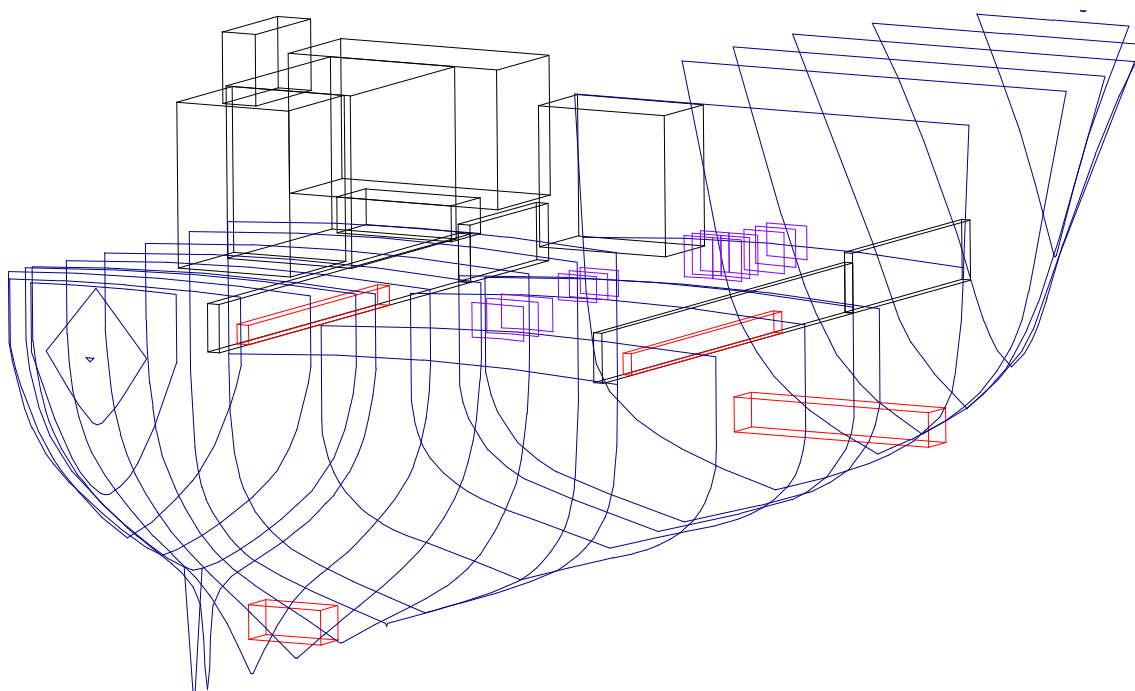


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# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

MS Aquafisk Senior - JWUO  
Ombygging 2019  
AM 064

Hydrostatikk  
K-Y Kurver / Maks VCG Kurver



064-101-201\_C

21.05.2019

Revisjon C

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

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Date: 21 MAY 2019

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# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

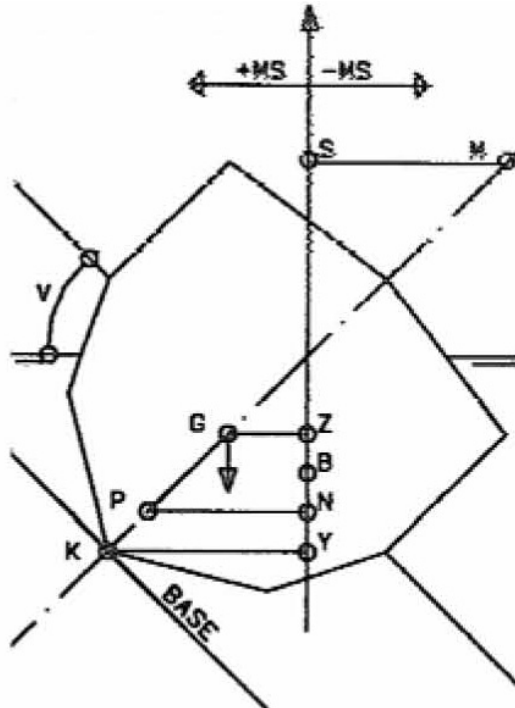
## The HYPET definitions.

Date: 21 MAY 2019

ShortCut	Unit	Description
BASE (BL)		BASE Line. Horizontal line, vertical placed above Keel at LPP/2
CL		The Ships Centre Line
AP		Aft Perpendicular. Defined as a vertical line through the Rudder axis
FP		Fore Perpendicular. The construction waterline cuts the bow at FP Also defined as LPP metres in front of AP
LPP	m	Length between Perpendiculares. (From AP to FP)
LOA	m	Total SHIP Length. The largest length for the Ship.
DA	m	Draught at AP. Measured above BASE
DF	m	Draught at FP. Measured above BASE
LCG	m	Longitudinal Centre of Gravity measured from AP
VCG (KG)	m	Uncorrected Vertical Centre of Gravity, measured above BASE.
VCG_Cor.	m	VCG + Cor.for It [Sum:(Sp.gr.*It)] / [Sum:(Sp.Gr.*VolumeDispl)]
VCG_Max	m	Maximum allowed VCG. Taken from the VCG limit curves
TCG	m	Transverse Centre of Gravity from CL
LCB/ VCB/ TCB	m	Longitudinal/ Vertical/ Transverse Centre of Buoyancy from AP/ BASE/ CL
VL_Area	m2	The Waterline area
LCF/ TCF	m	Longitudinal/ Transverse Centre of Flotation from AP/ CL. (CoG for VL_Area)
IT/ IL	m4	Transverse/ Longitudinal moment of inertia for Waterline.
IP	m3	Polar moment of inertia for Waterline.
BMT/ BML	m	Transverse/ Longitudinal Metacentre radius: (IT/Displ) / (IL/Displ)
KMT/ KML	m	Transverse/ Longitudinal Metacentre height: (BMT+VCB) / (BML+VCB)
GMT/ GML	m	GMT=(KMT-VCG) / GML=(KML-VCG)
GZ	m	Righting arm. Transverse distance between BUOYANCY and WEIGHT load line.
MR		MetresRadians. To measure the area under the GZ curve
TPC	T/cm	Ton Per Cm immersion
MCT1CM	T	Necessary moment to TRIM the ship 1 Cm [m4*T/m3/m] = [T]
Heeling (V)	°	Heelage in Degrees against SB(+) and PS(-)
Turning		When heeling, the waterline will not be symmetrical. Waterline Trim/ Turn at LCF/ TCF
Displacement	T or m3	Weight-Displacement in Tonnes or Volume-Displacement in m3
FSM	T*m	Free surface moment
Trim = (DA-DF)		Units
Trim Aft(positive)	Length: Metres (m)	AP Longitudinal reference -Aft +Fore
Trim Fore(negative)	Weight: Tonnes (T)	BASE Vertical reference -Under +Above
		CL Transverse reference -PS(Port Side) +SB(Starboard)

### Abbreviations

CoG Centre of Gravity in metres from AP, BASE and CL  
 CoB Centre of Buoyancy in metres from AP, BASE and CL  
 Sp.gr. Specific gravity in T/m3



$$GZ = GM * \sin(V) + MS$$

$$GZ = PN - PG * \sin(V)$$

$$PN = KY \text{ when } KP = 0$$

## M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

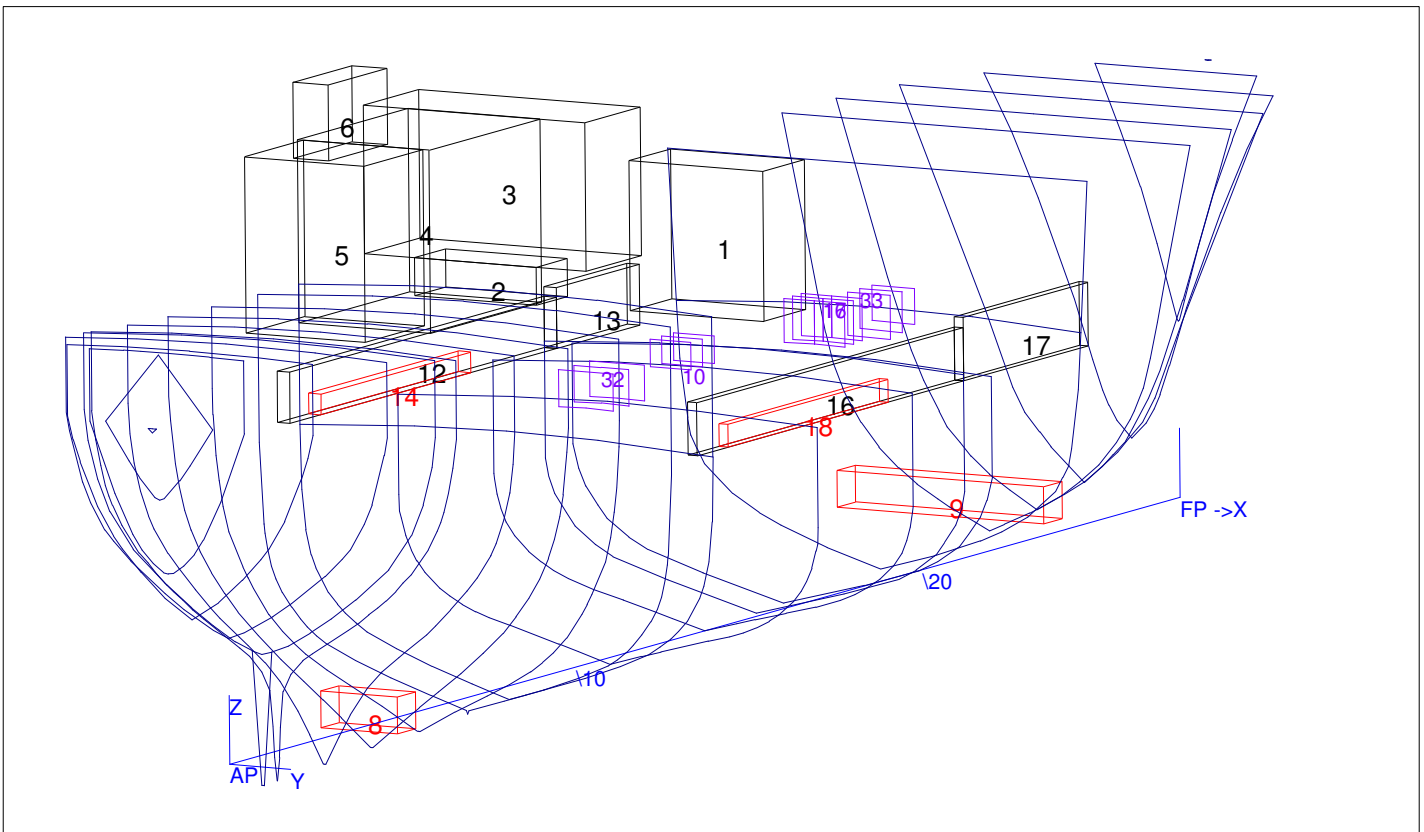
### Maindata

Path to ship: O:\Hypet\Skrogdatabase\_CW8\AM\064\

Prefix: 1

Date: 21 MAY 2019

Buildfirm: Kystvågen Slip & Mek. AS  
 Project: Ombygging 2019-reduksjon lasterom  
 Signature: MK  
 Date: 18.03.2019  
 Lpp (m): 27.430  
 Loa (m): 30.500  
 Moulded Breadth(m): 6.900  
 Moulded Depth(m): 3.667  
 Moulded max.Draft(m): 3.427  
 Min. Slamming (m): 0.500  
 Sections: 1-23  
 Appendages:  
     Boxes: 1-6,8-9,12-14,16-18  
     Volume sections: 10,16-17,32-33  
 Spec.gravity (t/m3): 1.0250  
 ShellAddition(x/1000): 4  
 Constr.Trim (m): 0.920  
 Keelpl. at AP (m): 0.150  
 Keelpl. at FP (m): 0.150  
 Frame Spacing: 0.4  
 GZ angles (deg): 10,20,30,40,50,60,70,80



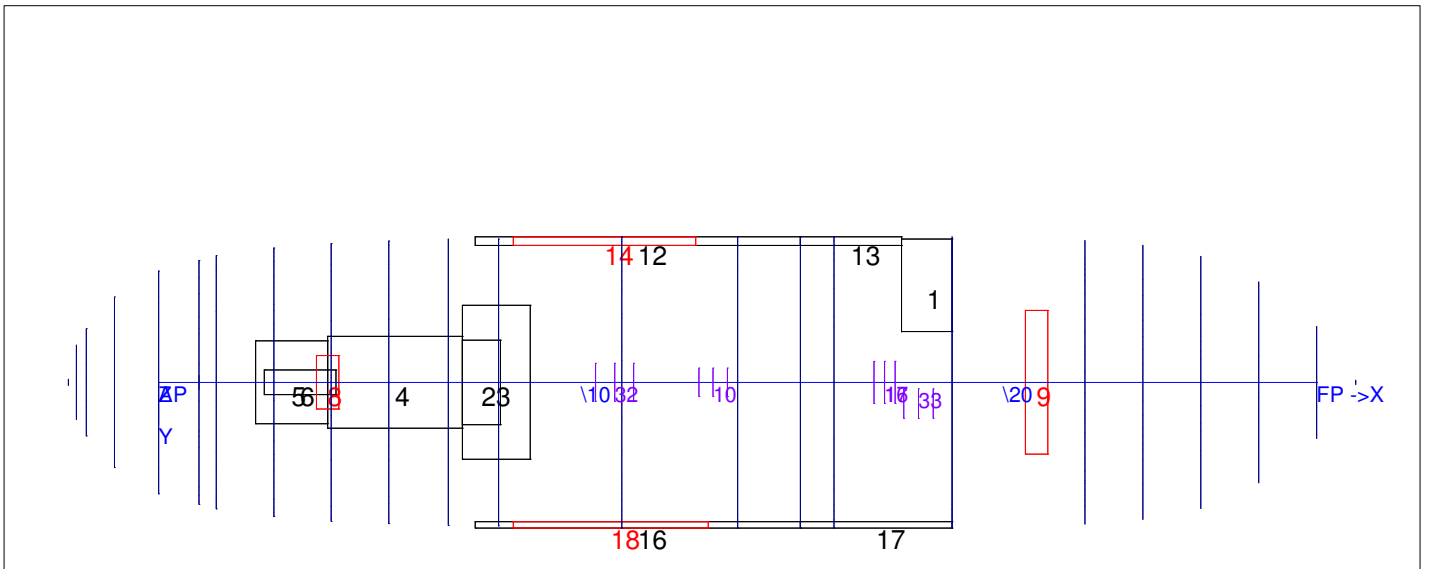
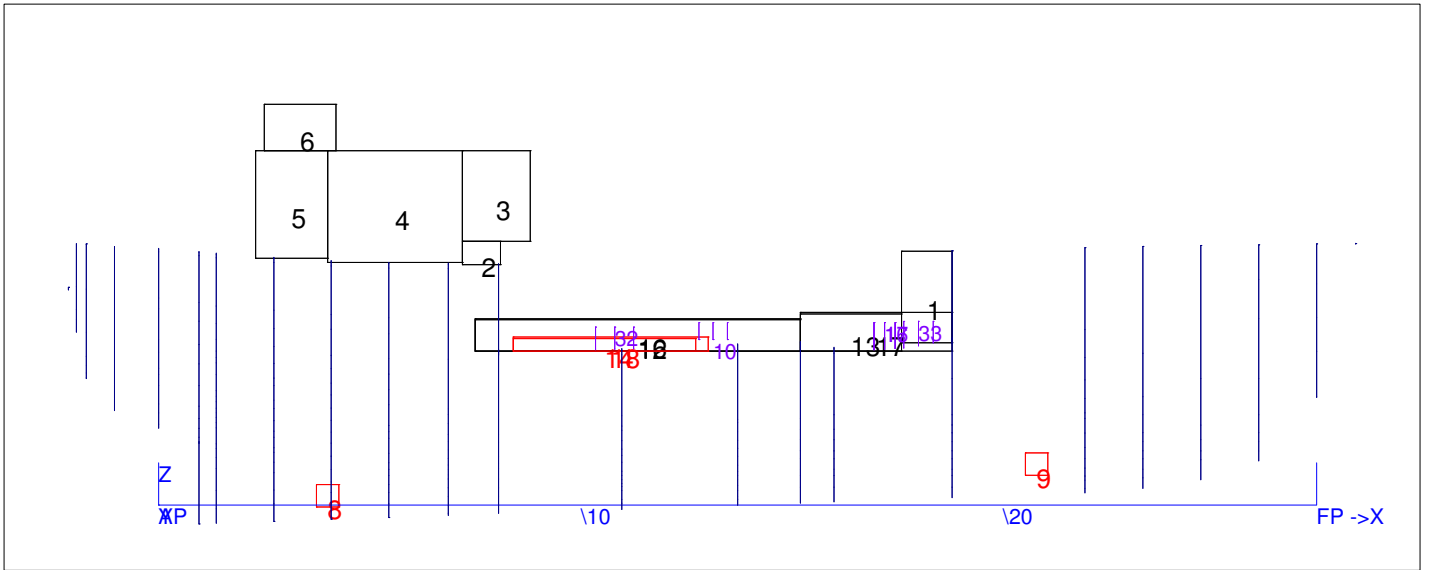
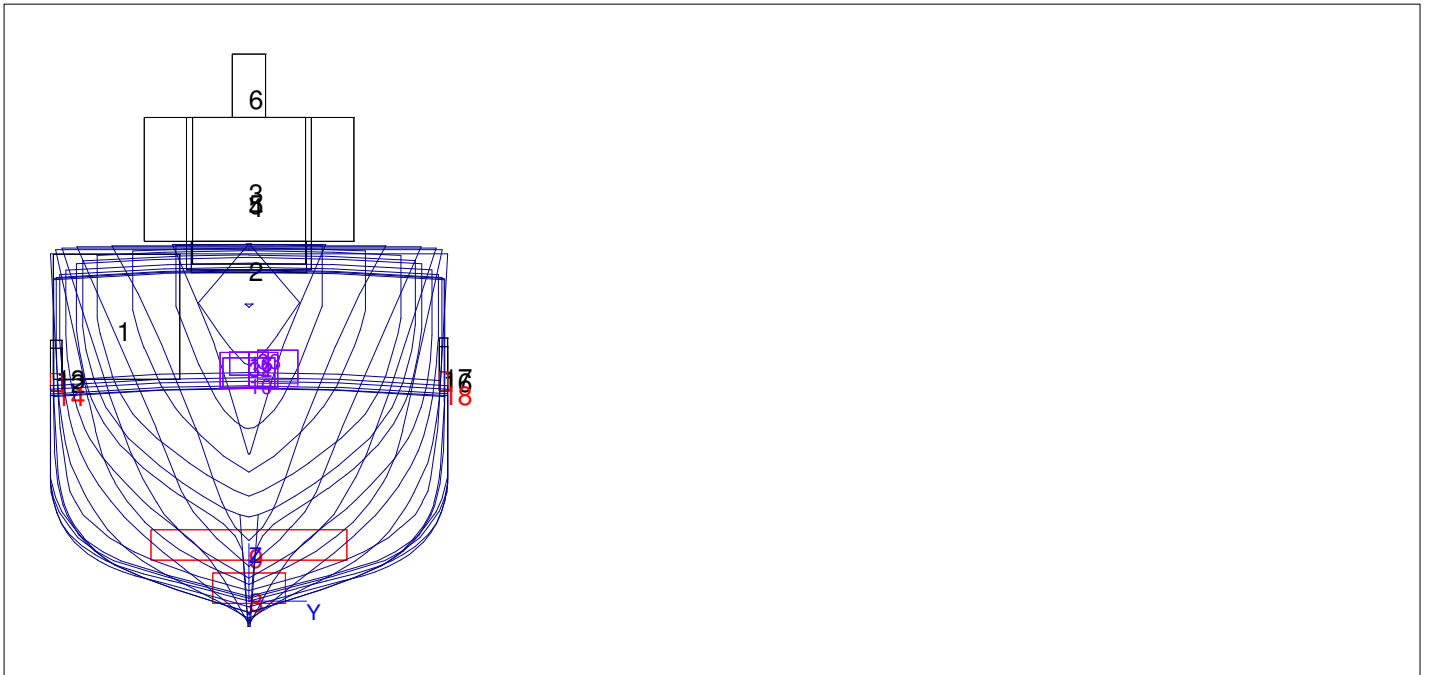
# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

## Maindata

Path to ship: O:\Hypet\Skrogdatabase\_CW8\AM\064\

Prefix: 1

Date: 21 MAY 2019



## M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM/Intact ship

**Hydrostatic calculation. Shell = 4, Sp.Gravity = 1.0250 t/m3**

Date: 21 MAY 2019

**Trim No:** 1                    **Trim (DA-DF) (m):** -1.000  
**Appe1 (Boxes):**            1-6,8-9,12-14,16-18  
**Appe2 (V. sections):**    10,16-17,32-33  
**Start mean draft (m):**     2.150 0.100\*14=>3.550  
**Draft step, No:**            0.1,14

Dr. #	DA (m)	DF (m)	DM (m)	M.Volume (m3)	Volume (m3)	Displac. (t)	LCB (m)	VCB (m)	LCF (m)	KMT (m)	TPC (t/cm)	MCT1CM (t*m/cm)
1	1.650	2.650	2.150	201.1	201.9	206.98	13.657	1.333	13.376	3.511	1.457	2.184
2	1.750	2.750	2.250	215.4	216.2	221.64	13.637	1.391	13.332	3.463	1.476	2.257
3	1.850	2.850	2.350	229.8	230.7	236.50	13.617	1.447	13.273	3.422	1.495	2.337
4	1.950	2.950	2.450	244.4	245.4	251.56	13.593	1.503	13.194	3.390	1.516	2.432
5	2.050	3.050	2.550	259.3	260.3	266.82	13.569	1.559	13.131	3.368	1.536	2.518
6	2.150	3.150	2.650	274.3	275.4	282.28	13.543	1.614	13.069	3.354	1.556	2.606
7	2.250	3.250	2.750	289.5	290.7	297.94	13.517	1.670	13.018	3.345	1.574	2.687
8	2.350	3.350	2.850	304.9	306.1	313.78	13.490	1.726	12.976	3.340	1.595	2.794
9	2.450	3.450	2.950	320.5	321.8	329.83	13.464	1.782	12.915	3.339	1.614	2.890
10	2.550	3.550	3.050	336.3	337.6	346.06	13.437	1.838	12.861	3.342	1.633	2.981
11	2.650	3.650	3.150	352.2	353.6	362.48	13.410	1.893	12.814	3.350	1.650	3.068
12	2.750	3.750	3.250	368.3	369.8	379.06	13.383	1.949	12.777	3.361	1.666	3.150
13	2.850	3.850	3.350	384.6	386.2	395.80	13.356	2.004	12.744	3.375	1.682	3.228
14	2.950	3.950	3.450	401.0	402.6	412.70	13.331	2.060	12.717	3.391	1.697	3.301
15	3.050	4.050	3.550	417.5	419.2	429.69	13.306	2.116	12.606	3.332	1.676	3.347

## M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM/Intact ship

**Hydrostatic calculation. Shell = 4, Sp.Gravity = 1.0250 t/m3**

Date: 21 MAY 2019

**Trim No:** 2      **Trim (DA-DF) (m):** 0.000  
**Appe1 (Boxes):** 1-6,8-9,12-14,16-18  
**Appe2 (V. sections):** 10,16-17,32-33  
**Start mean draft (m):** 2.150 0.100\*14=>3.550  
**Draft step, No:** 0.1,14

