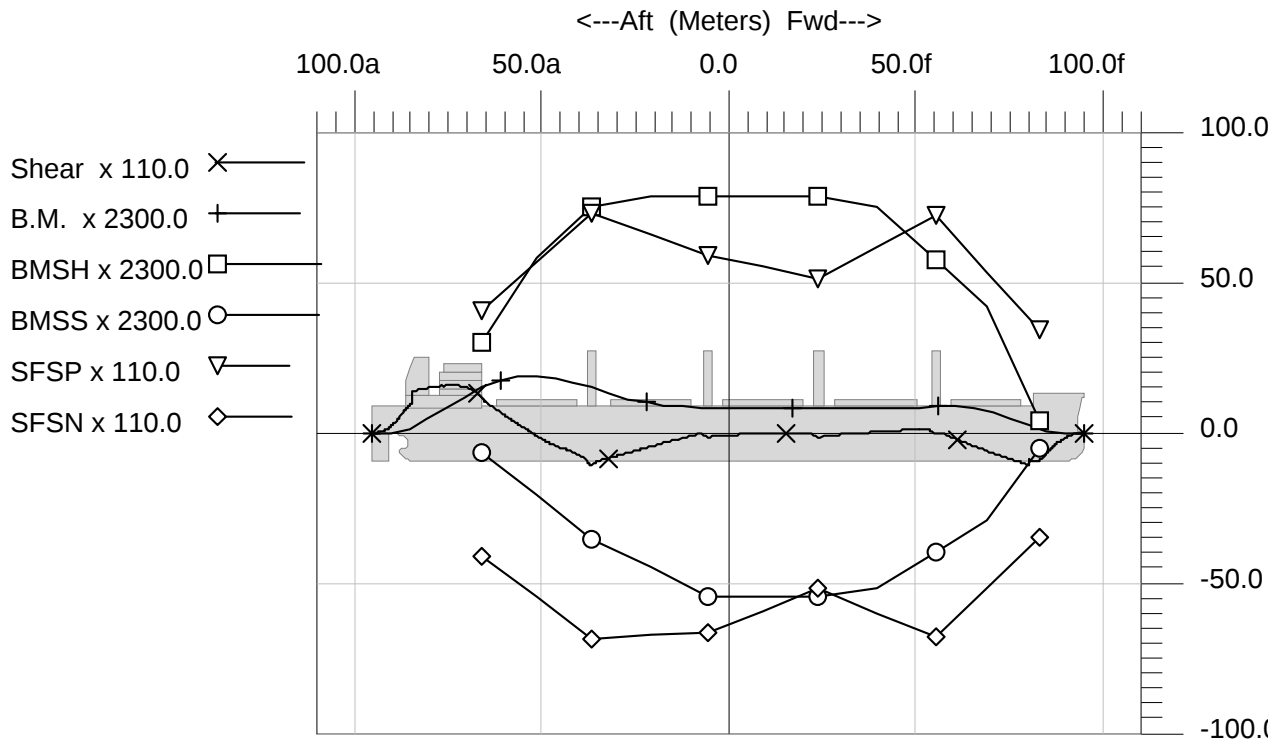
Longitudinal strength Calculation, Intact condition

Longitudinal Strength At Sea Condition (port 0.35 deg.)

Frame No.	Location (m)	Shear (MT)	Bending (MT-m)	Shear (%/Max)	Bending (%/Max)
FRAME 35	66.440a	1304.27	35212	28.81	50.56
FRAME 53	51.680a	-86.99	43684	1.46	32.35
FRAME 71	36.920a	-1179.24	35163	15.76	20.32
FRAME 90	21.340a	-477.72	23038	6.47	12.69
FRAME 109	5.760a	-178.35	19712	2.45	10.86
FRAME 127	9.000f	-7.36	19028	0.11	10.48
FRAME 145	23.760f	-184.01	19107	3.25	10.53
FRAME 164	39.340f	57.86	18826	0.85	10.82
FRAME 183	54.920f	1.19	20610	0.01	15.49
FRAME 200	68.860f	-643.81	16742	11.45	17.24
FRAME 217	82.800f	-1005.39	3866	26.50	42.79