Dr. #	DA (m)	DF (m)	DM (m)	M.Volume (m3)	Volume (m3)	Displac. (t)	LCB (m)	VCB (m)	LCF (m)	KMT (m)	TPC (t/cm)	MCT1CM (t*m/cm)
1	2.150	2.150	2.150	204.4	205.2	210.35	12.571	1.327	12.784	3.519	1.493	2.357
2	2.250	2.250	2.250	219.0	219.9	225.38	12.583	1.386	12.730	3.471	1.514	2.442
3	2.350	2.350	2.350	233.8	234.8	240.64	12.590	1.444	12.658	3.433	1.536	2.541
4	2.450	2.450	2.450	248.9	249.9	256.11	12.592	1.501	12.596	3.404	1.557	2.635
5	2.550	2.550	2.550	264.1	265.2	271.78	12.591	1.559	12.544	3.383	1.577	2.722
6	2.650	2.650	2.650	279.5	280.6	287.65	12.587	1.616	12.497	3.367	1.595	2.805
7	2.750	2.750	2.750	295.1	296.3	303.69	12.581	1.673	12.453	3.358	1.612	2.885
8	2.850	2.850	2.850	310.8	312.1	319.89	12.574	1.730	12.416	3.353	1.629	2.960
9	2.950	2.950	2.950	326.7	328.1	336.26	12.565	1.787	12.390	3.353	1.644	3.029
10	3.050	3.050	3.050	342.8	344.2	352.77	12.556	1.844	12.350	3.356	1.660	3.109
11	3.150	3.150	3.150	359.0	360.4	369.45	12.546	1.901	12.317	3.362	1.675	3.186
12	3.250	3.250	3.250	375.3	376.8	386.27	12.535	1.957	12.291	3.372	1.689	3.257
13	3.350	3.350	3.350	391.8	393.4	403.23	12.525	2.014	12.274	3.385	1.702	3.322
14	3.450	3.450	3.450	408.4	410.1	420.33	12.515	2.070	12.286	3.400	1.716	3.401
15	3.550	3.550	3.550	425.2	426.9	437.55	12.506	2.127	12.282	3.417	1.728	3.461

## M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM/Intact ship

**Hydrostatic calculation. Shell = 4, Sp.Gravity = 1.0250 t/m3**

Date: 21 MAY 2019

**Trim No:** 3                      **Trim (DA-DF) (m):** 1.000  
**Appe1 (Boxes):** 1-6,8-9,12-14,16-18  
**Appe2 (V. sections):** 10,16-17,32-33  
**Start mean draft (m):** 2.150 0.100\*14=>3.550  
**Draft step, No:** 0.1,14

Dr. #	DA (m)	DF (m)	DM (m)	M.Volume (m3)	Volume (m3)	Displac. (t)	LCB (m)	VCB (m)	LCF (m)	KMT (m)	TPC (t/cm)	MCT1CM (t*m/cm)
1	2.650	1.650	2.150	211.2	212.0	217.33	11.437	1.375	12.121	3.541	1.527	2.528
2	2.750	1.750	2.250	226.1	227.0	232.72	11.482	1.433	12.099	3.505	1.550	2.621
3	2.850	1.850	2.350	241.3	242.3	248.33	11.520	1.492	12.081	3.470	1.570	2.706
4	2.950	1.950	2.450	256.6	257.7	264.12	11.553	1.549	12.055	3.442	1.589	2.788
5	3.050	2.050	2.550	272.2	273.3	280.11	11.581	1.607	12.024	3.420	1.607	2.872
6	3.150	2.150	2.650	287.9	289.0	296.27	11.604	1.665	11.997	3.405	1.624	2.949
7	3.250	2.250	2.750	303.7	305.0	312.59	11.624	1.722	11.979	3.396	1.640	3.019
8	3.350	2.350	2.850	319.8	321.0	329.06	11.642	1.779	11.969	3.391	1.654	3.082
9	3.450	2.450	2.950	335.9	337.2	345.66	11.657	1.836	11.958	3.390	1.666	3.139
10	3.550	2.550	3.050	352.1	353.5	362.39	11.671	1.892	11.950	3.392	1.678	3.193
11	3.650	2.650	3.150	368.5	370.0	379.23	11.683	1.949	11.950	3.398	1.690	3.249
12	3.750	2.750	3.250	385.0	386.5	396.18	11.695	2.005	11.951	3.406	1.700	3.301
13	3.850	2.850	3.350	401.5	403.2	413.24	11.705	2.061	11.959	3.411	1.708	3.348
14	3.950	2.950	3.450	418.0	419.7	430.21	11.717	2.117	12.033	3.387	1.688	3.381
15	4.050	3.050	3.550	433.7	435.5	446.35	11.732	2.169	12.237	3.172	1.534	3.395



## M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM/Intact ship

**Hydrostatic calculation. Shell = 4, Sp.Gravity = 1.0250 t/m3**

Date: 21 MAY 2019

**Trim No:** 4                    **Trim (DA-DF) (m):** 2.000  
**Appe1 (Boxes):**            1-6,8-9,12-14,16-18  
**Appe2 (V. sections):**    10,16-17,32-33  
**Start mean draft (m):**     2.150 0.100\*14=>3.550  
**Draft step, No:**            0.1,14

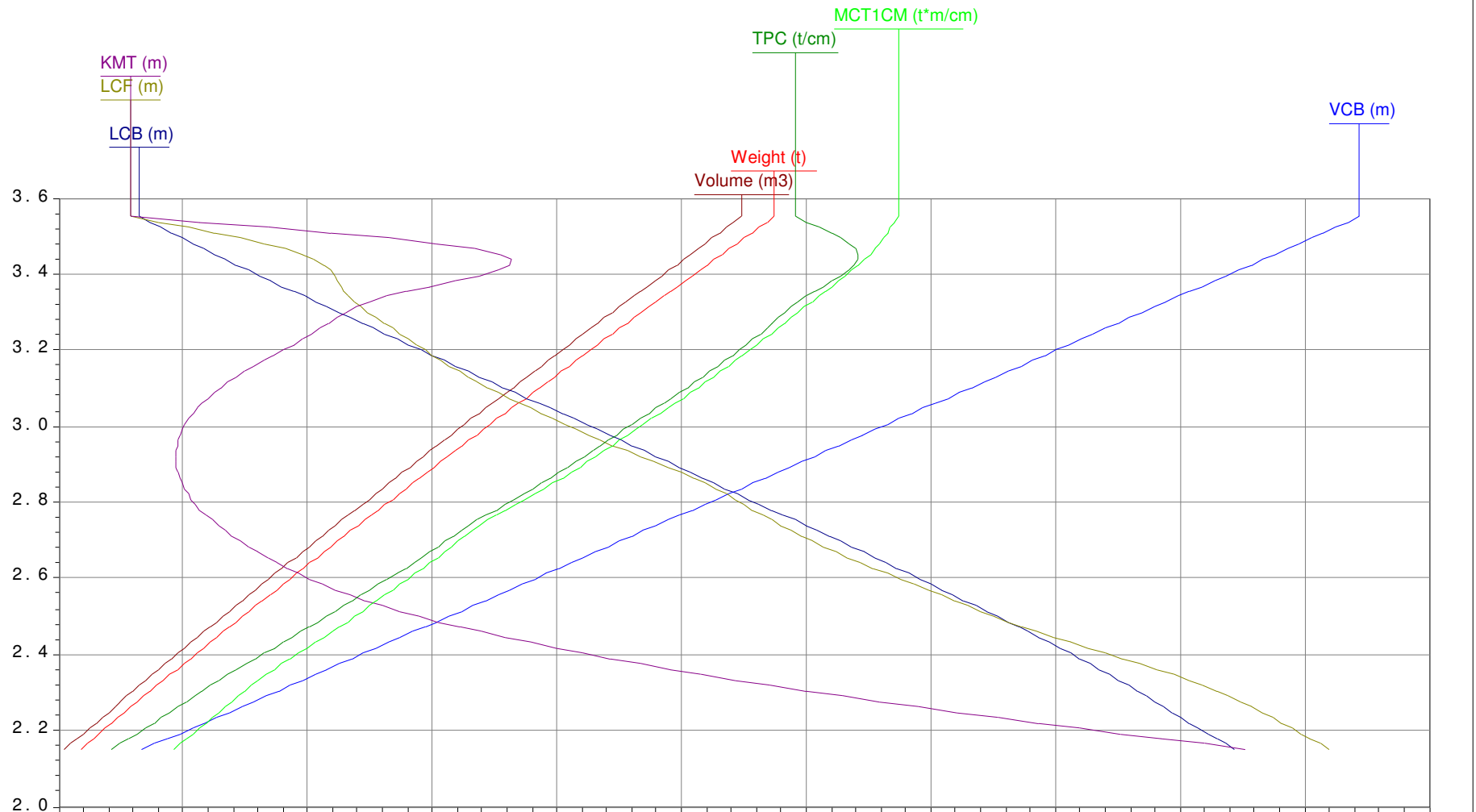
Dr. #	DA (m)	DF (m)	DM (m)	M.Volume (m3)	Volume (m3)	Displac. (t)	LCB (m)	VCB (m)	LCF (m)	KMT (m)	TPC (t/cm)	MCT1CM (t*m/cm)
1	3.150	1.150	2.150	221.7	222.5	228.11	10.331	1.477	11.434	3.579	1.538	2.557
2	3.250	1.250	2.250	236.7	237.7	243.62	10.402	1.534	11.469	3.552	1.562	2.655
3	3.350	1.350	2.350	252.0	253.0	259.37	10.469	1.590	11.538	3.522	1.586	2.770
4	3.450	1.450	2.450	267.5	268.6	275.32	10.532	1.646	11.557	3.494	1.603	2.846
5	3.550	1.550	2.550	283.2	284.3	291.44	10.589	1.702	11.576	3.475	1.619	2.918
6	3.650	1.650	2.650	299.0	300.2	307.71	10.642	1.758	11.597	3.460	1.635	2.987
7	3.750	1.750	2.750	315.0	316.2	324.13	10.691	1.813	11.615	3.451	1.648	3.047
8	3.850	1.850	2.850	331.0	332.4	340.67	10.736	1.869	11.630	3.445	1.660	3.101
9	3.950	1.950	2.950	347.2	348.6	357.33	10.778	1.924	11.645	3.443	1.672	3.153
10	4.050	2.050	3.050	363.5	365.0	374.10	10.817	1.979	11.666	3.444	1.682	3.200
11	4.150	2.150	3.150	379.9	381.4	390.97	10.854	2.033	11.694	3.438	1.688	3.244
12	4.250	2.250	3.250	396.2	397.8	407.74	10.890	2.087	11.773	3.411	1.666	3.275
13	4.350	2.350	3.350	412.2	413.8	424.16	10.927	2.140	11.857	3.409	1.641	3.303
14	4.450	2.450	3.450	427.7	429.4	440.13	10.962	2.189	11.949	3.204	1.525	3.336
15	4.550	2.550	3.550	441.7	443.5	454.57	10.996	2.236	12.034	3.241	1.427	3.367

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM/Intact ship

Hydrostatic calculation. Shell = 4, Sp.Gravity = 1.0250 t/m3

Date: 21/05/2019

Mean draft (DA+DF)/2 in metres above base, Trim #:1, -1m



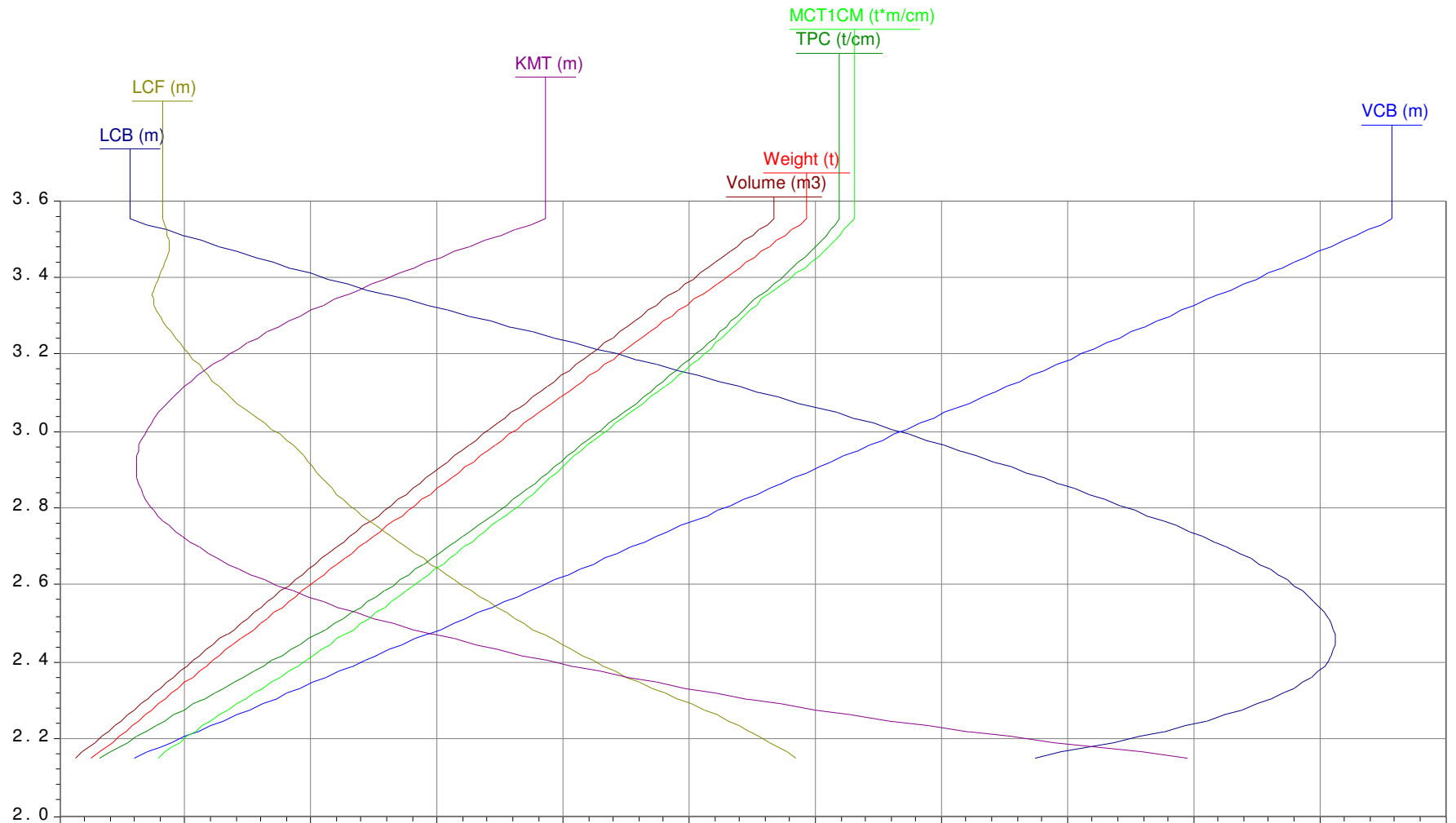
	200	240	280	320	360	400	440	480	520	560	600	640
Volume (m3)	200	240	280	320	360	400	440	480	520	560	600	640
Weight (t)	200	240	280	320	360	400	440	480	520	560	600	640
LCB (m)	13.28	13.32	13.36	13.40	13.44	13.48	13.52	13.56	13.60	13.64	13.68	13.72
VCB (m)	1.28	1.36	1.44	1.52	1.60	1.68	1.76	1.84	1.92	2.00	2.08	2.16
LCF (m)	12.56	12.64	12.72	12.80	12.88	12.96	13.04	13.12	13.20	13.28	13.36	13.44
KMT (m)	3.32	3.34	3.36	3.38	3.40	3.42	3.44	3.46	3.48	3.50	3.52	3.54
TPC (t/cm)	1.44	1.48	1.52	1.56	1.60	1.64	1.68	1.72	1.76	1.80	1.84	1.88
MCT1CM (t*m/cm)	2.0	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.0	4.2

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM/Intact ship

Hydrostatic calculation. Shell = 4, Sp.Gravity = 1.0250 t/m3

Date: 21/05/2019

Mean draft (DA+DF)/2 in metres above base, Trim #:2, 0m

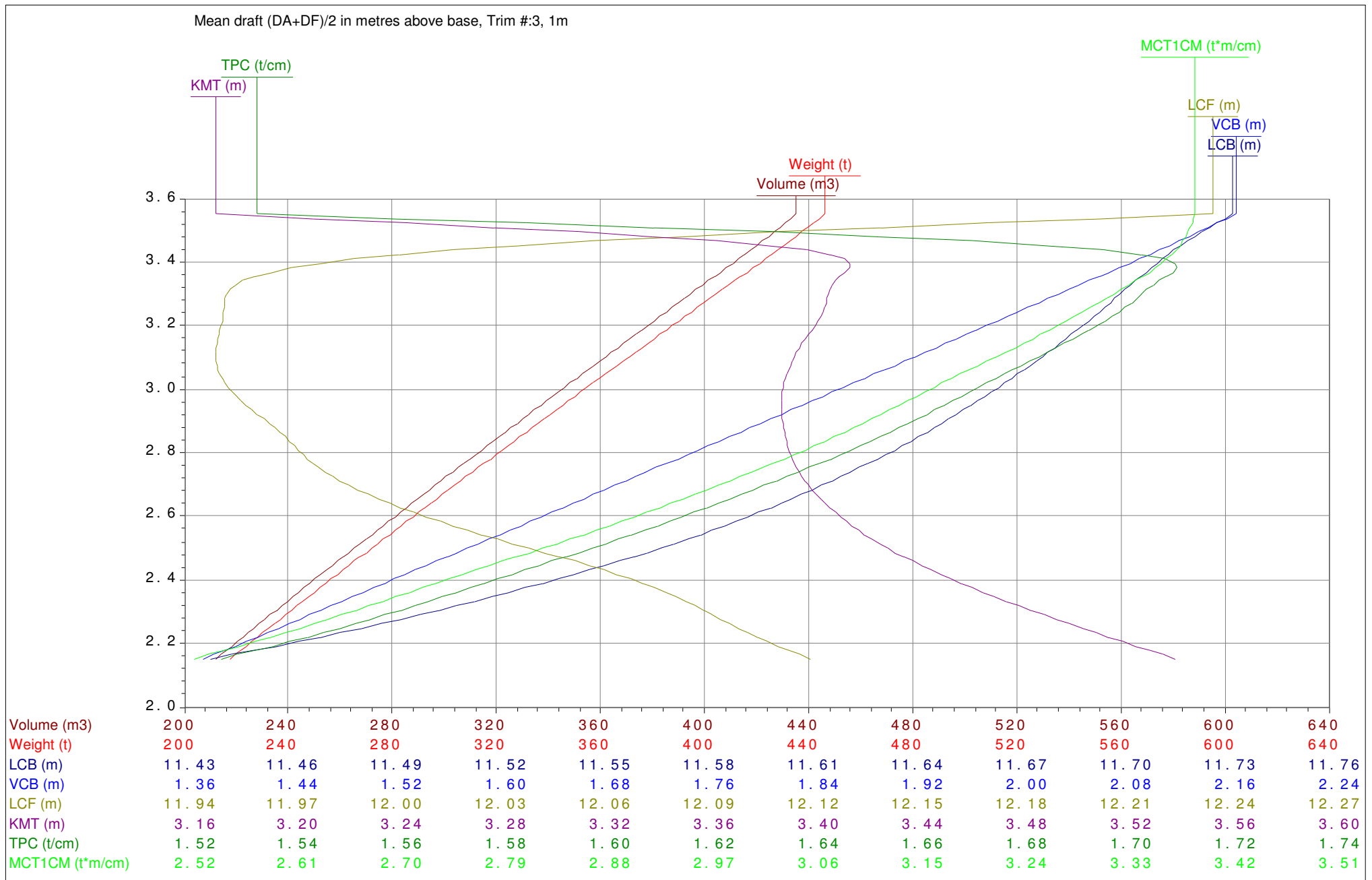


	200	240	280	320	360	400	440	480	520	560	600	640
Volume (m3)	200	240	280	320	360	400	440	480	520	560	600	640
Weight (t)	200	240	280	320	360	400	440	480	520	560	600	640
LCB (m)	12.501	12.510	12.519	12.528	12.537	12.546	12.555	12.564	12.573	12.582	12.591	12.600
VCB (m)	1.28	1.36	1.44	1.52	1.60	1.68	1.76	1.84	1.92	2.00	2.08	2.16
LCF (m)	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.3
KMT (m)	3.34	3.36	3.38	3.40	3.42	3.44	3.46	3.48	3.50	3.52	3.54	3.56
TPC (t/cm)	1.48	1.52	1.56	1.60	1.64	1.68	1.72	1.76	1.80	1.84	1.88	1.92
MCT1CM (t*m/cm)	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.0	4.2	4.4

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM/Intact ship

Hydrostatic calculation. Shell = 4, Sp.Gravity = 1.0250 t/m3

Date: 21/05/2019

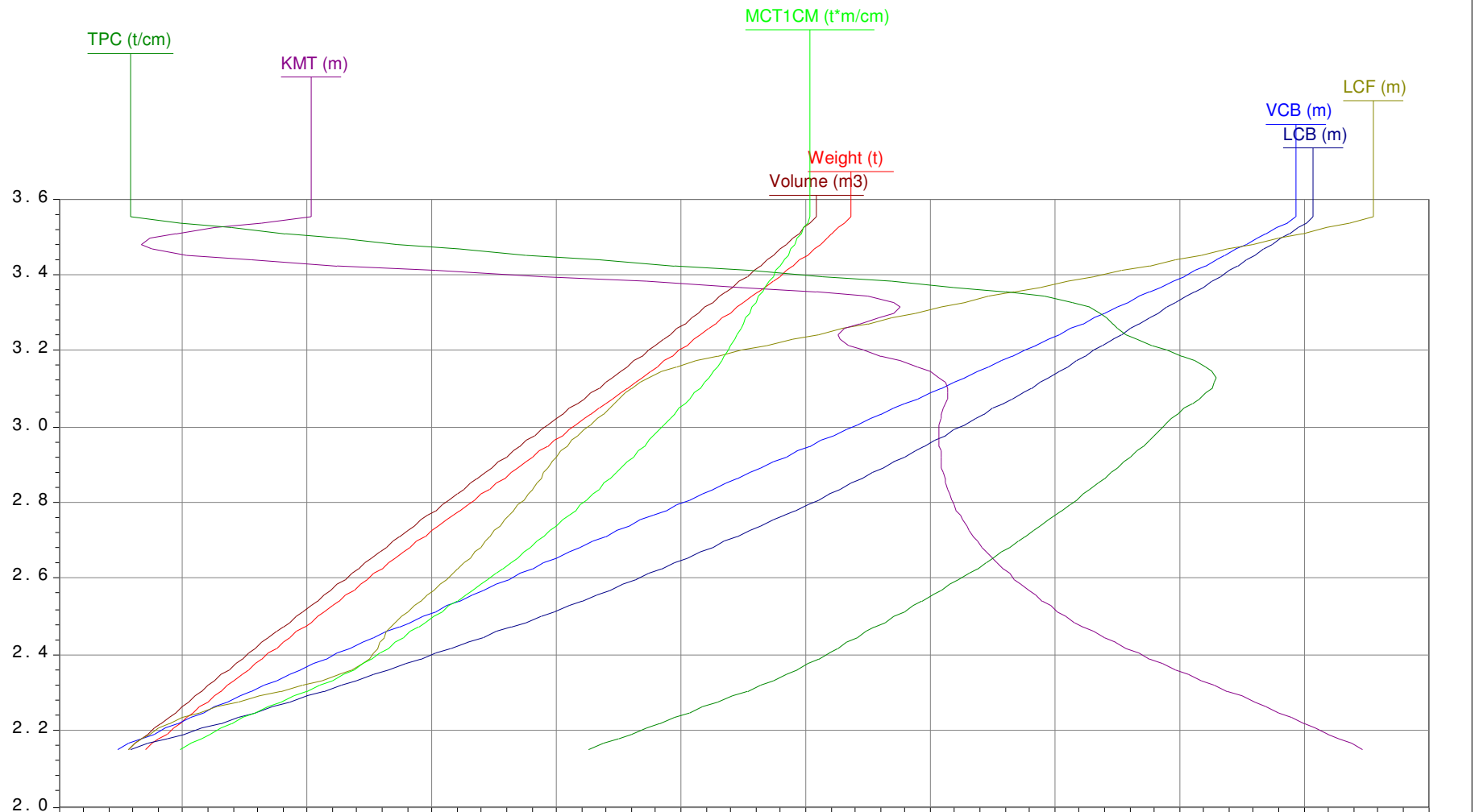


# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM/Intact ship

Hydrostatic calculation. Shell = 4, Sp.Gravity = 1.0250 t/m<sup>3</sup>

Date: 21/05/2019

Mean draft (DA+DF)/2 in metres above base, Trim #:4, 2m



	200	240	280	320	360	400	440	480	520	560	600	640
Volume (m3)	200	240	280	320	360	400	440	480	520	560	600	640
Weight (t)	200	240	280	320	360	400	440	480	520	560	600	640
LCB (m)	10.29	10.36	10.43	10.50	10.57	10.64	10.71	10.78	10.85	10.92	10.99	11.06
VCB (m)	1.44	1.52	1.60	1.68	1.76	1.84	1.92	2.00	2.08	2.16	2.24	2.32
LCF (m)	11.40	11.46	11.52	11.58	11.64	11.70	11.76	11.82	11.88	11.94	12.00	12.06
KMT (m)	3.16	3.20	3.24	3.28	3.32	3.36	3.40	3.44	3.48	3.52	3.56	3.60
TPC (t/cm)	1.41	1.44	1.47	1.50	1.53	1.56	1.59	1.62	1.65	1.68	1.71	1.74
MCT1CM (t*m/cm)	2.40	2.56	2.72	2.88	3.04	3.20	3.36	3.52	3.68	3.84	4.00	4.16

**M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM/Intact ship**

PN-values for different heel angles. **SB-heeling** PS > SB

Saved: 21 MAY 2019 ,used SS: 1-23 ,used APP1: 1-6,8-9,12-14,16-18 ,used APP2: 10,16-17,32-33 ,Sp.Grav.= 1.0250t/m3 ,Shell=4 Date:21 MAY 2019

Trim #	1,	-1.000(m),	KP-value =	0.000(m)	Info: PN=KY when KP=0m and PN=GZ when KP=VCG										
D#	DA (m)	DF (m)	DM (m)	Volume (m3)	Displ. (t)	0 (°)	10 (°)	20 (°)	30 (°)	40 (°)	50 (°)	60 (°)	70 (°)	80 (°)	
1	1.650	2.650	2.150	201.9	207.0	0.000	0.610	1.198	1.737	2.177	2.560	2.918	3.176	3.281	
2	1.750	2.750	2.250	216.2	221.6	0.000	0.603	1.191	1.727	2.170	2.563	2.916	3.160	3.269	
3	1.850	2.850	2.350	230.7	236.5	0.000	0.597	1.185	1.717	2.162	2.568	2.914	3.143	3.257	
4	1.950	2.950	2.450	245.4	251.6	0.000	0.593	1.180	1.706	2.155	2.572	2.911	3.128	3.248	
5	2.050	3.050	2.550	260.3	266.8	0.000	0.589	1.174	1.695	2.150	2.576	2.907	3.115	3.238	
6	2.150	3.150	2.650	275.4	282.3	0.000	0.586	1.166	1.684	2.147	2.578	2.902	3.107	3.228	
7	2.250	3.250	2.750	290.7	297.9	0.000	0.584	1.158	1.672	2.144	2.579	2.897	3.096	3.218	
8	2.350	3.350	2.850	306.1	313.8	0.000	0.584	1.149	1.662	2.142	2.579	2.892	3.088	3.208	
9	2.450	3.450	2.950	321.8	329.8	0.000	0.584	1.141	1.652	2.143	2.578	2.886	3.081	3.203	
10	2.550	3.550	3.050	337.6	346.1	0.000	0.584	1.132	1.644	2.143	2.576	2.881	3.074	3.200	
11	2.650	3.650	3.150	353.6	362.5	0.000	0.583	1.124	1.638	2.143	2.572	2.875	3.069	3.201	
12	2.750	3.750	3.250	369.8	379.1	0.000	0.580	1.115	1.632	2.142	2.567	2.869	3.065	3.206	
13	2.850	3.850	3.350	386.2	395.8	0.000	0.575	1.106	1.627	2.141	2.561	2.862	3.062	3.213	
14	2.950	3.950	3.450	402.6	412.7	0.000	0.567	1.098	1.625	2.139	2.554	2.855	3.060	3.220	
15	3.050	4.050	3.550	419.2	429.7	0.000	0.558	1.091	1.623	2.135	2.547	2.847	3.060	3.227	

M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM/Intact ship

PN-values for different heel angles. **SB-heeling** PS > SB

Saved: 21 MAY 2019 ,used SS: 1-23 ,used APP1: 1-6,8-9,12-14,16-18 ,used APP2: 10,16-17,32-33 ,Sp.Grav.= 1.0250t/m3 ,Shell=4 Date:21 MAY 2019

Trim #	2,	0.000(m),	KP-value =	0.000(m)	Info: PN=KY when KP=0m and PN=GZ when KP=VCG									
D#	DA (m)	DF (m)	DM (m)	Volume (m3)	Displ. (t)	0 (°)	10 (°)	20 (°)	30 (°)	40 (°)	50 (°)	60 (°)	70 (°)	80 (°)
1	2.150	2.150	2.150	205.2	210.3	0.000	0.611	1.202	1.742	2.181	2.557	2.918	3.172	3.279
2	2.250	2.250	2.250	219.9	225.4	0.000	0.604	1.195	1.733	2.172	2.562	2.915	3.153	3.269
3	2.350	2.350	2.350	234.8	240.6	0.000	0.599	1.189	1.722	2.165	2.566	2.911	3.139	3.260
4	2.450	2.450	2.450	249.9	256.1	0.000	0.595	1.182	1.710	2.158	2.571	2.906	3.123	3.250
5	2.550	2.550	2.550	265.2	271.8	0.000	0.591	1.176	1.699	2.153	2.575	2.902	3.110	3.238
6	2.650	2.650	2.650	280.6	287.6	0.000	0.589	1.169	1.689	2.148	2.577	2.899	3.097	3.225
7	2.750	2.750	2.750	296.3	303.7	0.000	0.587	1.161	1.677	2.145	2.578	2.894	3.087	3.216
8	2.850	2.850	2.850	312.1	319.9	0.000	0.586	1.153	1.666	2.142	2.578	2.888	3.078	3.211
9	2.950	2.950	2.950	328.1	336.3	0.000	0.586	1.144	1.655	2.142	2.575	2.882	3.075	3.212
10	3.050	3.050	3.050	344.2	352.8	0.000	0.586	1.135	1.646	2.141	2.572	2.875	3.070	3.216
11	3.150	3.150	3.150	360.4	369.4	0.000	0.584	1.124	1.638	2.141	2.567	2.868	3.067	3.223
12	3.250	3.250	3.250	376.8	386.3	0.000	0.579	1.114	1.632	2.140	2.562	2.861	3.067	3.231
13	3.350	3.350	3.350	393.4	403.2	0.000	0.572	1.105	1.627	2.138	2.555	2.854	3.067	3.238
14	3.450	3.450	3.450	410.1	420.3	0.000	0.564	1.095	1.623	2.135	2.548	2.848	3.069	3.246
15	3.550	3.550	3.550	426.9	437.6	0.000	0.555	1.088	1.621	2.132	2.540	2.842	3.072	3.252

M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM/Intact ship

PN-values for different heel angles. **SB-heeling** PS > SB

Saved: 21 MAY 2019 ,used SS: 1-23 ,used APP1: 1-6,8-9,12-14,16-18 ,used APP2: 10,16-17,32-33 ,Sp.Grav.= 1.0250t/m3 ,Shell=4 Date:21 MAY 2019

Trim #	3,	1.000(m),	KP-value =	0.000(m)	Info: PN=KY when KP=0m and PN=GZ when KP=VCG										
D#	DA (m)	DF (m)	DM (m)	Volume (m3)	Displ. (t)	0 (°)	10 (°)	20 (°)	30 (°)	40 (°)	50 (°)	60 (°)	70 (°)	80 (°)	
1	2.650	1.650	2.150	212.0	217.3	0.000	0.614	1.212	1.754	2.205	2.581	2.920	3.160	3.271	
2	2.750	1.750	2.250	227.0	232.7	0.000	0.608	1.205	1.746	2.195	2.580	2.916	3.146	3.263	
3	2.850	1.850	2.350	242.3	248.3	0.000	0.604	1.198	1.736	2.187	2.580	2.913	3.131	3.254	
4	2.950	1.950	2.450	257.7	264.1	0.000	0.600	1.191	1.725	2.179	2.580	2.908	3.118	3.243	
5	3.050	2.050	2.550	273.3	280.1	0.000	0.597	1.184	1.713	2.171	2.580	2.902	3.106	3.234	
6	3.150	2.150	2.650	289.0	296.3	0.000	0.595	1.176	1.700	2.166	2.581	2.896	3.096	3.229	
7	3.250	2.250	2.750	305.0	312.6	0.000	0.593	1.169	1.689	2.161	2.580	2.889	3.087	3.229	
8	3.350	2.350	2.850	321.0	329.1	0.000	0.592	1.160	1.678	2.156	2.577	2.882	3.079	3.233	
9	3.450	2.450	2.950	337.2	345.7	0.000	0.591	1.152	1.667	2.152	2.573	2.875	3.073	3.239	
10	3.550	2.550	3.050	353.5	362.4	0.000	0.589	1.142	1.657	2.146	2.568	2.868	3.071	3.247	
11	3.650	2.650	3.150	370.0	379.2	0.000	0.586	1.132	1.649	2.142	2.561	2.861	3.071	3.253	
12	3.750	2.750	3.250	386.5	396.2	0.000	0.580	1.122	1.642	2.137	2.554	2.852	3.077	3.260	
13	3.850	2.850	3.350	403.2	413.2	0.000	0.574	1.113	1.637	2.132	2.545	2.846	3.081	3.266	
14	3.950	2.950	3.450	419.7	430.2	0.000	0.566	1.104	1.632	2.127	2.536	2.842	3.087	3.272	
15	4.050	3.050	3.550	435.5	446.4	0.000	0.558	1.096	1.628	2.122	2.528	2.838	3.093	3.278	



M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM/Intact ship

PN-values for different heel angles. **SB-heeling** PS > SB

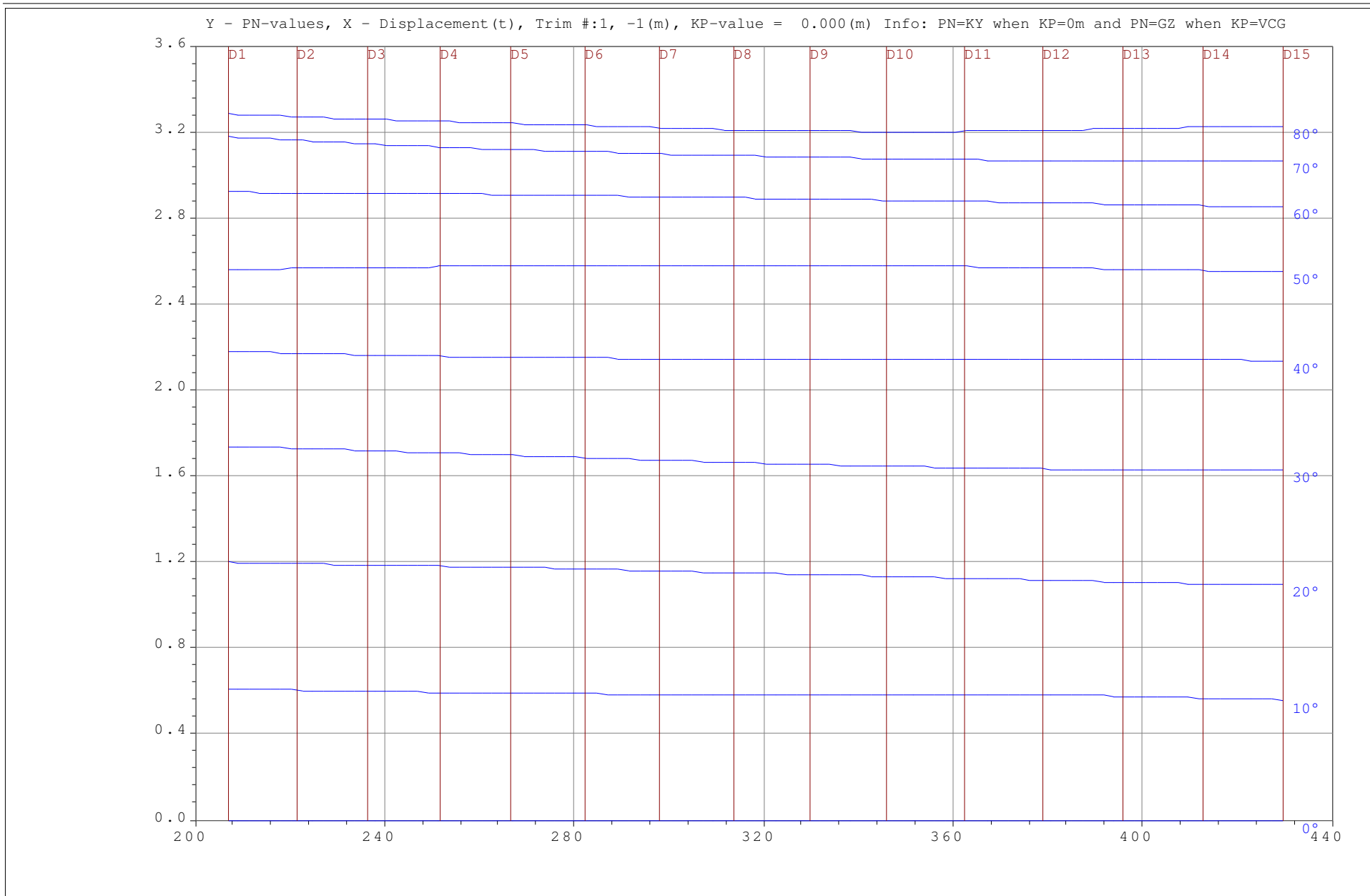
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Trim #	4,	2.000(m),	KP-value =	0.000(m)	Info: PN=KY when KP=0m and PN=GZ when KP=VCG									
D#	DA (m)	DF (m)	DM (m)	Volume (m3)	Displ. (t)	0 (°)	10 (°)	20 (°)	30 (°)	40 (°)	50 (°)	60 (°)	70 (°)	80 (°)
1	3.150	1.150	2.150	222.5	228.1	0.000	0.621	1.224	1.773	2.239	2.621	2.923	3.141	3.260
2	3.250	1.250	2.250	237.7	243.6	0.000	0.617	1.218	1.764	2.230	2.614	2.921	3.132	3.250
3	3.350	1.350	2.350	253.0	259.4	0.000	0.612	1.210	1.756	2.221	2.606	2.914	3.122	3.244
4	3.450	1.450	2.450	268.6	275.3	0.000	0.609	1.203	1.745	2.213	2.600	2.906	3.112	3.243
5	3.550	1.550	2.550	284.3	291.4	0.000	0.607	1.196	1.733	2.204	2.593	2.899	3.102	3.246
6	3.650	1.650	2.650	300.2	307.7	0.000	0.605	1.189	1.723	2.196	2.585	2.892	3.095	3.253
7	3.750	1.750	2.750	316.2	324.1	0.000	0.603	1.182	1.711	2.186	2.578	2.884	3.089	3.261
8	3.850	1.850	2.850	332.4	340.7	0.000	0.600	1.173	1.701	2.176	2.572	2.875	3.086	3.269
9	3.950	1.950	2.950	348.6	357.3	0.000	0.597	1.165	1.690	2.166	2.564	2.866	3.088	3.275
10	4.050	2.050	3.050	365.0	374.1	0.000	0.593	1.155	1.680	2.155	2.558	2.857	3.091	3.280
11	4.150	2.150	3.150	381.4	391.0	0.000	0.588	1.145	1.671	2.145	2.549	2.851	3.095	3.286
12	4.250	2.250	3.250	397.8	407.7	0.000	0.583	1.136	1.662	2.134	2.538	2.847	3.100	3.290
13	4.350	2.350	3.350	413.8	424.2	0.000	0.577	1.127	1.653	2.125	2.528	2.845	3.107	3.295
14	4.450	2.450	3.450	429.4	440.1	0.000	0.571	1.119	1.644	2.116	2.519	2.844	3.114	3.302
15	4.550	2.550	3.550	443.5	454.6	0.000	0.564	1.112	1.636	2.108	2.511	2.844	3.118	3.308

M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM/Intact ship

PN-values for different heel angles. **SB-heeling** PS > SB

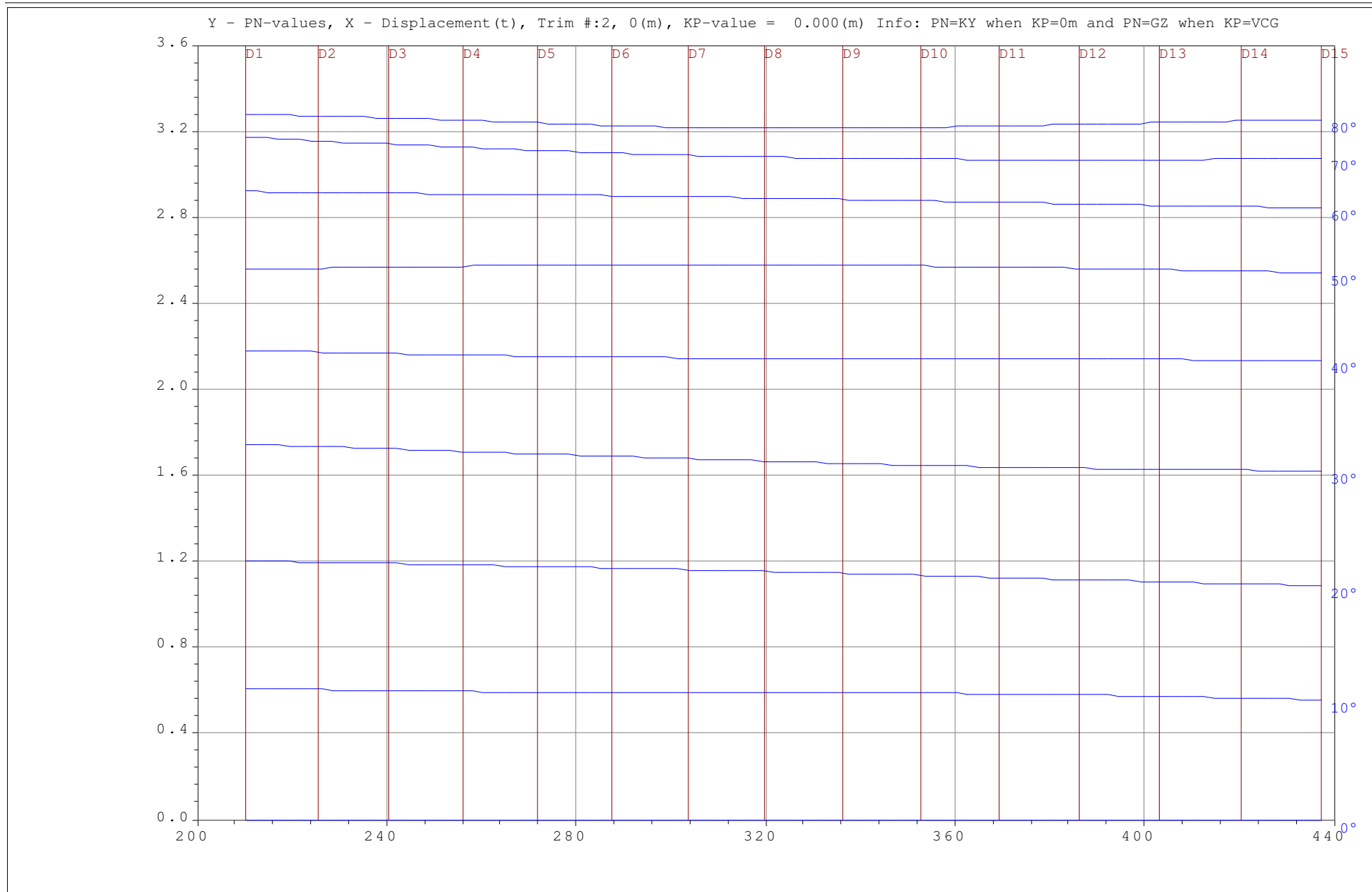
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M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM/Intact ship

PN-values for different heel angles. **SB-heeling** PS > SB

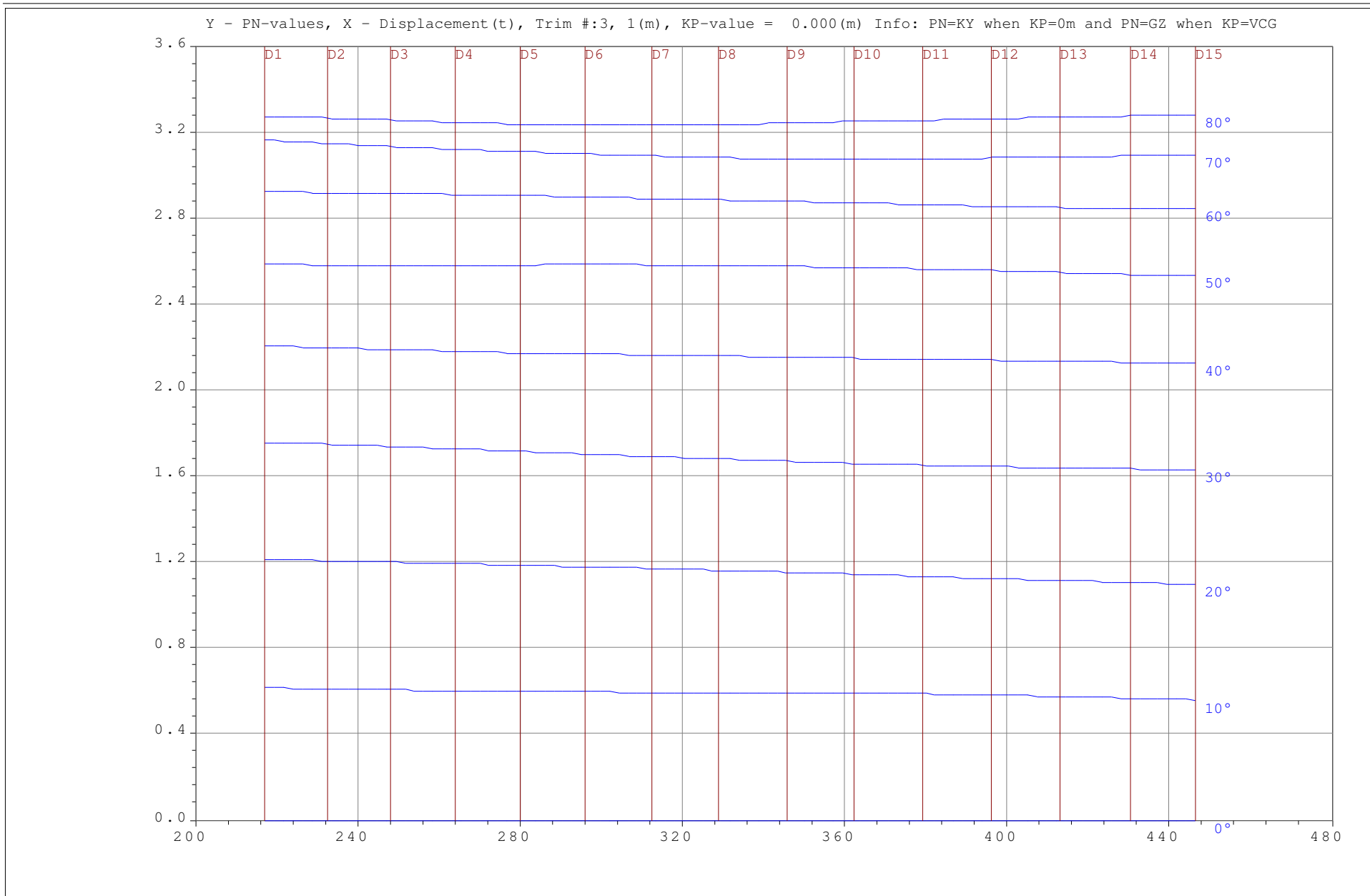
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M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM/Intact ship