Max. Shear	1750.39 MT	at	73.180a
Max. Bending Moment	43723 MT-m	at	52.500a (Hogging)
Max% Shear	28.81%	at	66.440a
Max% Bending Moment	50.56%	at	66.440a

Longitudinal Strength At Sea Condition



Cargo Hold Local Strength Check At Sea Condition

Hold Name	Hold Draft (m)	Hold Load (MT)	Max. ALoad (MT)	Min. RLoad (MT)
CargoHold1	9.220	1974.9	14762.2	0.0
CargoHold2	9.225	4733.0	13744.2	0.0
CargoHold3	9.229	5792.9	17049.9	0.0
CargoHold4	9.233	8926.2	15333.0	0.0
CargoHold5	9.237	3986.2	16402.0	0.0

Hold Name	Hold Draft (m)	Hold Load (MT)	Max. ALoad (MT)	Min. RLoad (MT)
CargoHold1 & CargoHold2	9.223	6708.0	25610.8	0.0
CargoHold2 & CargoHold3	9.227	10525.9	27559.2	0.0
CargoHold3 & CargoHold4	9.231	14719.1	29148.0	0.0
CargoHold4 & CargoHold5	9.235	12912.4	28735.1	0.0

INTACT STABILITY CHECK AS PER IMO A.749

Righting Arms vs Heel Angle

Free Surface Adjustment 0.631
Adjusted VCG 6.767

Heel Angle (deg)	Trim Angle (deg)	Righting Arm (m)	Area (m-Rad)	Flood Pt Height (m)	Notes
0.35p	0.01a	-0.004	0.000	16.205 (1)	
3.85p	0.00a	0.466	0.014	15.652 (1)	
7.35p	0.01f	0.940	0.057	15.059 (1)	
10.85p	0.03f	1.422	0.129	14.427 (1)	
14.35p	0.06f	1.917	0.231	13.761 (1)	
17.85p	0.10f	2.430	0.364	13.063 (1)	
21.35p	0.15f	2.966	0.528	12.338 (1)	
24.85p	0.20f	3.530	0.727	11.591 (1)	
28.35p	0.27f	4.118	0.960	10.829 (1)	
30.00p	0.30f	4.397	1.083	10.468 (1)	
31.85p	0.34f	4.695	1.230	10.066 (1)	
35.35p	0.42f	5.140	1.530	9.292 (1)	
38.85p	0.51f	5.440	1.854	8.478 (1)	
40.00p	0.53f	5.513	1.964	8.202 (1)	
42.35p	0.58f	5.629	2.193	7.620 (1)	
45.85p	0.64f	5.729	2.540	6.721 (1)	
49.35p	0.68f	5.764	2.891	5.785 (1)	
50.19p	0.69f	5.765	2.975	5.557 (1)	MaxRa
52.85p	0.72f	5.753	3.243	4.821 (1)	
56.35p	0.74f	5.702	3.594	3.854 (1)	
59.85p	0.77f	5.607	3.939	2.876 (1)	
63.35p	0.79f	5.469	4.278	1.880 (1)	
66.85p	0.81f	5.292	4.607	0.870 (1)	
69.85p	0.82f	5.113	4.879	0.000 (1)	FldPt
70.35p	0.82f	5.081	4.924	-0.146 (1)	
73.85p	0.83f	4.839	5.227	-1.161 (1)	
77.35p	0.84f	4.569	5.514	-2.165 (1)	
80.85p	0.85f	4.274	5.784	-3.155 (1)	
84.35p	0.86f	3.956	6.036	-4.124 (1)	

Weight and C.G. used above include tank loads.

The tank load centers were not allowed to shift with heel and trim changes.

A Free Surface Moment of 29676.2 MT-m was used to adjust the VCG.

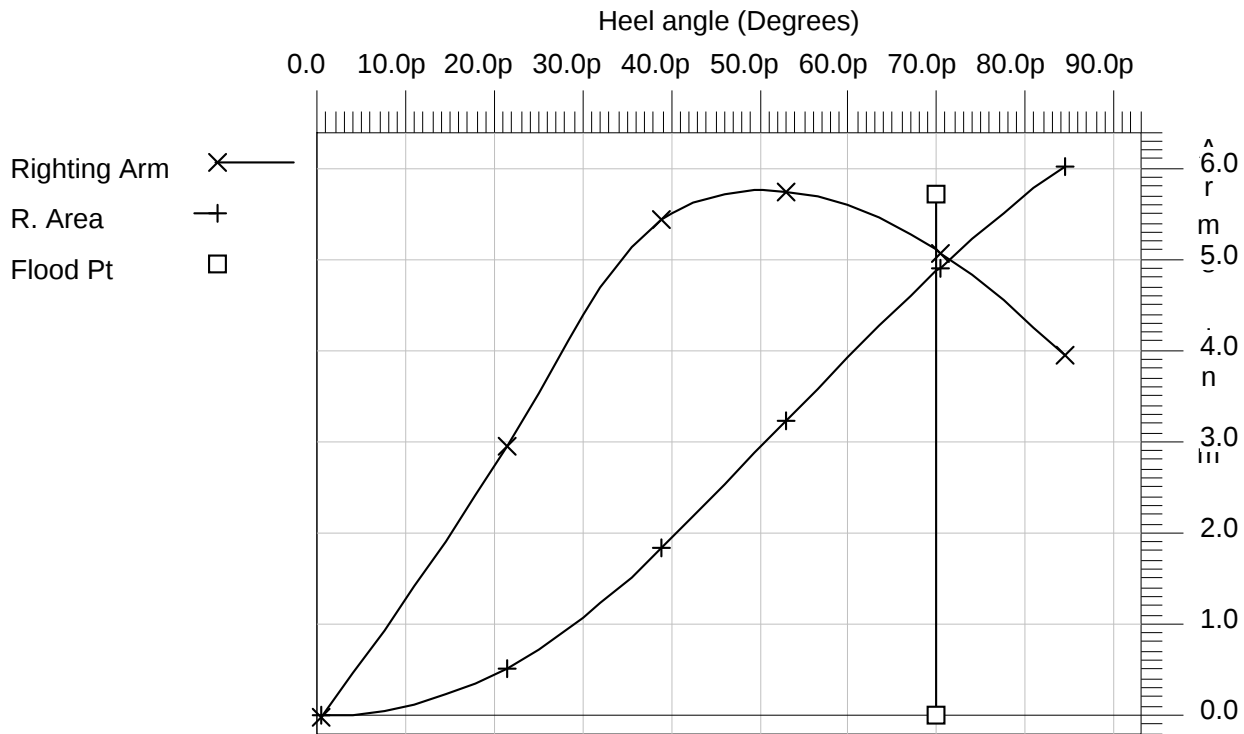
Unprotected Flood Points

Name	L,T,V (m)
(1) Down Flooding Point Fr 16(P)	82.020a, 8.630p, 25.500

IMO A749, INTACT STABILITY

Limit	Min/Max	Actual	Margin	Pass
(1) Area from 0.00 deg to Abs 30.00	>0.0550 m-R	1.083	1.028	Yes
(2) Area from 0.00 deg to Abs 40.00 or Flood	>0.0900 m-R	1.964	1.874	Yes
(3) Area from Abs 30.00 deg to Abs 40.00 or Flood	>0.0300 m-R	0.881	0.851	Yes
(4) Righting Arm at Abs 30.00 deg or MaxRA	>0.200 m	5.765	5.565	Yes
(5) Absolute Angle at MaxRA	>25.00 deg	50.19	25.19	Yes
(6) GM Upright	>0.150 m	7.673	7.523	Yes