PN-values for different heel angles. **SB-heeling** PS > SB

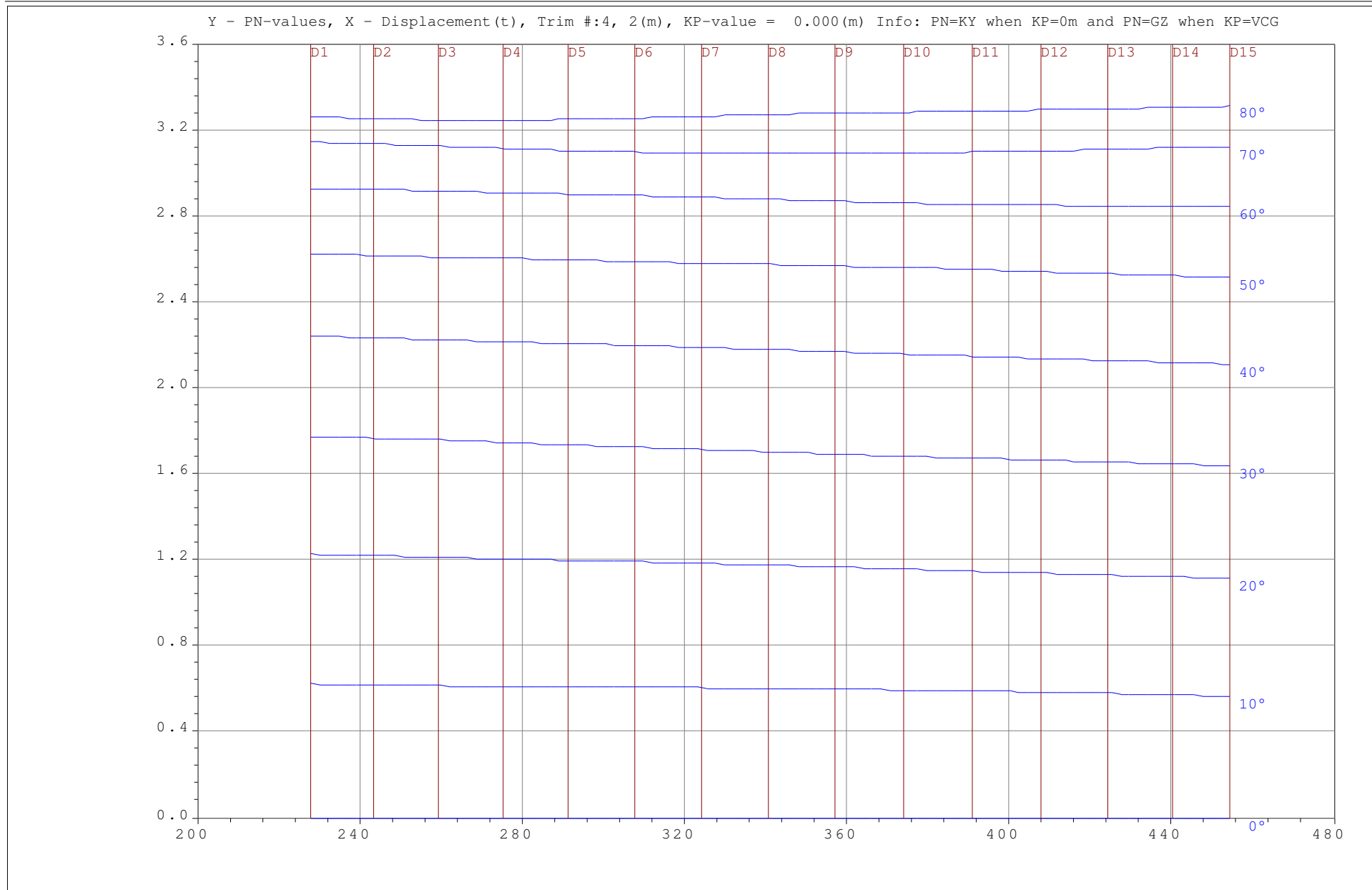
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# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM/Intact ship

PN-values for different heel angles. **SB-heeling** PS > SB

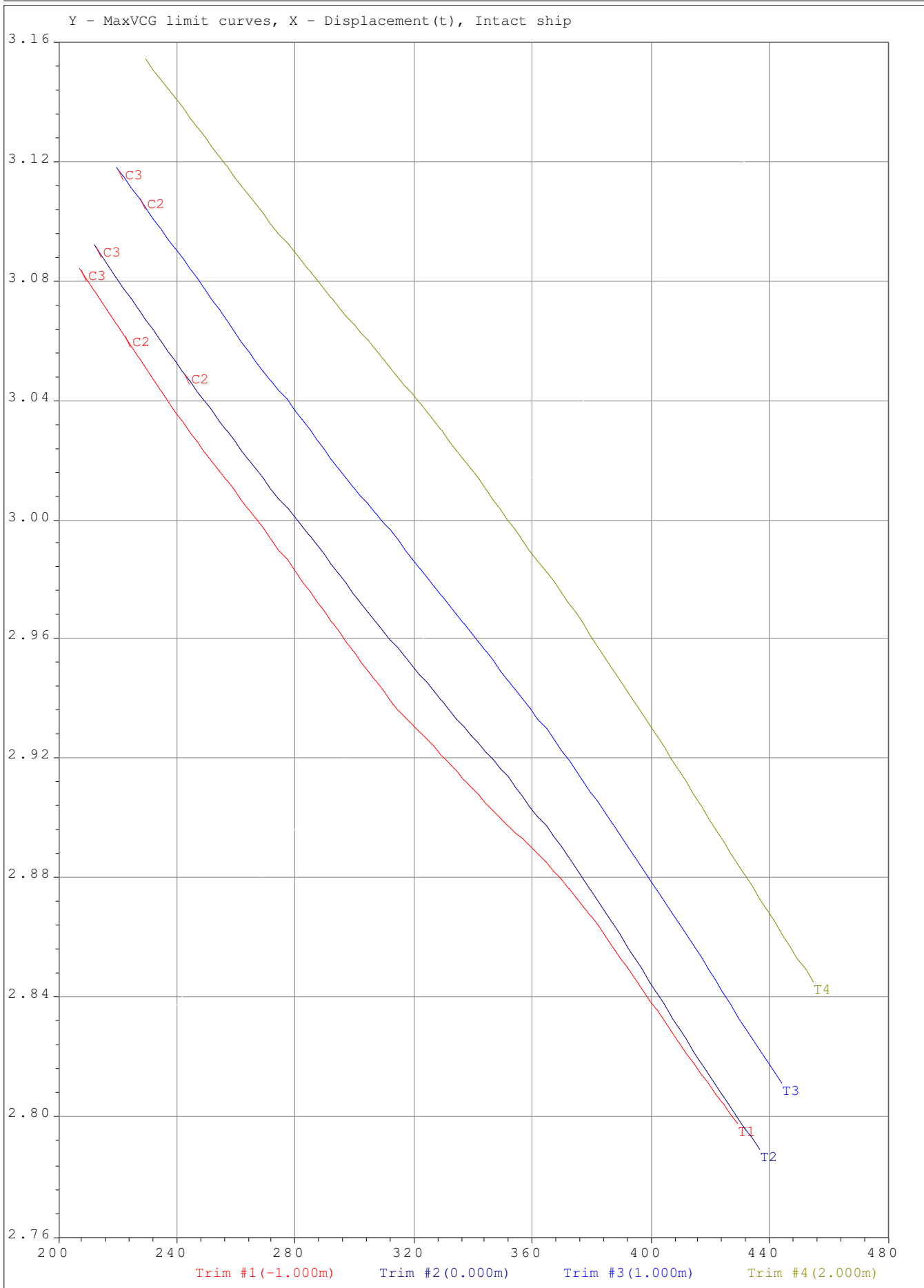
Saved: 21 MAY 2019 ,used SS: 1-23 ,used APP1: 1-6,8-9,12-14,16-18 ,used APP2: 10,16-17,32-33 ,Sp.Grav.= 1.0250t/m3 ,Shell=4 Date:21 MAY 2019



# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

## VCG limit curves.

Date: 21 MAY 2019



**M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM**

**VCG limit curves.**

Intact ship, Trim No:1(-1m)

Date:21 MAY 2019

FA#:Pnr - flood angle 1/2/3; MV - angle for max GZ; EQ - angle for equilibrium.

Dr.No	DA(M)	DF(M)	DM(M)	VOLUME(M3)	DISPL.(T)	MaxVCG	Min.GM	PS	FA1:Pnr	SB	PS	FA2:Pnr	SB	PS	FA3:Pnr	SB
1	1.65	2.65	2.150	201.93	206.98	3.084	0.427									
2	1.75	2.75	2.250	216.24	221.64	3.062	0.401									
3	1.85	2.85	2.350	230.73	236.50	3.040	0.382									
4	1.95	2.95	2.450	245.42	251.56	3.020	0.370									
5	2.05	3.05	2.550	260.31	266.82	3.001	0.367									
6	2.15	3.15	2.650	275.40	282.28	2.979	0.375									
7	2.25	3.25	2.750	290.67	297.94	2.958	0.387									
8	2.35	3.35	2.850	306.12	313.78	2.937	0.402									
9	2.45	3.45	2.950	321.78	329.83	2.921	0.418									
10	2.55	3.55	3.050	337.62	346.06	2.903	0.439									
11	2.65	3.65	3.150	353.64	362.48	2.888	0.463									
12	2.75	3.75	3.250	369.82	379.06	2.868	0.493									
13	2.85	3.85	3.350	386.15	395.80	2.845	0.530									
14	2.95	3.95	3.450	402.63	412.70	2.820	0.571									
15	3.05	4.05	3.550	419.21	429.69	2.798	0.534									

None flooding point was used in the calculation

Claim ID: 1 (GMT)>=(0.15)

Draught	1	2	3	4	5	6	7	8	9	10	11	12
Max.VCG	3.360	3.313	3.272	3.240	3.217	3.204	3.195	3.190	3.189	3.193	3.200	3.211
PS MV	68.3	67.0	64.5	61.4	59.2	57.3	56.0	54.9	53.9	53.1	52.3	51.7
SB MV	27.3	28.1	28.3	59.2	57.1	55.7	54.5	53.6	52.8	52.3	51.7	50.7
EQ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Draught	13	14	15
Max.VCG	3.225	3.241	3.182
PS MV	50.5	49.1	49.7
SB MV	49.7	48.3	49.1
EQ	0.0	0.0	-0.0

Claim ID: 2 (GetGZArea(HeelAngle,30))>=(0.055)

Draught	1	2	3	4	5	6	7	8	9	10	11	12
Max.VCG	3.089	3.062	3.040	3.020	3.001	2.979	2.958	2.937	2.921	2.903	2.888	2.868
PS MV	70.1	69.4	68.0	65.4	62.9	61.1	60.0	59.0	58.2	57.7	57.7	57.9
SB MV	69.3	68.3	65.9	62.9	60.6	59.8	58.7	57.9	57.4	57.4	57.6	57.9
EQ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Draught	13	14	15
Max.VCG	2.845	2.820	2.798
PS MV	58.2	80.0	80.0
SB MV	80.0	80.0	80.0
EQ	0.0	0.0	-0.0

Claim ID: 3 (GetGZArea(HeelAngle,Min(40,FloodAngle3)))>=(0.09)

Draught	1	2	3	4	5	6	7	8	9	10	11	12
Max.VCG	3.084	3.062	3.042	3.023	3.005	2.987	2.969	2.953	2.939	2.927	2.916	2.903
PS MV	70.1	69.4	68.0	65.3	62.7	60.9	59.8	58.7	58.1	57.4	57.3	57.3
SB MV	69.3	68.3	65.9	62.7	60.6	59.8	58.5	57.7	57.1	56.9	57.1	57.3
EQ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Draught	13	14	15
Max.VCG	2.888	2.873	2.858
PS MV	57.4	80.0	80.0
SB MV	57.4	80.0	80.0
EQ	0.0	0.0	-0.0

Claim ID: 4 (CHOOSE(Min(40,FloodAngle3) >30 ,GetGZArea(30,Min(40,FloodAngle3)),0))>=(0.03)

**M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM**

**VCG limit curves.**

Intact ship, Trim No:1(-1m)

Date:21 MAY 2019

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=====
Draught :    1      2      3      4      5      6      7      8      9      10     11     12
Max.VCG :  3.128  3.111  3.094  3.077  3.060  3.047  3.034  3.022  3.015  3.008  3.004  2.999
PS MV   :  69.7   69.1   67.2   64.5   61.7   60.0   58.7   57.6   56.8   56.0   55.7   55.5
SB MV   :  69.1   67.7   64.9   61.9   59.8   58.7   57.4   56.5   55.8   55.5   55.3   55.2
EQ      :    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
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=====
Draught :    13     14     15
Max.VCG :  2.995  2.992  2.989
PS MV   :  55.2  55.2  80.0
SB MV   :  55.0  55.3  80.0
EQ      :    0.0    0.0  -0.0
Claim ID: 5 (GZMaxAngle)>=(25)
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Draught :    1      2      3      4      5      6      7      8      9      10     11     12
Max.VCG :  3.426  3.407  3.375  3.336  3.309  3.331  3.352  3.366  3.364  3.360  3.353  3.349
PS MV   :  25.2  25.7  62.7  59.8  57.4  54.9  53.3  52.1  51.3  50.5  49.9  48.9
SB MV   :  24.9  24.9  24.9  25.1  24.4  52.9  19.5  50.7   0.0   5.8   6.3  47.6
EQ      :    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
=====
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=====
Draught :    13     14     15
Max.VCG :  3.346  3.338  3.330
PS MV   :  47.8  46.7  45.9
SB MV   :  46.7   0.0  44.9
EQ      :    0.0    0.0 -43.3
Claim ID: 6 (GetGZMax(30,LastAngle))>=(0.2)
=====
```

```
=====
Draught :    1      2      3      4      5      6      7      8      9      10     11     12
Max.VCG :  3.164  3.149  3.137  3.129  3.125  3.121  3.118  3.115  3.111  3.107  3.100  3.092
PS MV   :  69.6  68.6  66.5  63.5  60.6  58.7  57.3  56.0  55.2  54.4  54.1  53.9
SB MV   :  68.8  67.3  64.1  60.9  58.7  57.3  55.8  54.9  54.2  53.7  53.6  53.3
EQ      :    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
=====
```

```
=====
Draught :    13     14     15
Max.VCG :  3.084  3.074  3.064
PS MV   :  53.4  53.3  52.9
SB MV   :  52.9  53.1  52.8
EQ      :    0.0    0.0  -0.0
=====
```



**M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM**

**VCG limit curves.**

Intact ship, Trim No:2(0m)

Date:21 MAY 2019

FA#:Pnr - flood angle 1/2/3; MV - angle for max GZ; EQ - angle for equilibrium.

Dr.No	DA(M)	DF(M)	DM(M)	VOLUME(M3)	DISPL.(T)	MaxVCG	Min.GM	PS	FA1:Pnr	SB	PS	FA2:Pnr	SB	PS	FA3:Pnr	SB
1	2.15	2.15	2.150	205.22	210.35	3.094	0.425									
2	2.25	2.25	2.250	219.89	225.38	3.073	0.398									
3	2.35	2.35	2.350	234.77	240.64	3.051	0.382									
4	2.45	2.45	2.450	249.86	256.11	3.031	0.373									
5	2.55	2.55	2.550	265.16	271.78	3.011	0.372									
6	2.65	2.65	2.650	280.63	287.65	2.991	0.376									
7	2.75	2.75	2.750	296.28	303.69	2.970	0.388									
8	2.85	2.85	2.850	312.09	319.89	2.951	0.402									
9	2.95	2.95	2.950	328.06	336.26	2.931	0.421									
10	3.05	3.05	3.050	344.17	352.77	2.913	0.443									
11	3.15	3.15	3.150	360.44	369.45	2.891	0.472									
12	3.25	3.25	3.250	376.85	386.27	2.866	0.506									
13	3.35	3.35	3.350	393.39	403.23	2.840	0.545									
14	3.45	3.45	3.450	410.08	420.33	2.813	0.587									
15	3.55	3.55	3.550	426.88	437.55	2.788	0.629									

None flooding point was used in the calculation

Claim ID: 1 (GMT)>=(0.15)

Draught	1	2	3	4	5	6	7	8	9	10	11	12
Max.VCG	3.369	3.321	3.284	3.255	3.233	3.217	3.207	3.203	3.203	3.206	3.212	3.223
PS MV	67.8	66.4	63.7	60.8	58.5	56.8	55.5	54.5	53.6	52.9	52.1	51.0
SB MV	27.1	27.9	28.1	58.2	56.3	55.0	54.1	53.3	52.5	51.8	51.0	49.9
EQ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Draught	13	14	15
Max.VCG	3.235	3.251	3.267
PS MV	49.7	48.3	47.0
SB MV	48.6	47.3	46.0
EQ	0.0	0.0	-32.7

Claim ID: 2 (GetGZArea(HeelAngle,30))>=(0.055)

Draught	1	2	3	4	5	6	7	8	9	10	11	12
Max.VCG	3.098	3.075	3.051	3.031	3.011	2.991	2.970	2.951	2.931	2.913	2.891	2.866
PS MV	69.9	69.3	68.0	65.1	62.4	60.3	59.0	58.2	57.7	57.6	57.6	80.0
SB MV	68.9	67.7	65.7	62.4	60.1	58.9	57.7	57.1	56.9	56.9	80.0	80.0
EQ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Draught	13	14	15
Max.VCG	2.840	2.813	2.788
PS MV	80.0	80.0	80.0
SB MV	80.0	80.0	80.0
EQ	0.0	0.0	0.0

Claim ID: 3 (GetGZArea(HeelAngle,Min(40,FloodAngle3)))>=(0.09)

Draught	1	2	3	4	5	6	7	8	9	10	11	12
Max.VCG	3.094	3.073	3.051	3.032	3.013	2.997	2.979	2.961	2.947	2.933	2.917	2.901
PS MV	69.9	69.3	68.0	65.1	62.2	60.3	59.0	58.1	57.4	57.3	57.1	80.0
SB MV	69.1	67.7	65.7	62.4	60.1	58.7	57.7	56.9	56.6	56.6	80.0	80.0
EQ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Draught	13	14	15
Max.VCG	2.884	2.867	2.851
PS MV	80.0	80.0	80.0
SB MV	80.0	80.0	80.0
EQ	0.0	0.0	0.0

Claim ID: 4 (CHOOSE(Min(40,FloodAngle3) >30 ,GetGZArea(30,Min(40,FloodAngle3)),0))>=(0.03)

**M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM**

**VCG limit curves.**

Intact ship, Trim No:2(0m)

Date:21 MAY 2019

```
=====
Draught :    1      2      3      4      5      6      7      8      9      10     11     12
Max.VCG :  3.137  3.119  3.102  3.085  3.068  3.054  3.039  3.027  3.017  3.010  3.003  2.998
PS MV   :  69.6   68.8   67.0   64.0   61.3   59.3   58.1   57.1   56.5   56.1   55.7   55.2
SB MV   :  68.6   66.9   64.6   61.4   59.3   57.7   56.8   56.0   55.5   55.2   54.9   80.0
EQ      :    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
=====
```

```
=====
Draught :    13     14     15
Max.VCG :  2.993  2.989  2.985
PS MV   :  80.0   80.0   80.0
SB MV   :  80.0   80.0   80.0
EQ      :    0.0    0.0    0.0
Claim ID: 5 (GZMaxAngle)>=(25)
=====
```

```
=====
Draught :    1      2      3      4      5      6      7      8      9      10     11     12
Max.VCG :  3.430  3.421  3.386  3.347  3.309  3.321  3.345  3.357  3.358  3.353  3.347  3.344
PS MV   :  25.1   25.4   26.0   59.2   57.1   54.9   53.3   52.1   51.3   50.7   49.9   48.8
SB MV   :  25.1   24.9   25.1   24.9   24.9   52.9   51.8   50.9   9.8    7.9    7.0   47.3
EQ      :    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
=====
```

```
=====
Draught :    13     14     15
Max.VCG :  3.341  3.333  3.324
PS MV   :  47.5   46.5   45.7
SB MV   :    0.0    0.0   44.4
EQ      :    0.0    0.0  -42.9
Claim ID: 6 (GetGZMax(30,LastAngle))>=(0.2)
=====
```

```
=====
Draught :    1      2      3      4      5      6      7      8      9      10     11     12
Max.VCG :  3.164  3.146  3.133  3.125  3.121  3.120  3.117  3.114  3.108  3.102  3.094  3.085
PS MV   :  69.4   68.5   66.4   63.2   60.5   58.4   56.9   55.8   55.0   54.7   54.1   53.6
SB MV   :  68.5   66.5   64.0   60.6   58.4   56.8   55.5   54.7   54.1   53.7   53.1   52.6
EQ      :    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
=====
```

```
=====
Draught :    13     14     15
Max.VCG :  3.083  3.090  3.097
PS MV   :  52.8   80.0   80.0
SB MV   :  80.0   80.0   80.0
EQ      :    0.0    0.0    0.0
=====
```

**M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM**

**VCG limit curves.**

Intact ship, Trim No:3(1m)

Date:21 MAY 2019

FA#:Pnr - flood angle 1/2/3; MV - angle for max GZ; EQ - angle for equilibrium.

Dr.No	DA(M)	DF(M)	DM(M)	VOLUME(M3)	DISPL.(T)	MaxVCG	Min.GM	PS	FA1:Pnr	SB	PS	FA2:Pnr	SB	PS	FA3:Pnr	SB
1	2.65	1.65	2.150	212.03	217.33	3.120	0.421									
2	2.75	1.75	2.250	227.04	232.72	3.100	0.405									
3	2.85	1.85	2.350	242.27	248.33	3.079	0.391									
4	2.95	1.95	2.450	257.68	264.12	3.057	0.385									
5	3.05	2.05	2.550	273.28	280.11	3.036	0.384									
6	3.15	2.15	2.650	289.04	296.27	3.015	0.391									
7	3.25	2.25	2.750	304.97	312.59	2.996	0.400									
8	3.35	2.35	2.850	321.04	329.06	2.975	0.416									
9	3.45	2.45	2.950	337.23	345.66	2.955	0.435									
10	3.55	2.55	3.050	353.55	362.39	2.933	0.459									
11	3.65	2.65	3.150	369.98	379.23	2.909	0.489									
12	3.75	2.75	3.250	386.52	396.18	2.885	0.521									
13	3.85	2.85	3.350	403.16	413.24	2.860	0.552									
14	3.95	2.95	3.450	419.71	430.21	2.833	0.554									
15	4.05	3.05	3.550	435.47	446.35	2.809	0.364									

None flooding point was used in the calculation

Claim ID: 1 (GMT)>=(0.15)

Draught :	1	2	3	4	5	6	7	8	9	10	11	12
Max.VCG :	3.391	3.355	3.320	3.292	3.271	3.255	3.246	3.241	3.240	3.242	3.248	3.256
PS MV :	27.8	28.6	29.2	59.0	57.1	55.7	53.7	52.9	52.1	51.5	50.7	49.7
SB MV :	27.1	27.9	28.3	28.7	28.9	52.5	51.5	51.0	50.7	50.2	49.6	48.6
EQ :	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Draught :	13	14	15
Max.VCG :	3.261	3.237	3.023
PS MV :	80.0	80.0	80.0
SB MV :	80.0	80.0	80.0
EQ :	0.0	-0.0	-0.0

Claim ID: 2 (GetGZArea(HeelAngle,30))>=(0.055)

Draught :	1	2	3	4	5	6	7	8	9	10	11	12
Max.VCG :	3.121	3.100	3.079	3.057	3.036	3.015	2.996	2.975	2.955	2.933	2.909	2.885
PS MV :	68.6	67.3	64.8	62.9	60.9	59.7	58.4	57.6	80.0	80.0	80.0	80.0
SB MV :	67.3	64.9	62.1	60.6	59.2	57.7	56.8	56.3	80.0	80.0	80.0	80.0
EQ :	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Draught :	13	14	15
Max.VCG :	2.860	2.833	2.809
PS MV :	80.0	80.0	80.0
SB MV :	80.0	80.0	80.0
EQ :	0.0	-0.0	-0.0

Claim ID: 3 (GetGZArea(HeelAngle,Min(40,FloodAngle3)))>=(0.09)

Draught :	1	2	3	4	5	6	7	8	9	10	11	12
Max.VCG :	3.120	3.101	3.081	3.061	3.041	3.021	3.005	2.986	2.969	2.951	2.933	2.915
PS MV :	68.6	67.3	64.8	62.7	60.8	59.7	58.2	57.4	80.0	80.0	80.0	80.0
SB MV :	67.3	64.9	62.1	60.5	59.0	57.7	56.6	56.0	80.0	80.0	80.0	80.0
EQ :	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Draught :	13	14	15
Max.VCG :	2.897	2.879	2.861
PS MV :	80.0	80.0	80.0
SB MV :	80.0	80.0	80.0
EQ :	0.0	-0.0	-0.0

Claim ID: 4 (CHOOSE(Min(40,FloodAngle3) >30 ,GetGZArea(30,Min(40,FloodAngle3)),0))>=(0.03)

**M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM**

**VCG limit curves.**

Intact ship, Trim No:3(1m)

Date:21 MAY 2019

```
=====
Draught :    1      2      3      4      5      6      7      8      9      10     11     12
Max.VCG :  3.168  3.152  3.134  3.116  3.098  3.080  3.065  3.051  3.038  3.025  3.015  3.005
PS MV   :  68.1   66.4   63.8   61.7   60.0   58.7   57.3   56.3   55.7   80.0   80.0   80.0
SB MV   :  66.7   63.8   61.1   59.7   58.1   56.6   55.5   54.9   54.5   80.0   80.0   80.0
EQ      :    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
=====
```

```
=====
Draught :    13     14     15
Max.VCG :  2.997  2.989  2.982
PS MV   :  80.0   80.0   80.0
SB MV   :  80.0   80.0   80.0
EQ      :    0.0   -0.0   -0.0
Claim ID: 5 (GZMaxAngle)>=(25)
=====
```

```
=====
Draught :    1      2      3      4      5      6      7      8      9      10     11     12
Max.VCG :  3.446  3.438  3.411  3.388  3.350  3.310  3.327  3.340  3.344  3.342  3.336  3.332
PS MV   :  25.4   25.5   25.9   26.3   55.2   54.4   52.1   51.0   50.4   49.7   49.1   48.4
SB MV   :  24.9   24.9   25.1   24.9   24.9   24.9   49.6   18.3   13.7   10.0    8.2    6.3
EQ      :    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
=====
```

```
=====
Draught :    13     14     15
Max.VCG :  3.325  3.325  3.330
PS MV   :  47.5   80.0   80.0
SB MV   :    3.0   80.0   80.0
EQ      :    0.0  -79.9  -79.8
Claim ID: 6 (GetGZMax(30,LastAngle))>=(0.2)
=====
```

```
=====
Draught :    1      2      3      4      5      6      7      8      9      10     11     12
Max.VCG :  3.151  3.140  3.132  3.126  3.121  3.117  3.113  3.108  3.101  3.095  3.103  3.109
PS MV   :  68.3   66.7   63.8   61.6   59.7   58.2   56.3   55.3   54.5   54.1   80.0   80.0
SB MV   :  66.9   64.1   61.1   59.5   57.6   55.8   54.5   53.7   53.4   80.0   80.0   80.0
EQ      :    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
=====
```

```
=====
Draught :    13     14     15
Max.VCG :  3.115  3.122  3.127
PS MV   :  80.0   80.0   80.0
SB MV   :  80.0   80.0   80.0
EQ      :    0.0   -0.0   -0.0
=====
```

**M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM**

**VCG limit curves.**

Intact ship, Trim No:4(2m)

Date:21 MAY 2019

FA#:Pnr - flood angle 1/2/3; MV - angle for max GZ; EQ - angle for equilibrium.

Dr.No	DA(M)	DF(M)	DM(M)	VOLUME(M3)	DISPL.(T)	MaxVCG	Min.GM	PS	FA1:Pnr	SB	PS	FA2:Pnr	SB	PS	FA3:Pnr	SB
1	3.15	1.15	2.150	222.55	228.11	3.156	0.423									
2	3.25	1.25	2.250	237.67	243.62	3.136	0.416									
3	3.35	1.35	2.350	253.05	259.37	3.115	0.407									
4	3.45	1.45	2.450	268.61	275.32	3.095	0.399									
5	3.55	1.55	2.550	284.33	291.44	3.075	0.400									
6	3.65	1.65	2.650	300.21	307.71	3.056	0.404									
7	3.75	1.75	2.750	316.22	324.13	3.036	0.414									
8	3.85	1.85	2.850	332.36	340.67	3.016	0.430									
9	3.95	1.95	2.950	348.62	357.33	2.993	0.451									
10	4.05	2.05	3.050	364.98	374.10	2.969	0.475									
11	4.15	2.15	3.150	381.43	390.97	2.944	0.494									
12	4.25	2.25	3.250	397.80	407.74	2.919	0.492									
13	4.35	2.35	3.350	413.82	424.16	2.893	0.516									
14	4.45	2.45	3.450	429.40	440.13	2.868	0.335									
15	4.55	2.55	3.550	443.48	454.57	2.845	0.396									

None flooding point was used in the calculation

Claim ID: 1 (GMT)>=(0.15)

Draught :	1	2	3	4	5	6	7	8	9	10	11	12
Max.VCG :	3.429	3.402	3.372	3.344	3.325	3.310	3.301	3.295	3.293	3.295	3.288	3.262
PS MV :	28.1	29.1	30.5	33.1	38.0	42.0	43.3	45.9	47.0	80.0	80.0	80.0
SB MV :	27.5	28.1	29.4	30.7	33.1	36.0	37.7	39.2	41.1	80.0	80.0	80.0
EQ :	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0

Draught :	13	14	15
Max.VCG :	3.259	3.054	3.091
PS MV :	80.0	80.0	80.0
SB MV :	80.0	80.0	80.0
EQ :	0.0	0.0	-0.0

Claim ID: 2 (GetGZArea(HeelAngle,30))>=(0.055)

Draught :	1	2	3	4	5	6	7	8	9	10	11	12
Max.VCG :	3.156	3.136	3.115	3.095	3.075	3.056	3.036	3.016	2.993	2.969	2.944	2.919
PS MV :	54.1	58.5	59.0	58.7	58.1	80.0	80.0	80.0	80.0	80.0	80.0	80.0
SB MV :	40.8	41.9	44.8	53.6	54.5	56.0	80.0	80.0	80.0	80.0	80.0	80.0
EQ :	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0

Draught :	13	14	15
Max.VCG :	2.893	2.868	2.845
PS MV :	80.0	80.0	80.0
SB MV :	80.0	80.0	80.0
EQ :	0.0	0.0	-0.0

Claim ID: 3 (GetGZArea(HeelAngle,Min(40,FloodAngle3)))>=(0.09)

Draught :	1	2	3	4	5	6	7	8	9	10	11	12
Max.VCG :	3.158	3.140	3.122	3.103	3.083	3.066	3.046	3.026	3.005	2.984	2.963	2.940
PS MV :	53.4	58.4	58.7	58.5	57.9	80.0	80.0	80.0	80.0	80.0	80.0	80.0
SB MV :	40.6	41.6	43.8	52.8	54.1	55.8	80.0	80.0	80.0	80.0	80.0	80.0
EQ :	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0

Draught :	13	14	15
Max.VCG :	2.919	2.899	2.880
PS MV :	80.0	80.0	80.0
SB MV :	80.0	80.0	80.0
EQ :	0.0	0.0	-0.0

Claim ID: 4 (CHOOSE(Min(40,FloodAngle3) >30 ,GetGZArea(30,Min(40,FloodAngle3)),0))>=(0.03)

**M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM**

**VCG limit curves.**

Intact ship, Trim No:4(2m)

Date:21 MAY 2019

```
=====
Draught :    1      2      3      4      5      6      7      8      9     10     11     12
Max.VCG  :  3.210  3.195  3.180  3.163  3.146  3.127  3.109  3.090  3.072  3.053  3.037  3.019
PS MV    :  40.4   54.4   57.1   56.9   56.1   56.0   80.0   80.0   80.0   80.0   80.0   80.0
SB MV    :  37.4   38.4   39.3   41.7   44.4   46.4   80.0   80.0   80.0   80.0   80.0   80.0
EQ       :   0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   -0.0
=====
```

```
=====
Draught :    13     14     15
Max.VCG  :  3.004  2.988  2.974
PS MV    :  80.0   80.0   80.0
SB MV    :  80.0   80.0   80.0
EQ       :   0.0    0.0   -0.0
Claim ID: 5 (GZMaxAngle)>=(25)
=====
```

```
=====
Draught :    1      2      3      4      5      6      7      8      9     10     11     12
Max.VCG  :  3.476  3.460  3.453  3.425  3.397  3.364  3.343  3.333  3.326  3.322  3.329  3.339
PS MV    :  25.9   26.0   26.2   26.7   27.9   37.6   40.4   43.3   45.4   80.0   80.0   80.0
SB MV    :  24.9   24.9   25.1   25.1   25.1   24.9   24.9   35.6   37.9   41.9   10.7   80.0
EQ       :   0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   -0.1
=====
```

```
=====
Draught :    13     14     15
Max.VCG  :  3.349  3.356  3.362
PS MV    :  80.0   80.0   80.0
SB MV    :   0.0    0.0   80.0
EQ       :  72.6   72.7  -79.8
Claim ID: 6 (GetGZMax(30,LastAngle))>=(0.2)
=====
```

```
=====
Draught :    1      2      3      4      5      6      7      8      9     10     11     12
Max.VCG  :  3.168  3.155  3.142  3.131  3.121  3.111  3.111  3.118  3.124  3.131  3.136  3.141
PS MV    :  48.4   57.6   58.2   57.7   56.9   56.3   80.0   80.0   80.0   80.0   80.0   80.0
SB MV    :  40.0   40.6   42.0   44.1   47.5   53.9   80.0   80.0   80.0   80.0   80.0   80.0
EQ       :   0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   -0.0
=====
```