Righting Arms vs. Heel



INTACT STABILITY CHECK UNDER SEVER WIND AS PER IMO A.749

Heeling Moment Derivation

Part	LPA (m ²)	HCP (m)	Arm (m)	Pressure (MT/m ²)	Moment (m-MT)
HULL.C	2014.9	5.361	9.958	0.051	1031.289
SUPERSTRUCTURE	427.4	16.868	21.464	0.051	471.550

Total wind heeling moment 1502.839 to port

Residual Righting Arms vs Heel Angle

Free Surface Adjustment
Adjusted VCG

0.612
6.748

Heel Angle (deg)	Trim Angle (deg)	Residual Arm (m)	Area (m-Rad)	Flood Pt Height (m)	Notes
18.12s	0.10f	-2.621	0.000	13.009 (2)	Roll
14.62s	0.07f	-2.107	-0.144	13.709 (2)	
11.12s	0.03f	-1.611	-0.258	14.377 (2)	
7.62s	0.01f	-1.128	-0.341	15.011 (2)	
4.12s	0.00a	-0.653	-0.396	15.608 (2)	
0.62s	0.01a	-0.182	-0.421	16.164 (2)	
0.74p	0.01a	0.000	-0.423	16.146 (1)	Equil
2.88p	0.01a	0.288	-0.418	15.810 (1)	
6.38p	0.01f	0.762	-0.386	15.227 (1)	

9.88p	0.03f	1.242	-0.325	14.606 (1)	
13.38p	0.05f	1.734	-0.234	13.949 (1)	
16.88p	0.09f	2.243	-0.113	13.260 (1)	
20.38p	0.13f	2.773	0.041	12.542 (1)	
23.88p	0.19f	3.330	0.227	11.800 (1)	
27.38p	0.25f	3.914	0.448	11.041 (1)	
30.88p	0.32f	4.504	0.705	10.277 (1)	
34.38p	0.40f	4.995	0.995	9.511 (1)	
37.88p	0.48f	5.332	1.311	8.709 (1)	
41.38p	0.56f	5.550	1.644	7.863 (1)	
44.88p	0.62f	5.674	1.988	6.975 (1)	
48.38p	0.67f	5.725	2.336	6.049 (1)	
50.00p	0.69f	5.731	2.498	5.608 (1)	
50.25p	0.69f	<u>5.731</u>	2.523	5.540 (1)	MaxRa
51.88p	0.71f	5.727	2.686	5.090 (1)	
55.38p	0.74f	5.688	3.035	4.123 (1)	
58.88p	0.76f	5.606	3.380	3.150 (1)	
62.38p	0.79f	5.479	3.719	2.158 (1)	
65.88p	0.80f	5.313	4.049	1.152 (1)	

Weight and C.G. used above include tank loads.

The tank load centers were not allowed to shift with heel and trim changes.

A Free Surface Moment of 28808.4 MT-m was used to adjust the VCG.

Note:

Residual Righting Arms shown above are in excess of the
wind heeling arms derived from this moment (in m-MT):

Port heeling moment = 2254.26

Roll angle is 18.71

Equilibrium for load condition without gust is 0.59p

Unprotected Flood Points

Name			L,T,V (m)
(1)	Down Flooding Point	Fr 16(P)	82.020a, 8.630p, 25.500
(2)	Down Flooding Point	Fr 16(S)	82.020a, 8.630s, 25.500

"IMO SEVERE WIND "

Limit	Min/Max	Actual	Margin	Pass
(1) Res. Ratio from Roll to Abs 50.00 deg or Flood	>1.000	6.900	5.900	Yes

Righting Arms vs. Heel