```
=====
Draught :    13     14     15
Max.VCG  :  3.146  3.154  3.160
PS MV    :  80.0   80.0   80.0
SB MV    :  80.0   80.0   80.0
EQ       :   0.0    0.0   -0.0
=====
```

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

## VCG limit curves.

The summary maxVCG-limit curves for all trims.

Date: 21 MAY 2019

Next claims were used:

Claim ID 1 (GMT) >= (0.15)

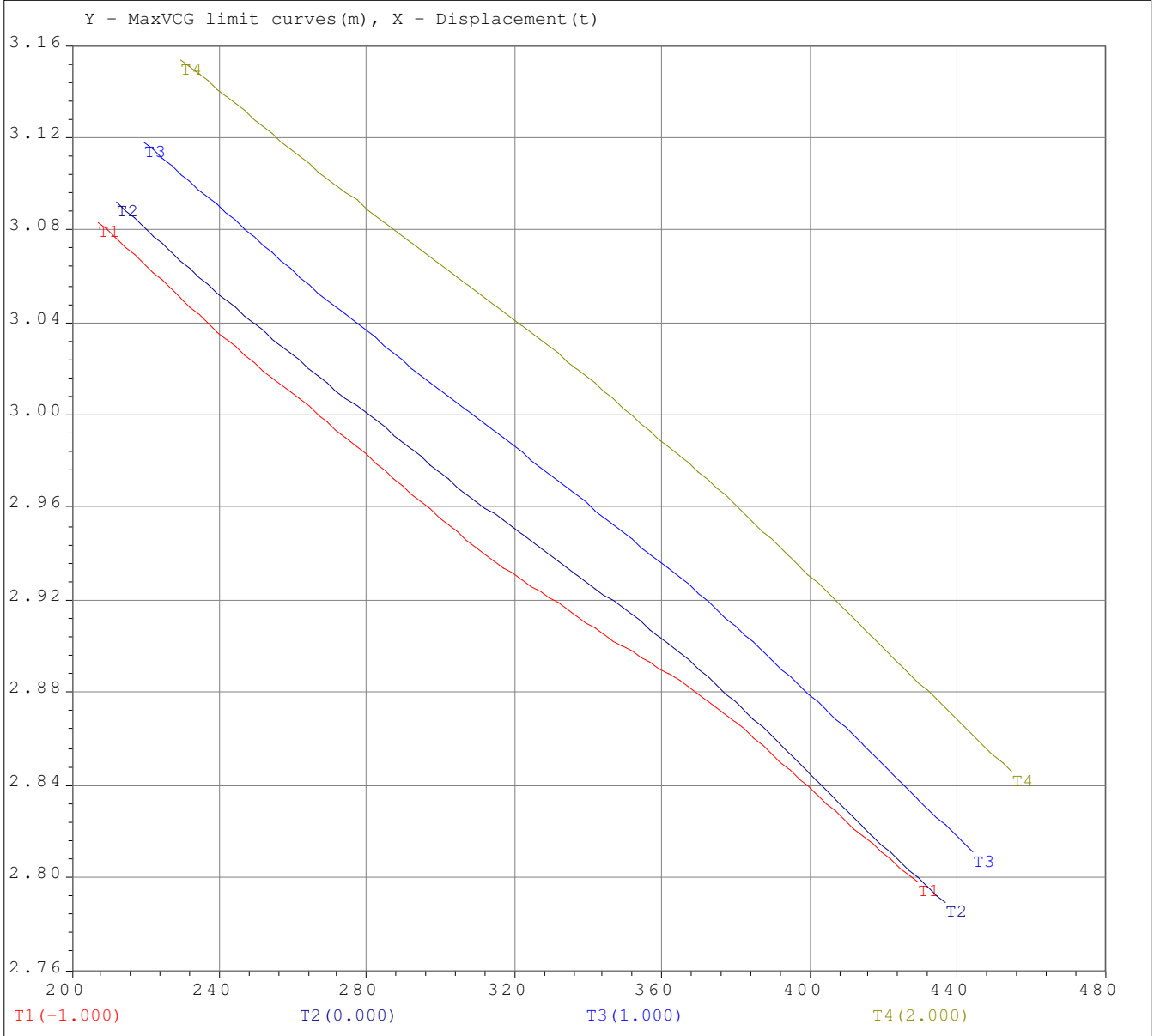
Claim ID 2 (GetGZArea(HeelAngle, 30)) >= (0.055)

Claim ID 3 (GetGZArea(HeelAngle, Min(40, FloodAngle3))) >= (0.09)

Claim ID 4 (CHOOSE(Min(40, FloodAngle3) > 30, GetGZArea(30, Min(40, FloodAngle3)), 0)) >= (0.03)

Claim ID 5 (GZMaxAngle) >= (25)

Claim ID 6 (GetGZMax(30, LastAngle)) >= (0.2)



Used: Intact ship

Decisive for the result: Intact ship

**M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM**

**VCG limit curves.**

The summary maxVCG-limit curves for all trims.

Date:21 MAY 2019

\*MinGM=KMT(Intact)-MaxVCG

Intact ship, Trim No:1(-1m)

Dr.No	DA (M)	DF (M)	DM (M)	VOLUME (M3)	DISPL. (T)	MaxVCG	*MinGM	Case	Claim_ID
1	1.650	2.650	2.150	201.93	206.98	3.084	0.427	0	3
2	1.750	2.750	2.250	216.24	221.64	3.062	0.401	0	2
3	1.850	2.850	2.350	230.73	236.50	3.040	0.382	0	2
4	1.950	2.950	2.450	245.42	251.56	3.020	0.370	0	2
5	2.050	3.050	2.550	260.31	266.82	3.001	0.367	0	2
6	2.150	3.150	2.650	275.40	282.28	2.979	0.375	0	2
7	2.250	3.250	2.750	290.67	297.94	2.958	0.387	0	2
8	2.350	3.350	2.850	306.12	313.78	2.937	0.402	0	2
9	2.450	3.450	2.950	321.78	329.83	2.921	0.418	0	2
10	2.550	3.550	3.050	337.62	346.06	2.903	0.439	0	2
11	2.650	3.650	3.150	353.64	362.48	2.888	0.463	0	2
12	2.750	3.750	3.250	369.82	379.06	2.868	0.493	0	2
13	2.850	3.850	3.350	386.15	395.80	2.845	0.530	0	2
14	2.950	3.950	3.450	402.63	412.70	2.820	0.571	0	2
15	3.050	4.050	3.550	419.21	429.69	2.798	0.534	0	2

\*MinGM=KMT(Intact)-MaxVCG

Intact ship, Trim No:2(0m)

Dr.No	DA (M)	DF (M)	DM (M)	VOLUME (M3)	DISPL. (T)	MaxVCG	*MinGM	Case	Claim_ID
1	2.150	2.150	2.150	205.22	210.35	3.094	0.425	0	3
2	2.250	2.250	2.250	219.89	225.38	3.073	0.398	0	3
3	2.350	2.350	2.350	234.77	240.64	3.051	0.382	0	2
4	2.450	2.450	2.450	249.86	256.11	3.031	0.373	0	2
5	2.550	2.550	2.550	265.16	271.78	3.011	0.372	0	2
6	2.650	2.650	2.650	280.63	287.65	2.991	0.376	0	2
7	2.750	2.750	2.750	296.28	303.69	2.970	0.388	0	2
8	2.850	2.850	2.850	312.09	319.89	2.951	0.402	0	2
9	2.950	2.950	2.950	328.06	336.26	2.931	0.421	0	2
10	3.050	3.050	3.050	344.17	352.77	2.913	0.443	0	2
11	3.150	3.150	3.150	360.44	369.45	2.891	0.472	0	2
12	3.250	3.250	3.250	376.85	386.27	2.866	0.506	0	2
13	3.350	3.350	3.350	393.39	403.23	2.840	0.545	0	2
14	3.450	3.450	3.450	410.08	420.33	2.813	0.587	0	2
15	3.550	3.550	3.550	426.88	437.55	2.788	0.629	0	2

\*MinGM=KMT(Intact)-MaxVCG

Intact ship, Trim No:3(1m)

Dr.No	DA (M)	DF (M)	DM (M)	VOLUME (M3)	DISPL. (T)	MaxVCG	*MinGM	Case	Claim_ID
1	2.650	1.650	2.150	212.03	217.33	3.120	0.421	0	3
2	2.750	1.750	2.250	227.04	232.72	3.100	0.405	0	2
3	2.850	1.850	2.350	242.27	248.33	3.079	0.391	0	2
4	2.950	1.950	2.450	257.68	264.12	3.057	0.385	0	2
5	3.050	2.050	2.550	273.28	280.11	3.036	0.384	0	2
6	3.150	2.150	2.650	289.04	296.27	3.015	0.391	0	2
7	3.250	2.250	2.750	304.97	312.59	2.996	0.400	0	2
8	3.350	2.350	2.850	321.04	329.06	2.975	0.416	0	2
9	3.450	2.450	2.950	337.23	345.66	2.955	0.435	0	2
10	3.550	2.550	3.050	353.55	362.39	2.933	0.459	0	2
11	3.650	2.650	3.150	369.98	379.23	2.909	0.489	0	2
12	3.750	2.750	3.250	386.52	396.18	2.885	0.521	0	2
13	3.850	2.850	3.350	403.16	413.24	2.860	0.552	0	2
14	3.950	2.950	3.450	419.71	430.21	2.833	0.554	0	2
15	4.050	3.050	3.550	435.47	446.35	2.809	0.364	0	2

\*MinGM=KMT(Intact)-MaxVCG

Intact ship, Trim No:4(2m)

Dr.No	DA (M)	DF (M)	DM (M)	VOLUME (M3)	DISPL. (T)	MaxVCG	*MinGM	Case	Claim_ID
1	3.150	1.150	2.150	222.55	228.11	3.156	0.423	0	2
2	3.250	1.250	2.250	237.67	243.62	3.136	0.416	0	2
3	3.350	1.350	2.350	253.05	259.37	3.115	0.407	0	2
4	3.450	1.450	2.450	268.61	275.32	3.095	0.399	0	2
5	3.550	1.550	2.550	284.33	291.44	3.075	0.400	0	2
6	3.650	1.650	2.650	300.21	307.71	3.056	0.404	0	2
7	3.750	1.750	2.750	316.22	324.13	3.036	0.414	0	2
8	3.850	1.850	2.850	332.36	340.67	3.016	0.430	0	2



# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

## VCG limit curves.

The summary maxVCG-limit curves for all trims.

Date:21 MAY 2019

Dr.No	DA (M)	DF (M)	DM (M)	VOLUME (M3)	DISPL. (T)	MaxVCG	*MinGM	Case	Claim_ID
9	3.950	1.950	2.950	348.62	357.33	2.993	0.451	0	2
10	4.050	2.050	3.050	364.98	374.10	2.969	0.475	0	2
11	4.150	2.150	3.150	381.43	390.97	2.944	0.494	0	2
12	4.250	2.250	3.250	397.80	407.74	2.919	0.492	0	2
13	4.350	2.350	3.350	413.82	424.16	2.893	0.516	0	2
14	4.450	2.450	3.450	429.40	440.13	2.868	0.335	0	2
15	4.550	2.550	3.550	443.48	454.57	2.845	0.396	0	2

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

## VCG limit curves.

Intact ship, Trim No:1(-1m)

Date:21 MAY 2019

FA#:Pnr - flood angle 1/2/3; MV - angle for max GZ; EQ - angle for equilibrium.

Dr.No	DA (M)	DF (M)	DM (M)	VOLUME (M3)	DISPL. (T)	MaxVCG	Min.GM	PS	FA1:Pnr	SB	PS	FA2:Pnr	SB	PS	FA3:Pnr	SB
1	1.65	2.65	2.150	201.93	206.98	3.084	0.427									
2	1.75	2.75	2.250	216.24	221.64	3.062	0.401									
3	1.85	2.85	2.350	230.73	236.50	3.040	0.382									
4	1.95	2.95	2.450	245.42	251.56	3.020	0.370									
5	2.05	3.05	2.550	260.31	266.82	3.001	0.367									
6	2.15	3.15	2.650	275.40	282.28	2.979	0.375									
7	2.25	3.25	2.750	290.67	297.94	2.958	0.387									
8	2.35	3.35	2.850	306.12	313.78	2.937	0.402									
9	2.45	3.45	2.950	321.78	329.83	2.921	0.418									
10	2.55	3.55	3.050	337.62	346.06	2.903	0.439									
11	2.65	3.65	3.150	353.64	362.48	2.888	0.463									
12	2.75	3.75	3.250	369.82	379.06	2.868	0.493									
13	2.85	3.85	3.350	386.15	395.80	2.845	0.530									
14	2.95	3.95	3.450	402.63	412.70	2.820	0.571									
15	3.05	4.05	3.550	419.21	429.69	2.798	0.534									

None flooding point was used in the calculation

Next claims were used:

Claim ID 1 (GMT)>=(0.15)

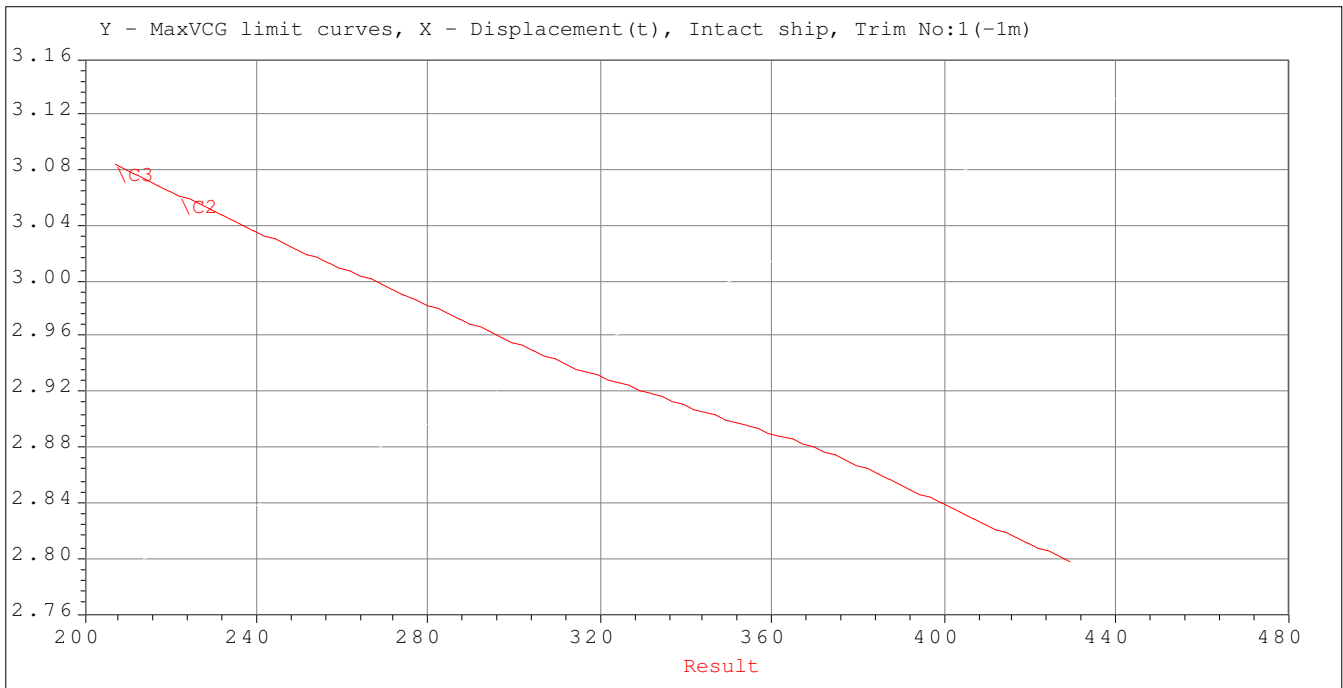
Claim ID 2 (GetGZArea(HeelAngle,30))>=(0.055)

Claim ID 3 (GetGZArea(HeelAngle,Min(40,FloodAngle3)))>=(0.09)

Claim ID 4 (CHOOSE(Min(40,FloodAngle3) >30 ,GetGZArea(30,Min(40,FloodAngle3)),0))>=(0.03)

Claim ID 5 (GZMaxAngle)>=(25)

Claim ID 6 (GetGZMax(30,LastAngle))>=(0.2)



# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

## VCG limit curves.

Intact ship, Trim No:2(0m)

Date:21 MAY 2019

FA#:Pnr - flood angle 1/2/3; MV - angle for max GZ; EQ - angle for equilibrium.

Dr.No	DA (M)	DF (M)	DM (M)	VOLUME (M3)	DISPL. (T)	MaxVCG	Min.GM	PS	FA1:Pnr	SB	PS	FA2:Pnr	SB	PS	FA3:Pnr	SB
1	2.15	2.15	2.150	205.22	210.35	3.094	0.425									
2	2.25	2.25	2.250	219.89	225.38	3.073	0.398									
3	2.35	2.35	2.350	234.77	240.64	3.051	0.382									
4	2.45	2.45	2.450	249.86	256.11	3.031	0.373									
5	2.55	2.55	2.550	265.16	271.78	3.011	0.372									
6	2.65	2.65	2.650	280.63	287.65	2.991	0.376									
7	2.75	2.75	2.750	296.28	303.69	2.970	0.388									
8	2.85	2.85	2.850	312.09	319.89	2.951	0.402									
9	2.95	2.95	2.950	328.06	336.26	2.931	0.421									
10	3.05	3.05	3.050	344.17	352.77	2.913	0.443									
11	3.15	3.15	3.150	360.44	369.45	2.891	0.472									
12	3.25	3.25	3.250	376.85	386.27	2.866	0.506									
13	3.35	3.35	3.350	393.39	403.23	2.840	0.545									
14	3.45	3.45	3.450	410.08	420.33	2.813	0.587									
15	3.55	3.55	3.550	426.88	437.55	2.788	0.629									

None flooding point was used in the calculation

Next claims were used:

Claim ID 1 (GMT) $\geq$ (0.15)

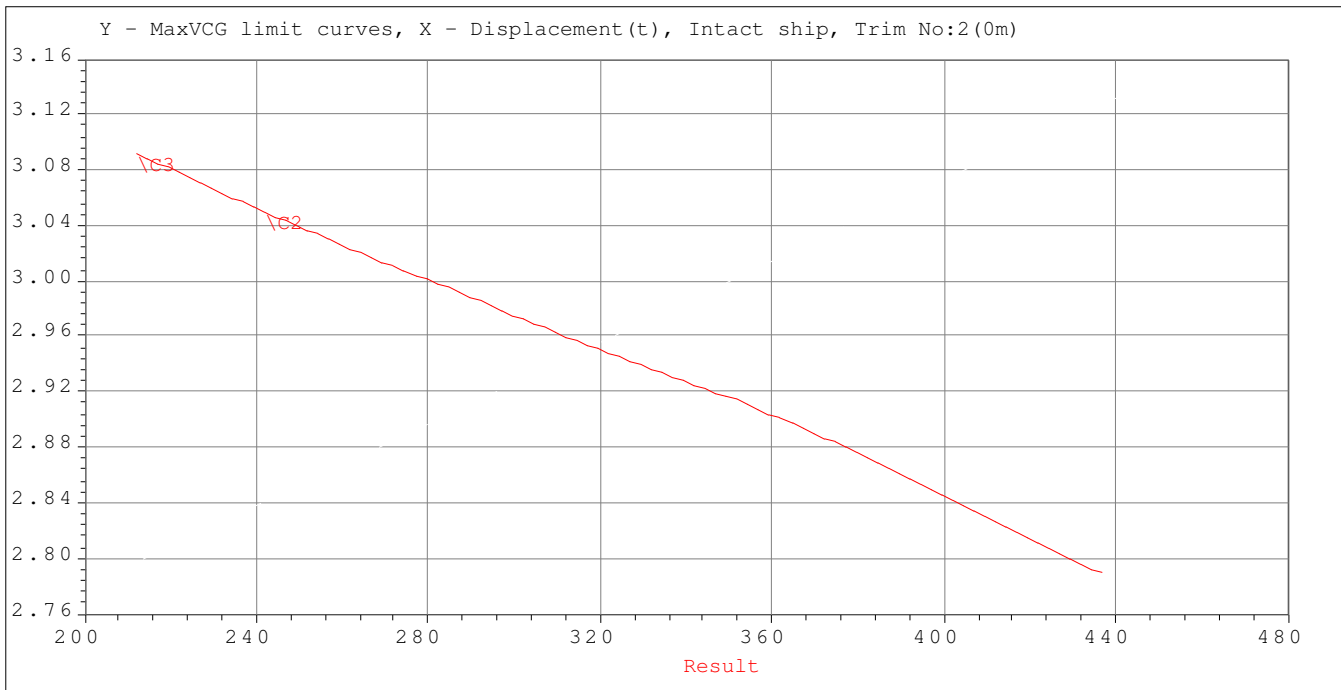
Claim ID 2 (GetGZArea(HeelAngle,30)) $\geq$ (0.055)

Claim ID 3 (GetGZArea(HeelAngle,Min(40,FloodAngle3))) $\geq$ (0.09)

Claim ID 4 (CHOOSE(Min(40,FloodAngle3) >30 ,GetGZArea(30,Min(40,FloodAngle3)),0)) $\geq$ (0.03)

Claim ID 5 (GZMaxAngle) $\geq$ (25)

Claim ID 6 (GetGZMax(30,LastAngle)) $\geq$ (0.2)



# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

## VCG limit curves.

Intact ship, Trim No:3(1m)

Date:21 MAY 2019

FA#:Pnr - flood angle 1/2/3; MV - angle for max GZ; EQ - angle for equilibrium.

Dr.No	DA (M)	DF (M)	DM (M)	VOLUME (M3)	DISPL. (T)	MaxVCG	Min.GM	PS	FA1:Pnr	SB	PS	FA2:Pnr	SB	PS	FA3:Pnr	SB
1	2.65	1.65	2.150	212.03	217.33	3.120	0.421									
2	2.75	1.75	2.250	227.04	232.72	3.100	0.405									
3	2.85	1.85	2.350	242.27	248.33	3.079	0.391									
4	2.95	1.95	2.450	257.68	264.12	3.057	0.385									
5	3.05	2.05	2.550	273.28	280.11	3.036	0.384									
6	3.15	2.15	2.650	289.04	296.27	3.015	0.391									
7	3.25	2.25	2.750	304.97	312.59	2.996	0.400									
8	3.35	2.35	2.850	321.04	329.06	2.975	0.416									
9	3.45	2.45	2.950	337.23	345.66	2.955	0.435									
10	3.55	2.55	3.050	353.55	362.39	2.933	0.459									
11	3.65	2.65	3.150	369.98	379.23	2.909	0.489									
12	3.75	2.75	3.250	386.52	396.18	2.885	0.521									
13	3.85	2.85	3.350	403.16	413.24	2.860	0.552									
14	3.95	2.95	3.450	419.71	430.21	2.833	0.554									
15	4.05	3.05	3.550	435.47	446.35	2.809	0.364									

None flooding point was used in the calculation

Next claims were used:

Claim ID 1 (GMT)>=(0.15)

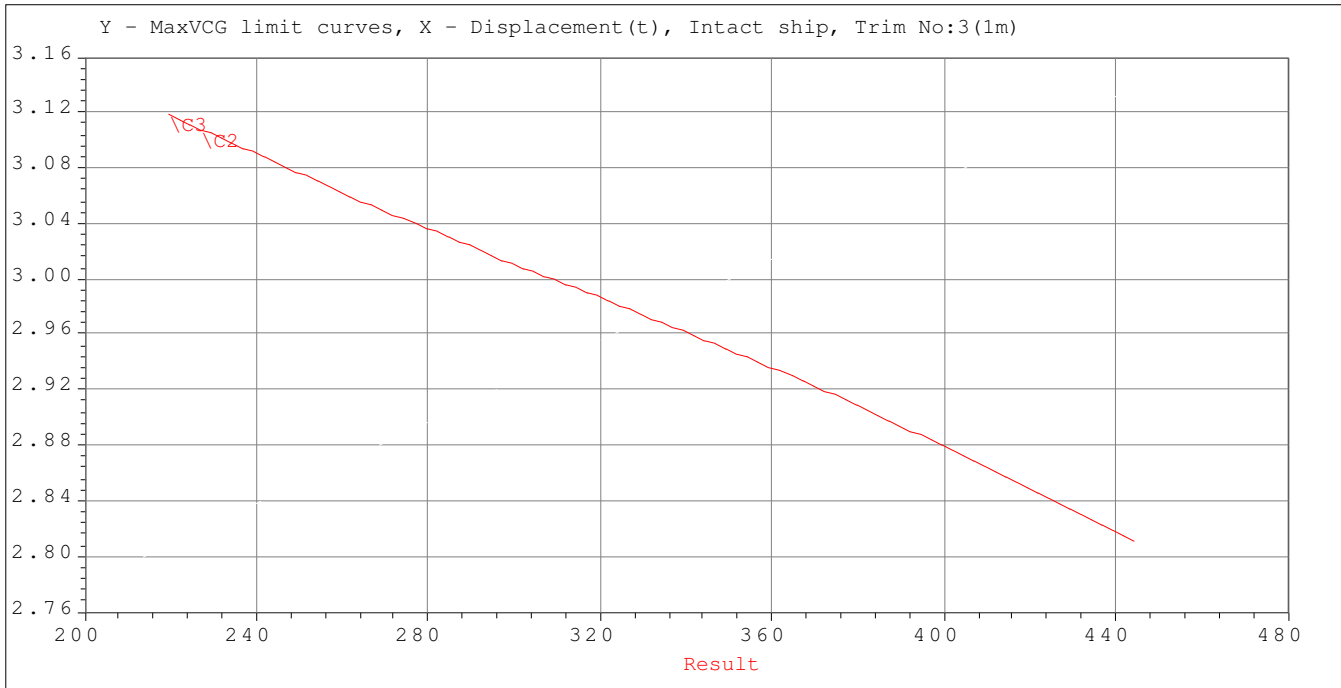
Claim ID 2 (GetGZArea(HeelAngle,30))>=(0.055)

Claim ID 3 (GetGZArea(HeelAngle,Min(40,FloodAngle3)))>=(0.09)

Claim ID 4 (CHOOSE(Min(40,FloodAngle3) >30 ,GetGZArea(30,Min(40,FloodAngle3)),0))>=(0.03)

Claim ID 5 (GZMaxAngle)>=(25)

Claim ID 6 (GetGZMax(30,LastAngle))>=(0.2)



# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

## VCG limit curves.

Intact ship, Trim No:4(2m)

Date:21 MAY 2019

FA#:Pnr - flood angle 1/2/3; MV - angle for max GZ; EQ - angle for equilibrium.

Dr.No	DA(M)	DF(M)	DM(M)	VOLUME(M3)	DISPL.(T)	MaxVCG	Min.GM	PS	FA1:Pnr	SB	PS	FA2:Pnr	SB	PS	FA3:Pnr	SB
1	3.15	1.15	2.150	222.55	228.11	3.156	0.423									
2	3.25	1.25	2.250	237.67	243.62	3.136	0.416									
3	3.35	1.35	2.350	253.05	259.37	3.115	0.407									
4	3.45	1.45	2.450	268.61	275.32	3.095	0.399									
5	3.55	1.55	2.550	284.33	291.44	3.075	0.400									
6	3.65	1.65	2.650	300.21	307.71	3.056	0.404									
7	3.75	1.75	2.750	316.22	324.13	3.036	0.414									
8	3.85	1.85	2.850	332.36	340.67	3.016	0.430									
9	3.95	1.95	2.950	348.62	357.33	2.993	0.451									
10	4.05	2.05	3.050	364.98	374.10	2.969	0.475									
11	4.15	2.15	3.150	381.43	390.97	2.944	0.494									
12	4.25	2.25	3.250	397.80	407.74	2.919	0.492									
13	4.35	2.35	3.350	413.82	424.16	2.893	0.516									
14	4.45	2.45	3.450	429.40	440.13	2.868	0.335									
15	4.55	2.55	3.550	443.48	454.57	2.845	0.396									

None flooding point was used in the calculation

Next claims were used:

Claim ID 1 (GMT)>=(0.15)

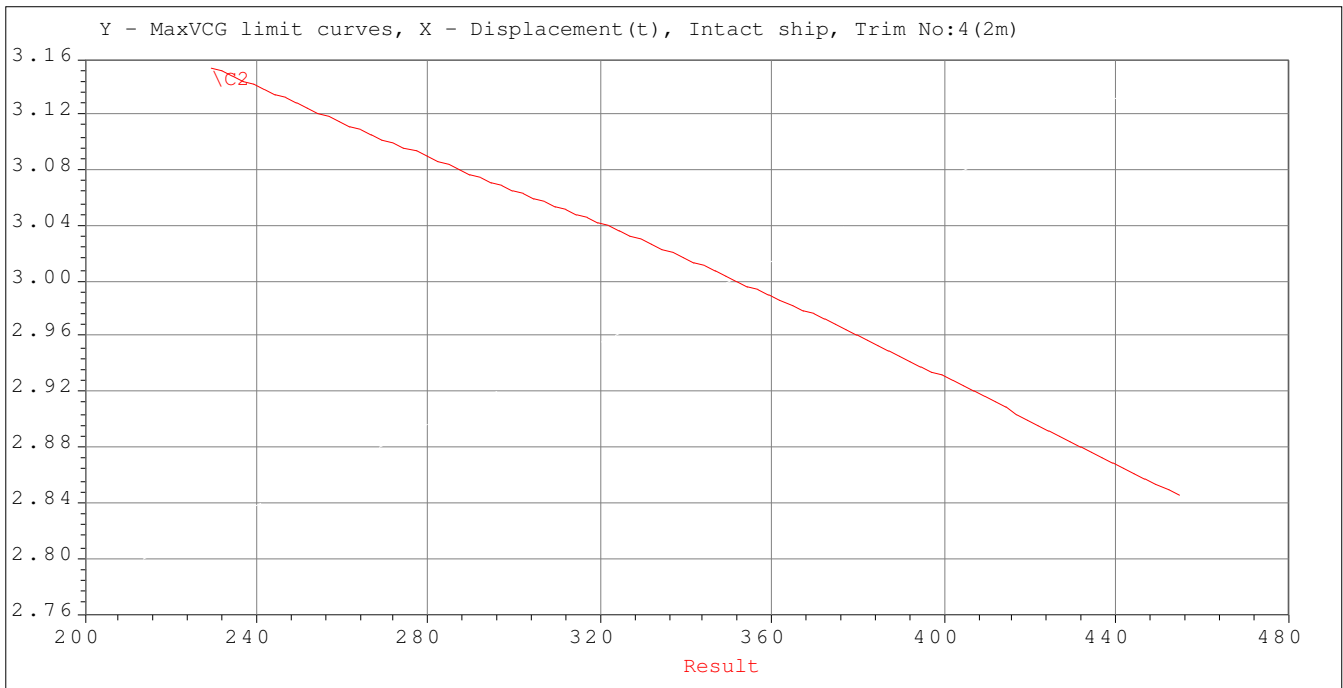
Claim ID 2 (GetGZArea(HeelAngle,30))>=(0.055)

Claim ID 3 (GetGZArea(HeelAngle,Min(40,FloodAngle3)))>=(0.09)

Claim ID 4 (CHOOSE(Min(40,FloodAngle3) >30 ,GetGZArea(30,Min(40,FloodAngle3)),0))>=(0.03)

Claim ID 5 (GZMaxAngle)>=(25)

Claim ID 6 (GetGZMax(30,LastAngle))>=(0.2)



**M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM**

**VCG limit curves.**

The interpolated table. Sp.Gravity = 1.025

Date:21 MAY 2019

\*MinGM=KMT(Intact)-MaxVCG

Intact ship, Trim No:1(-1m)

DISPL. (T)	MaxVCG	*MinGM	Case	Claim_ID	DISPL. (T)	MaxVCG	*MinGM	Case	Claim_ID
206.98	3.084	0.427	0	3	319.52	2.931	0.408	0	2
209.48	3.080	0.422	0	3	322.02	2.929	0.411	0	2
211.98	3.076	0.418	0	3	324.52	2.926	0.413	0	2
214.48	3.073	0.414	0	3	327.02	2.924	0.415	0	2
216.98	3.069	0.409	0	3	329.52	2.921	0.418	0	2
219.48	3.066	0.405	0	3	332.02	2.919	0.421	0	2
221.98	3.062	0.401	0	2	334.52	2.916	0.424	0	2
224.48	3.058	0.397	0	2	337.02	2.913	0.427	0	2
226.98	3.054	0.394	0	2	339.52	2.910	0.431	0	2
229.48	3.051	0.391	0	2	342.03	2.908	0.434	0	2
231.99	3.047	0.388	0	2	344.53	2.905	0.437	0	2
234.49	3.043	0.384	0	2	347.03	2.903	0.440	0	2
236.99	3.040	0.381	0	2	349.53	2.900	0.444	0	2
239.49	3.036	0.379	0	2	352.03	2.898	0.448	0	2
241.99	3.033	0.377	0	2	354.53	2.895	0.451	0	2
244.49	3.029	0.376	0	2	357.03	2.893	0.455	0	2
246.99	3.026	0.374	0	2	359.53	2.891	0.458	0	2
249.49	3.023	0.372	0	2	362.03	2.888	0.462	0	2
251.99	3.019	0.370	0	2	364.53	2.885	0.466	0	2
254.49	3.016	0.370	0	2	367.04	2.882	0.471	0	2
256.99	3.013	0.369	0	2	369.54	2.879	0.476	0	2
259.50	3.010	0.369	0	2	372.04	2.877	0.480	0	2
262.00	3.007	0.368	0	2	374.54	2.874	0.485	0	2
264.50	3.004	0.368	0	2	377.04	2.871	0.490	0	2
267.00	3.000	0.367	0	2	379.54	2.868	0.494	0	2
269.50	2.997	0.368	0	2	382.04	2.864	0.500	0	2
272.00	2.993	0.370	0	2	384.54	2.861	0.505	0	2
274.50	2.990	0.371	0	2	387.04	2.857	0.511	0	2
277.00	2.987	0.372	0	2	389.54	2.854	0.516	0	2
279.50	2.983	0.373	0	2	392.04	2.850	0.522	0	2
282.00	2.980	0.375	0	2	394.55	2.846	0.527	0	2
284.50	2.976	0.377	0	2	397.05	2.843	0.533	0	2
287.01	2.973	0.378	0	2	399.55	2.839	0.539	0	2
289.51	2.969	0.380	0	2	402.05	2.836	0.545	0	2
292.01	2.966	0.382	0	2	404.55	2.832	0.551	0	2
294.51	2.962	0.384	0	2	407.05	2.828	0.557	0	2
297.01	2.959	0.386	0	2	409.55	2.825	0.563	0	2
299.51	2.956	0.388	0	2	412.05	2.821	0.569	0	2
302.01	2.953	0.391	0	2	414.55	2.818	0.567	0	2
304.51	2.949	0.393	0	2	417.05	2.815	0.561	0	2
307.01	2.946	0.396	0	2	419.55	2.811	0.556	0	2
309.51	2.943	0.398	0	2	422.06	2.808	0.551	0	2
312.01	2.940	0.401	0	2	424.56	2.805	0.545	0	2
314.52	2.937	0.403	0	2	427.06	2.801	0.540	0	2
317.02	2.934	0.406	0	2	429.56	2.798	0.534	0	2

**M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM**

**VCG limit curves.**

The interpolated table. Sp.Gravity = 1.025

Date:21 MAY 2019

\*MinGM=KMT(Intact)-MaxVCG

Intact ship, Trim No:2(0m)

DISPL. (T)	MaxVCG	*MinGM	Case	Claim_ID	DISPL. (T)	MaxVCG	*MinGM	Case	Claim_ID
211.98	3.092	0.422	0	3	327.02	2.942	0.410	0	2
214.48	3.088	0.417	0	3	329.52	2.939	0.413	0	2
216.98	3.085	0.413	0	3	332.02	2.936	0.416	0	2
219.48	3.081	0.409	0	3	334.52	2.934	0.419	0	2
221.98	3.078	0.404	0	3	337.02	2.931	0.422	0	2
224.48	3.074	0.400	0	3	339.52	2.928	0.425	0	2
226.98	3.070	0.396	0	3	342.03	2.925	0.429	0	2
229.48	3.067	0.394	0	3	344.53	2.922	0.432	0	2
231.99	3.063	0.391	0	3	347.03	2.919	0.435	0	2
234.49	3.060	0.388	0	3	349.53	2.917	0.439	0	2
236.99	3.056	0.386	0	3	352.03	2.914	0.442	0	2
239.49	3.053	0.383	0	3	354.53	2.911	0.446	0	2
241.99	3.050	0.381	0	2	357.03	2.907	0.450	0	2
244.49	3.046	0.380	0	2	359.53	2.904	0.455	0	2
246.99	3.043	0.378	0	2	362.03	2.901	0.459	0	2
249.49	3.040	0.377	0	2	364.53	2.897	0.463	0	2
251.99	3.037	0.376	0	2	367.04	2.894	0.468	0	2
254.49	3.033	0.374	0	2	369.54	2.891	0.472	0	2
256.99	3.030	0.373	0	2	372.04	2.887	0.477	0	2
259.50	3.027	0.373	0	2	374.54	2.883	0.482	0	2
262.00	3.023	0.373	0	2	377.04	2.880	0.487	0	2
264.50	3.020	0.373	0	2	379.54	2.876	0.492	0	2
267.00	3.017	0.373	0	2	382.04	2.872	0.498	0	2
269.50	3.014	0.373	0	2	384.54	2.869	0.503	0	2
272.00	3.010	0.373	0	2	387.04	2.865	0.508	0	2
274.50	3.007	0.373	0	2	389.54	2.861	0.514	0	2
277.00	3.004	0.374	0	2	392.04	2.857	0.520	0	2
279.50	3.001	0.374	0	2	394.55	2.853	0.525	0	2
282.00	2.998	0.375	0	2	397.05	2.849	0.531	0	2
284.50	2.995	0.376	0	2	399.55	2.845	0.537	0	2
287.01	2.992	0.376	0	2	402.05	2.841	0.543	0	2
289.51	2.988	0.378	0	2	404.55	2.838	0.549	0	2
292.01	2.985	0.380	0	2	407.05	2.834	0.555	0	2
294.51	2.982	0.381	0	2	409.55	2.830	0.561	0	2
297.01	2.979	0.383	0	2	412.05	2.826	0.567	0	2
299.51	2.975	0.385	0	2	414.55	2.822	0.573	0	2
302.01	2.972	0.387	0	2	417.05	2.818	0.579	0	2
304.51	2.969	0.389	0	2	419.55	2.814	0.585	0	2
307.01	2.966	0.391	0	2	422.06	2.811	0.591	0	2
309.51	2.963	0.393	0	2	424.56	2.807	0.597	0	2
312.01	2.960	0.395	0	2	427.06	2.803	0.603	0	2
314.52	2.957	0.397	0	2	429.56	2.800	0.610	0	2
317.02	2.954	0.400	0	2	432.06	2.796	0.616	0	2
319.52	2.951	0.402	0	2	434.56	2.793	0.622	0	2
322.02	2.948	0.405	0	2	437.06	2.789	0.628	0	2
324.52	2.945	0.407	0	2					

**M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM**

**VCG limit curves.**

The interpolated table. Sp.Gravity = 1.025

Date:21 MAY 2019

\*MinGM=KMT(Intact)-MaxVCG

Intact ship, Trim No:3(lm)

DISPL. (T)	MaxVCG	*MinGM	Case	Claim_ID	DISPL. (T)	MaxVCG	*MinGM	Case	Claim_ID
219.48	3.118	0.418	0	3	334.52	2.968	0.422	0	2
221.98	3.115	0.416	0	3	337.02	2.965	0.425	0	2
224.48	3.111	0.413	0	3	339.52	2.962	0.428	0	2
226.98	3.108	0.410	0	2	342.03	2.959	0.431	0	2
229.48	3.104	0.408	0	2	344.53	2.956	0.434	0	2
231.99	3.101	0.406	0	2	347.03	2.953	0.437	0	2
234.49	3.097	0.403	0	2	349.53	2.950	0.441	0	2
236.99	3.094	0.401	0	2	352.03	2.946	0.444	0	2
239.49	3.091	0.399	0	2	354.53	2.943	0.448	0	2
241.99	3.087	0.397	0	2	357.03	2.940	0.451	0	2
244.49	3.084	0.395	0	2	359.53	2.937	0.455	0	2
246.99	3.081	0.392	0	2	362.03	2.933	0.458	0	2
249.49	3.077	0.391	0	2	364.53	2.930	0.463	0	2
251.99	3.074	0.390	0	2	367.04	2.926	0.467	0	2
254.49	3.070	0.389	0	2	369.54	2.923	0.471	0	2
256.99	3.067	0.388	0	2	372.04	2.919	0.476	0	2
259.50	3.063	0.387	0	2	374.54	2.916	0.480	0	2
262.00	3.060	0.386	0	2	377.04	2.912	0.485	0	2
264.50	3.056	0.385	0	2	379.54	2.909	0.489	0	2
267.00	3.053	0.385	0	2	382.04	2.905	0.494	0	2
269.50	3.050	0.385	0	2	384.54	2.902	0.499	0	2
272.00	3.046	0.385	0	2	387.04	2.898	0.504	0	2
274.50	3.043	0.385	0	2	389.54	2.894	0.509	0	2
277.00	3.040	0.384	0	2	392.04	2.891	0.513	0	2
279.50	3.037	0.384	0	2	394.55	2.887	0.518	0	2
282.00	3.034	0.385	0	2	397.05	2.883	0.523	0	2
284.50	3.030	0.386	0	2	399.55	2.880	0.527	0	2
287.01	3.027	0.387	0	2	402.05	2.876	0.532	0	2
289.51	3.024	0.388	0	2	404.55	2.872	0.536	0	2
292.01	3.020	0.389	0	2	407.05	2.869	0.541	0	2
294.51	3.017	0.390	0	2	409.55	2.865	0.545	0	2
297.01	3.014	0.391	0	2	412.05	2.861	0.550	0	2
299.51	3.011	0.392	0	2	414.55	2.858	0.552	0	2
302.01	3.008	0.394	0	2	417.05	2.854	0.552	0	2
304.51	3.005	0.395	0	2	419.55	2.850	0.553	0	2
307.01	3.002	0.397	0	2	422.06	2.846	0.553	0	2
309.51	2.999	0.398	0	2	424.56	2.842	0.553	0	2
312.01	2.996	0.400	0	2	427.06	2.838	0.554	0	2
314.52	2.993	0.402	0	2	429.56	2.834	0.554	0	2
317.02	2.990	0.404	0	2	432.06	2.830	0.532	0	2
319.52	2.987	0.407	0	2	434.56	2.826	0.503	0	2
322.02	2.984	0.409	0	2	437.06	2.823	0.473	0	2
324.52	2.981	0.412	0	2	439.56	2.819	0.444	0	2
327.02	2.977	0.414	0	2	442.06	2.815	0.414	0	2
329.52	2.974	0.417	0	2	444.56	2.811	0.385	0	2
332.02	2.971	0.420	0	2					



**M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM**

**VCG limit curves.**

The interpolated table. Sp.Gravity = 1.025

Date:21 MAY 2019

\*MinGM=KMT(Intact)-MaxVCG

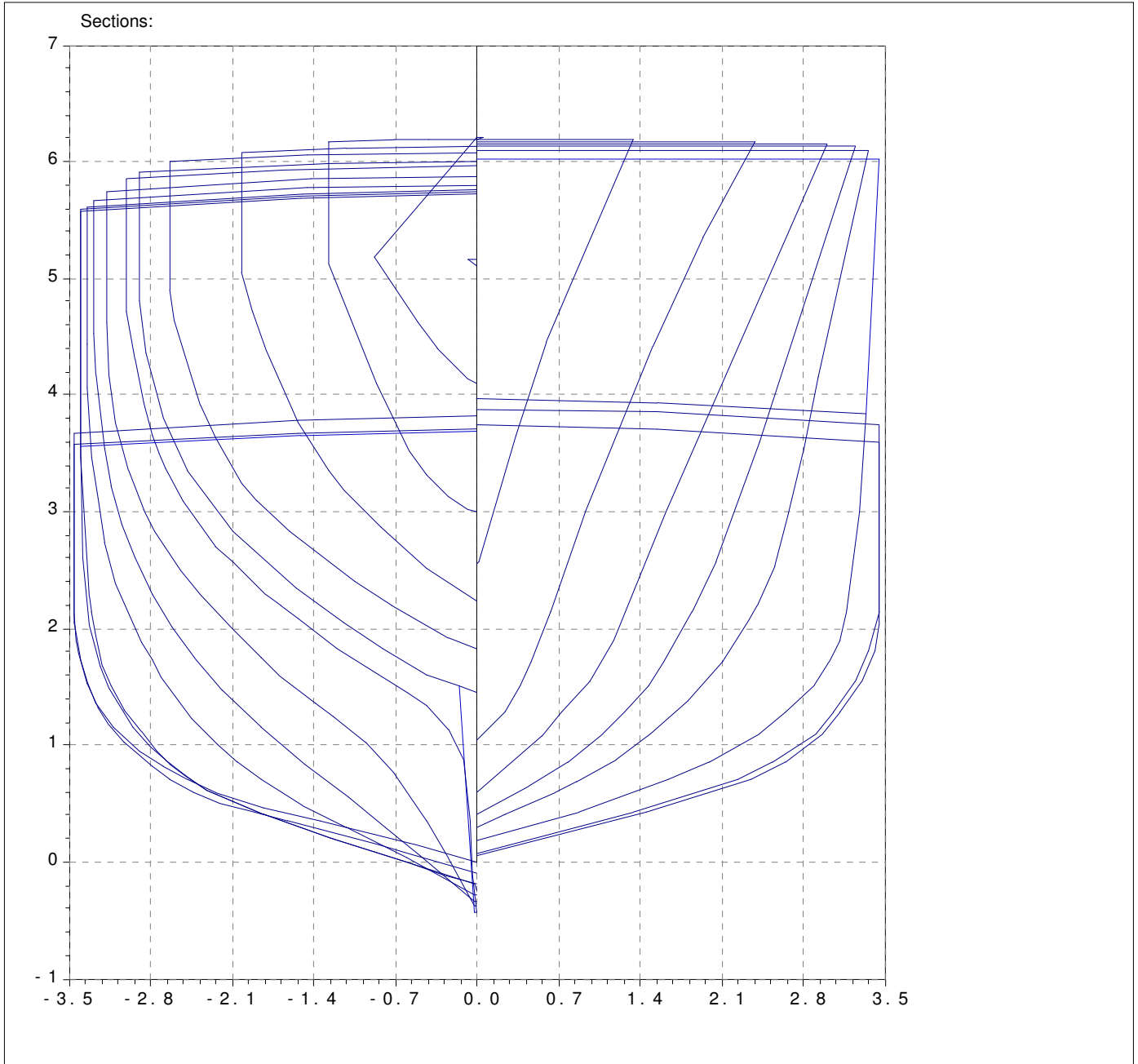
Intact ship, Trim No:4(2m)

DISPL.(T)	MaxVCG	*MinGM	Case	Claim_ID	DISPL.(T)	MaxVCG	*MinGM	Case	Claim_ID
229.48	3.154	0.423	0	2	344.53	3.010	0.434	0	2
231.99	3.151	0.421	0	2	347.03	3.007	0.438	0	2
234.49	3.147	0.420	0	2	349.53	3.003	0.441	0	2
236.99	3.144	0.419	0	2	352.03	3.000	0.444	0	2
239.49	3.141	0.418	0	2	354.53	2.996	0.447	0	2
241.99	3.138	0.417	0	2	357.03	2.993	0.450	0	2
244.49	3.135	0.415	0	2	359.53	2.990	0.454	0	2
246.99	3.131	0.414	0	2	362.03	2.986	0.457	0	2
249.49	3.128	0.412	0	2	364.53	2.983	0.461	0	2
251.99	3.125	0.411	0	2	367.04	2.979	0.465	0	2
254.49	3.122	0.410	0	2	369.54	2.976	0.468	0	2
256.99	3.118	0.408	0	2	372.04	2.972	0.472	0	2
259.50	3.115	0.407	0	2	374.54	2.969	0.475	0	2
262.00	3.112	0.406	0	2	377.04	2.965	0.478	0	2
264.50	3.109	0.405	0	2	379.54	2.961	0.481	0	2
267.00	3.105	0.403	0	2	382.04	2.957	0.484	0	2
269.50	3.102	0.402	0	2	384.54	2.954	0.487	0	2
272.00	3.099	0.401	0	2	387.04	2.950	0.490	0	2
274.50	3.096	0.400	0	2	389.54	2.946	0.493	0	2
277.00	3.093	0.400	0	2	392.04	2.942	0.494	0	2
279.50	3.090	0.400	0	2	394.55	2.939	0.494	0	2
282.00	3.086	0.400	0	2	397.05	2.935	0.494	0	2
284.50	3.083	0.400	0	2	399.55	2.931	0.493	0	2
287.01	3.080	0.400	0	2	402.05	2.927	0.493	0	2
289.51	3.077	0.400	0	2	404.55	2.924	0.493	0	2
292.01	3.074	0.400	0	2	407.05	2.920	0.492	0	2
294.51	3.071	0.401	0	2	409.55	2.916	0.495	0	2
297.01	3.068	0.402	0	2	412.05	2.912	0.499	0	2
299.51	3.065	0.402	0	2	414.55	2.908	0.502	0	2
302.01	3.063	0.403	0	2	417.05	2.904	0.506	0	2
304.51	3.060	0.404	0	2	419.55	2.900	0.510	0	2
307.01	3.057	0.404	0	2	422.06	2.896	0.513	0	2
309.51	3.054	0.405	0	2	424.56	2.892	0.512	0	2
312.01	3.051	0.407	0	2	427.06	2.888	0.484	0	2
314.52	3.048	0.408	0	2	429.56	2.885	0.455	0	2
317.02	3.045	0.410	0	2	432.06	2.881	0.427	0	2
319.52	3.042	0.411	0	2	434.56	2.877	0.399	0	2
322.02	3.039	0.413	0	2	437.06	2.873	0.370	0	2
324.52	3.036	0.415	0	2	439.56	2.869	0.342	0	2
327.02	3.033	0.417	0	2	442.06	2.865	0.343	0	2
329.52	3.030	0.419	0	2	444.56	2.861	0.354	0	2
332.02	3.026	0.422	0	2	447.06	2.857	0.364	0	2
334.52	3.023	0.424	0	2	449.57	2.853	0.375	0	2
337.02	3.020	0.426	0	2	452.07	2.849	0.386	0	2
339.52	3.017	0.428	0	2	454.57	2.845	0.396	0	2
342.03	3.014	0.431	0	2					

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

## The list of Ship's hull sections

Date: 21 MAY 2019



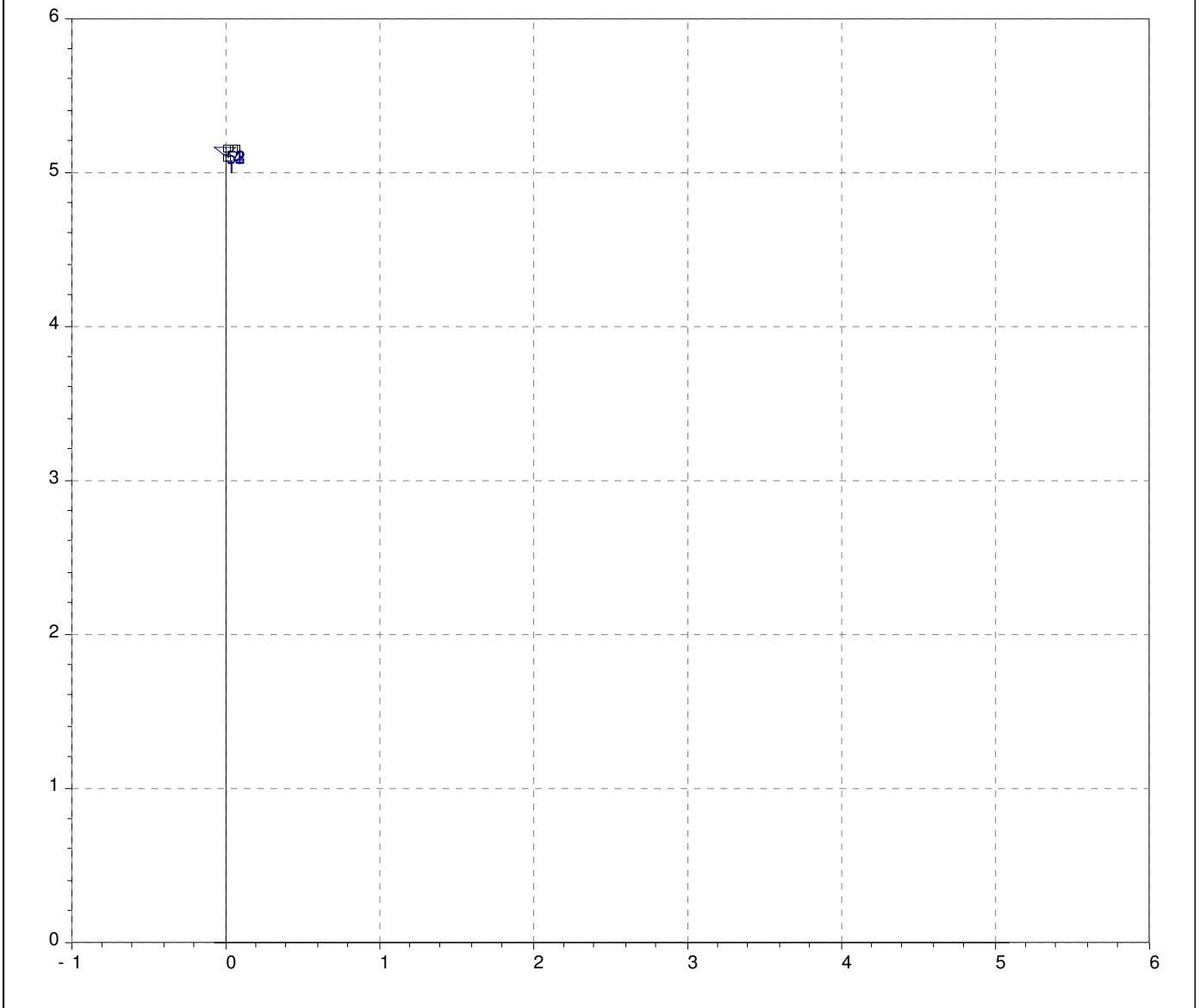
No	From AP (input)	From AP (m)	Points (input)	Points
1	-2.144	-2.144	5.00	5
2	-1.945	-1.945	6.00	6
3	-1.715	-1.715	11.00	11
4	-1.048	-1.048	12.00	12
5	0.00	0.000	14.00	14
6	0.953	0.953	13.12	16
7	1.363	1.363	25.00	25
8	2.726	2.726	22.00	22
9	4.088	4.088	20.00	20
10	5.451	5.451	21.00	21
11	6.863	6.863	20.00	20
12	8.05	8.050	15.32	20

No	From AP (input)	From AP (m)	Points (input)	Points
13	10.972	10.972	19.00	19
14	13.715	13.715	18.00	18
15	15.2	15.200	12.00	12
16	16.0	16.000	12.00	12
17	18.80	18.800	12.22	16
18	21.944	21.944	16.00	16
19	23.316	23.316	12.00	12
20	24.69	24.690	8.00	8
21	26.06	26.060	10.00	10
22	27.43	27.430	7.00	7
23	28.357	28.357	3.00	3

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

Date: 21 MAY 2019

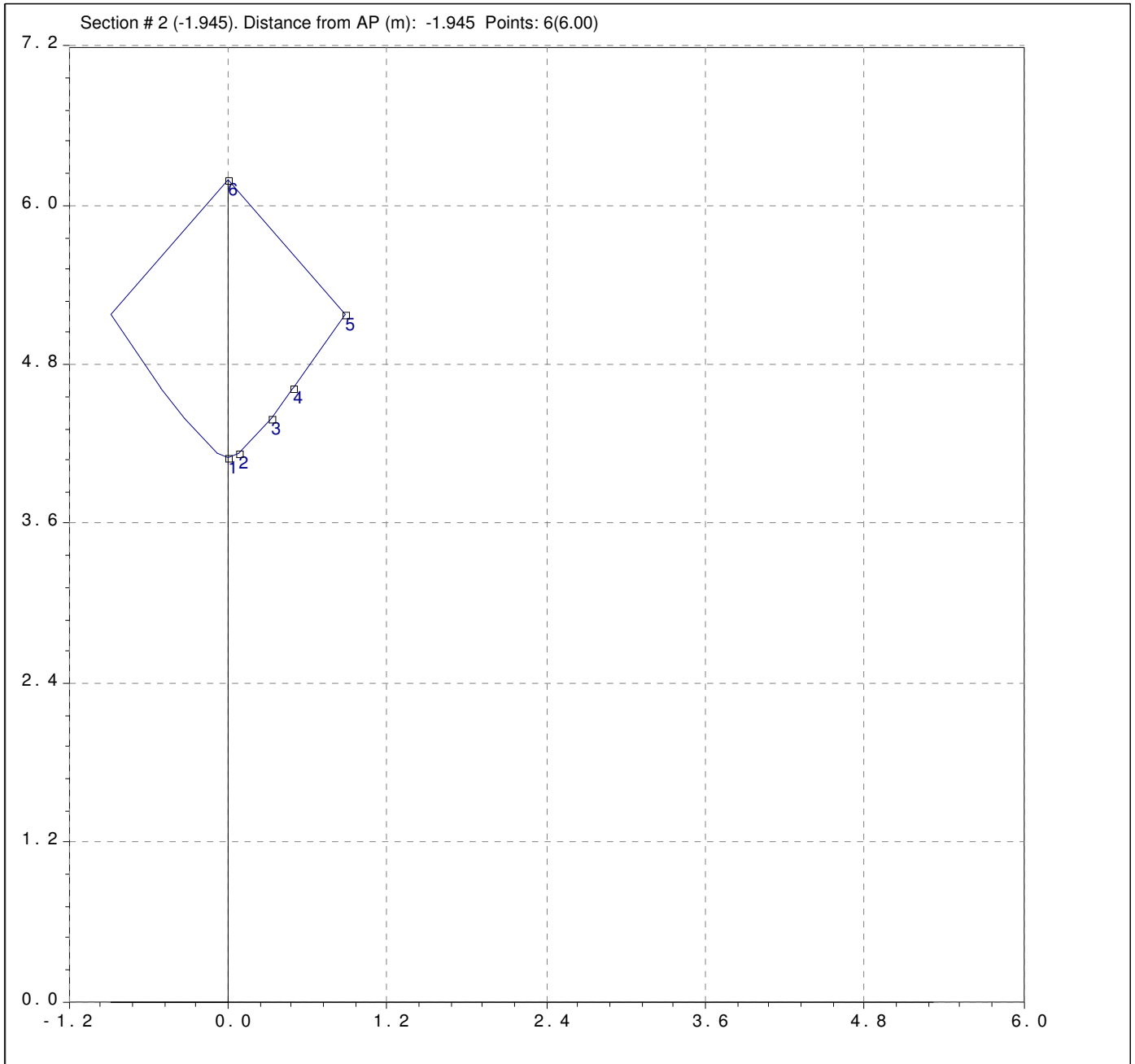
Section # 1 (-2.144). Distance from AP (m): -2.144 Points: 5(5.00)



P	Breadth (m)	Height (m)
1	0.000	5.100
2	0.070	5.160
3	0.062	5.160
4	0.047	5.160
5	0.000	5.160

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

Date: 21 MAY 2019

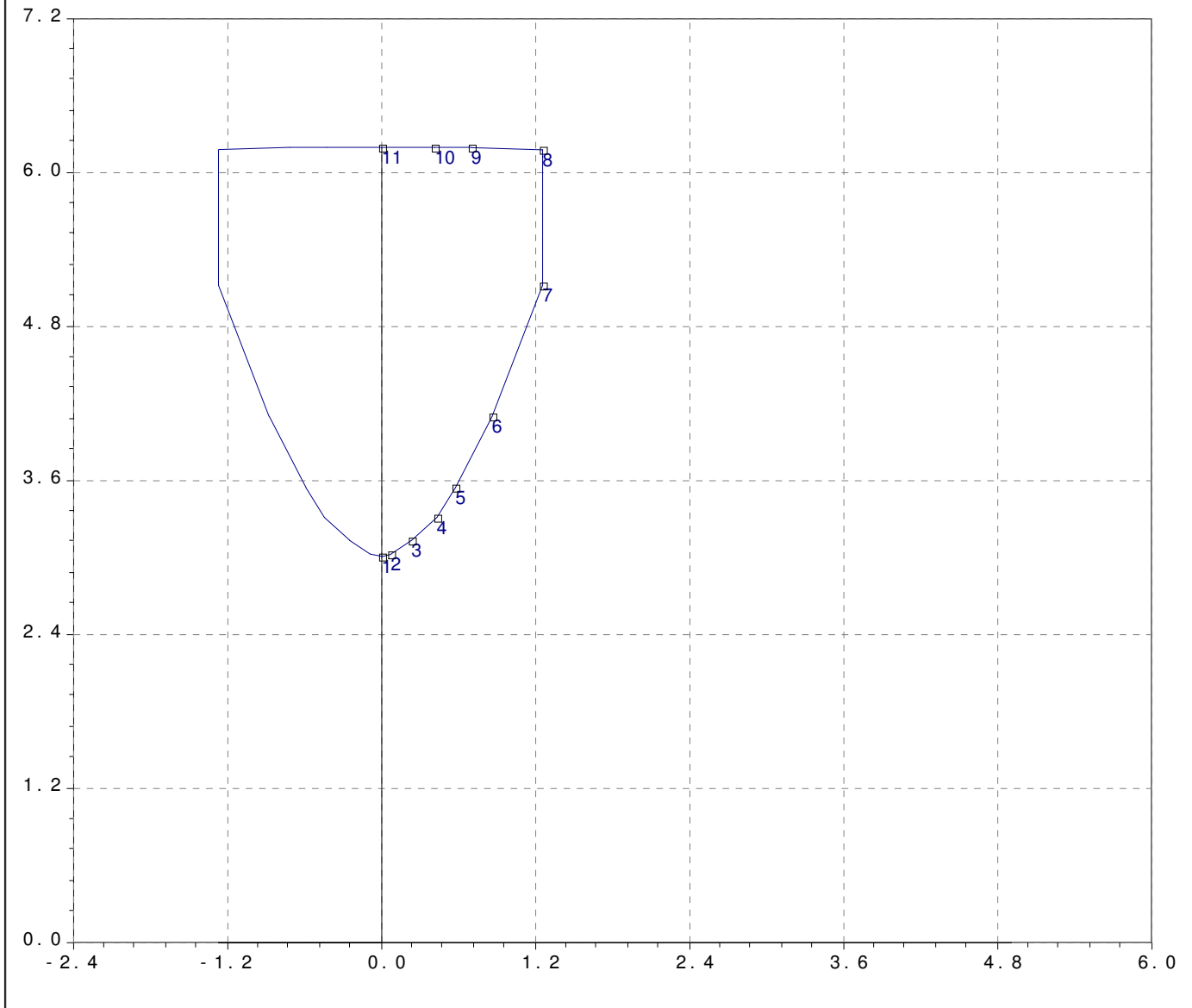


P	Breadth (m)	Height (m)
1	0.000	4.100
2	0.080	4.130
3	0.330	4.400
4	0.500	4.630
5	0.880	5.180
6	0.000	6.200

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

Date: 21 MAY 2019

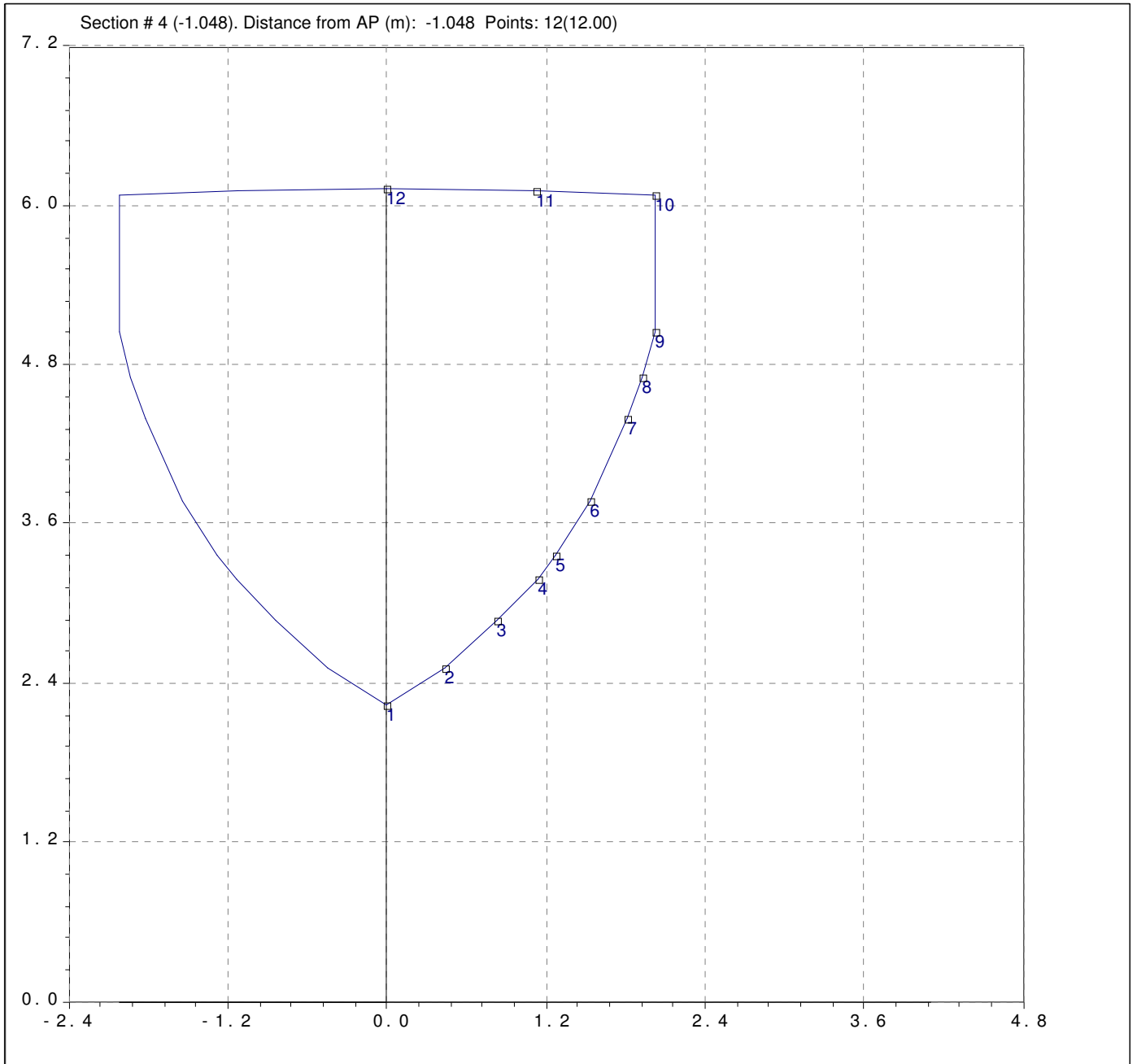
Section # 3 (-1.715). Distance from AP (m): -1.715 Points: 11(11.00)



P	Breadth (m)	Height (m)
1	0.000	3.000
2	0.080	3.010
3	0.250	3.130
4	0.430	3.310
5	0.580	3.530
6	0.870	4.100
7	1.270	5.120
8	1.270	6.170
9	0.706	6.184
10	0.423	6.188
11	0.000	6.190

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

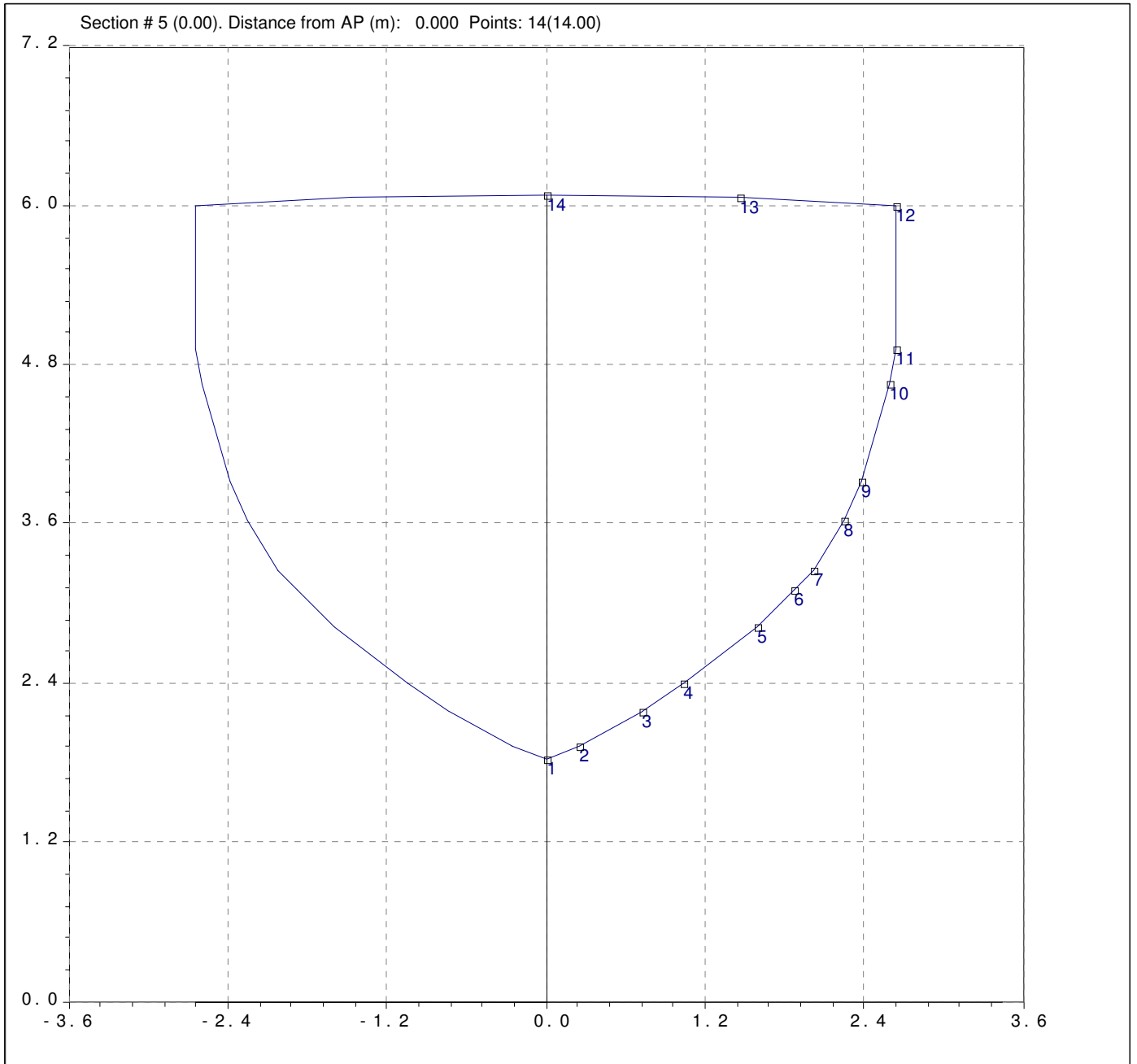
Date: 21 MAY 2019



P	Breadth (m)	Height (m)
1	0.000	2.240
2	0.440	2.520
3	0.830	2.870
4	1.140	3.190
5	1.280	3.360
6	1.540	3.770
7	1.820	4.400
8	1.930	4.710
9	2.020	5.050
10	2.020	6.080
11	1.122	6.114
12	0.000	6.130

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

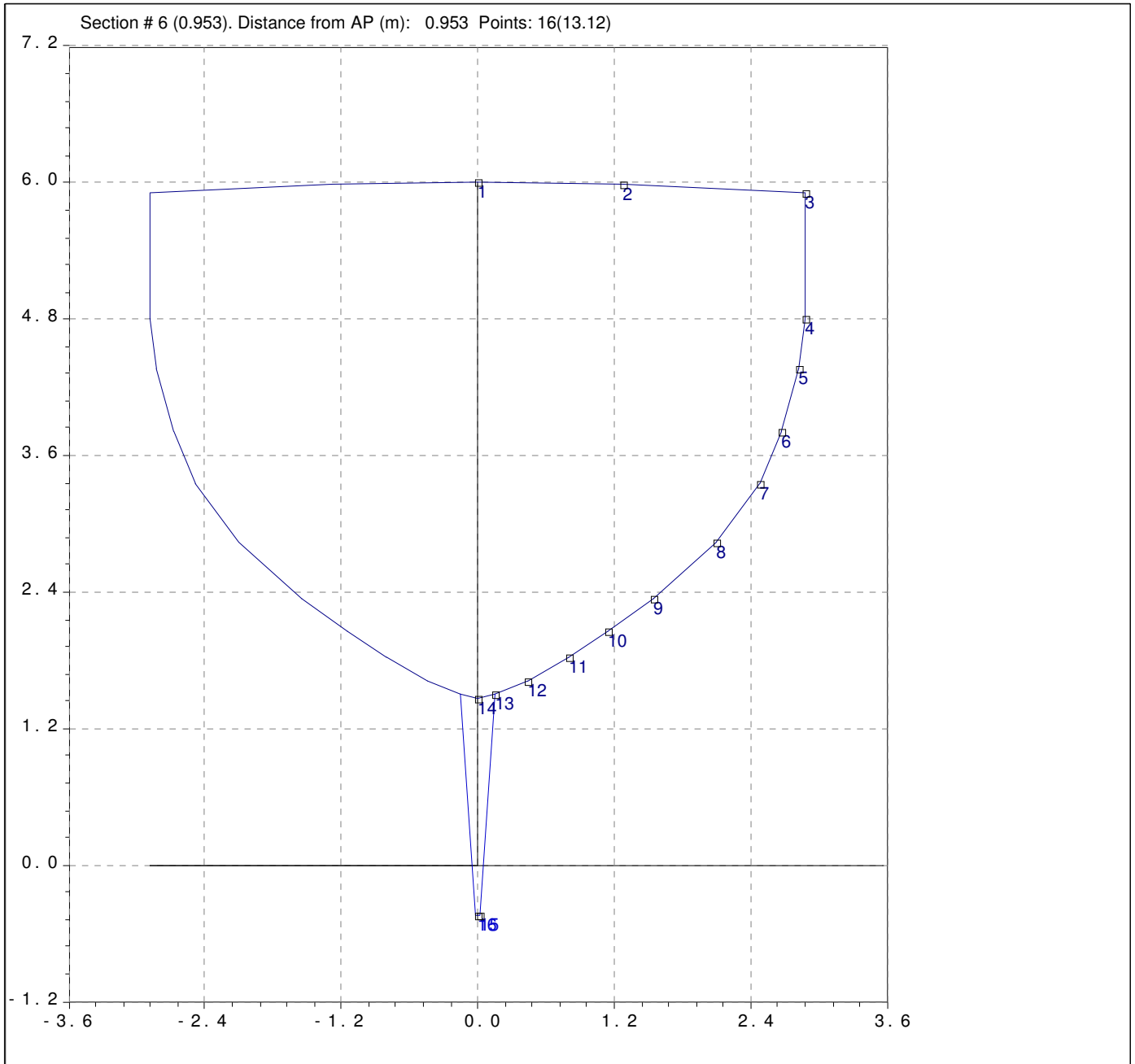
Date: 21 MAY 2019



P	Breadth (m)	Height (m)
1	0.000	1.820
2	0.250	1.920
3	0.730	2.190
4	1.040	2.400
5	1.600	2.830
6	1.880	3.100
7	2.020	3.250
8	2.250	3.630
9	2.380	3.920
10	2.590	4.650
11	2.640	4.910
12	2.640	6.000
13	1.467	6.057
14	0.000	6.084

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

Date: 21 MAY 2019

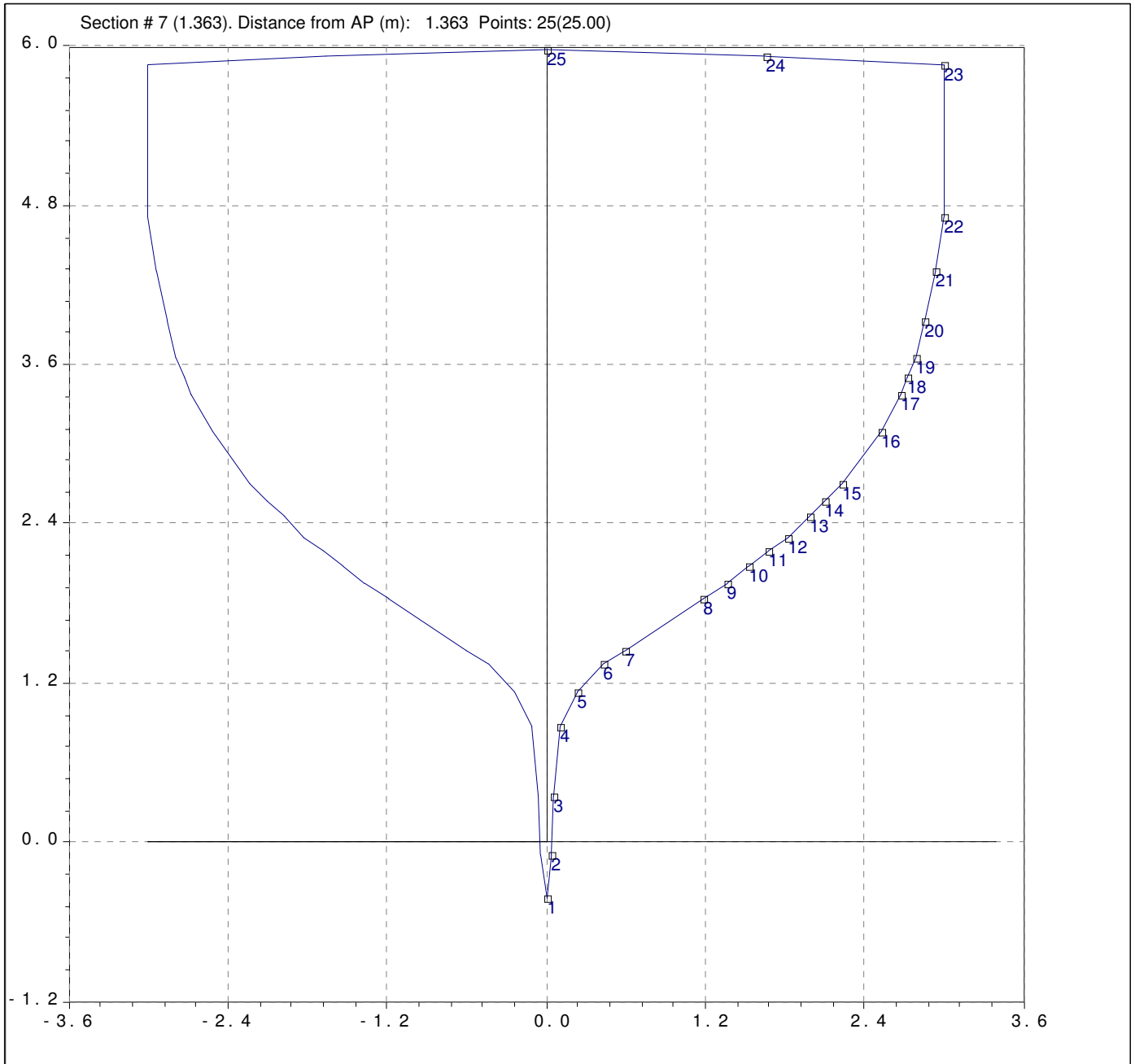


P	Breadth (m)	Height (m)
1	0.000	6.010
2	1.280	5.990
3	2.890	5.910
4	2.890	4.800
5	2.830	4.360
6	2.680	3.810
7	2.480	3.350
8	2.100	2.830
9	1.550	2.350
10	1.150	2.050
11	0.800	1.820
12	0.440	1.610
13	0.160	1.500
14	0.000	1.460
15	0.020	-0.440
16	0.000	-0.440



# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

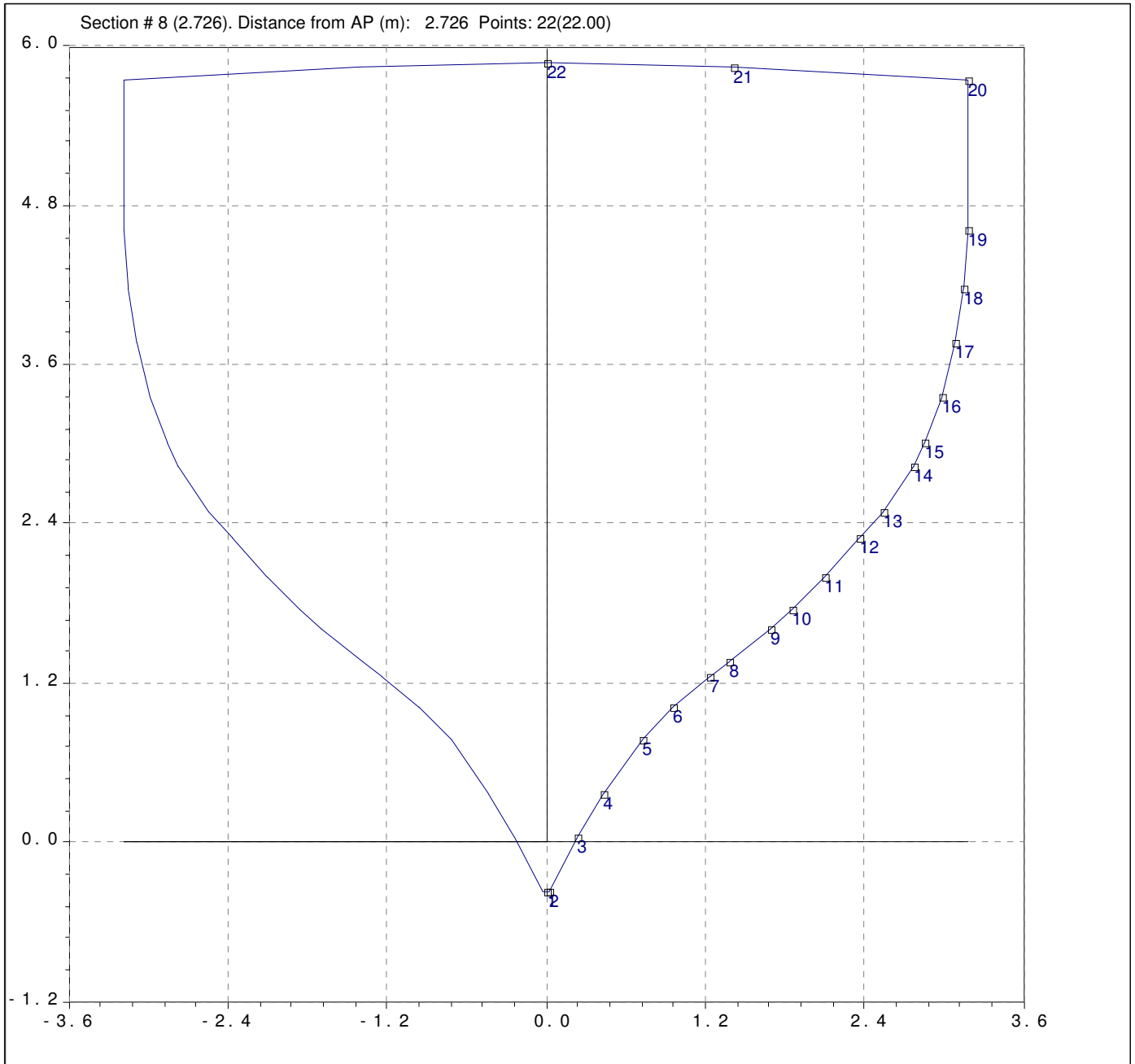
Date: 21 MAY 2019



P	Breadth (m)	Height (m)	P	Breadth (m)	Height (m)
1	0.000	-0.430	21	2.940	4.300
2	0.040	-0.090	22	3.000	4.720
3	0.060	0.350	23	3.000	5.860
4	0.110	0.870	24	1.667	5.933
5	0.240	1.130	25	0.000	5.968
6	0.440	1.340			
7	0.600	1.450			
8	1.190	1.830			
9	1.370	1.950			
10	1.530	2.080			
11	1.680	2.190			
12	1.820	2.300			
13	1.980	2.450			
14	2.100	2.580			
15	2.240	2.710			
16	2.520	3.090			
17	2.670	3.370			
18	2.730	3.500			
19	2.787	3.649			
20	2.862	3.930			

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

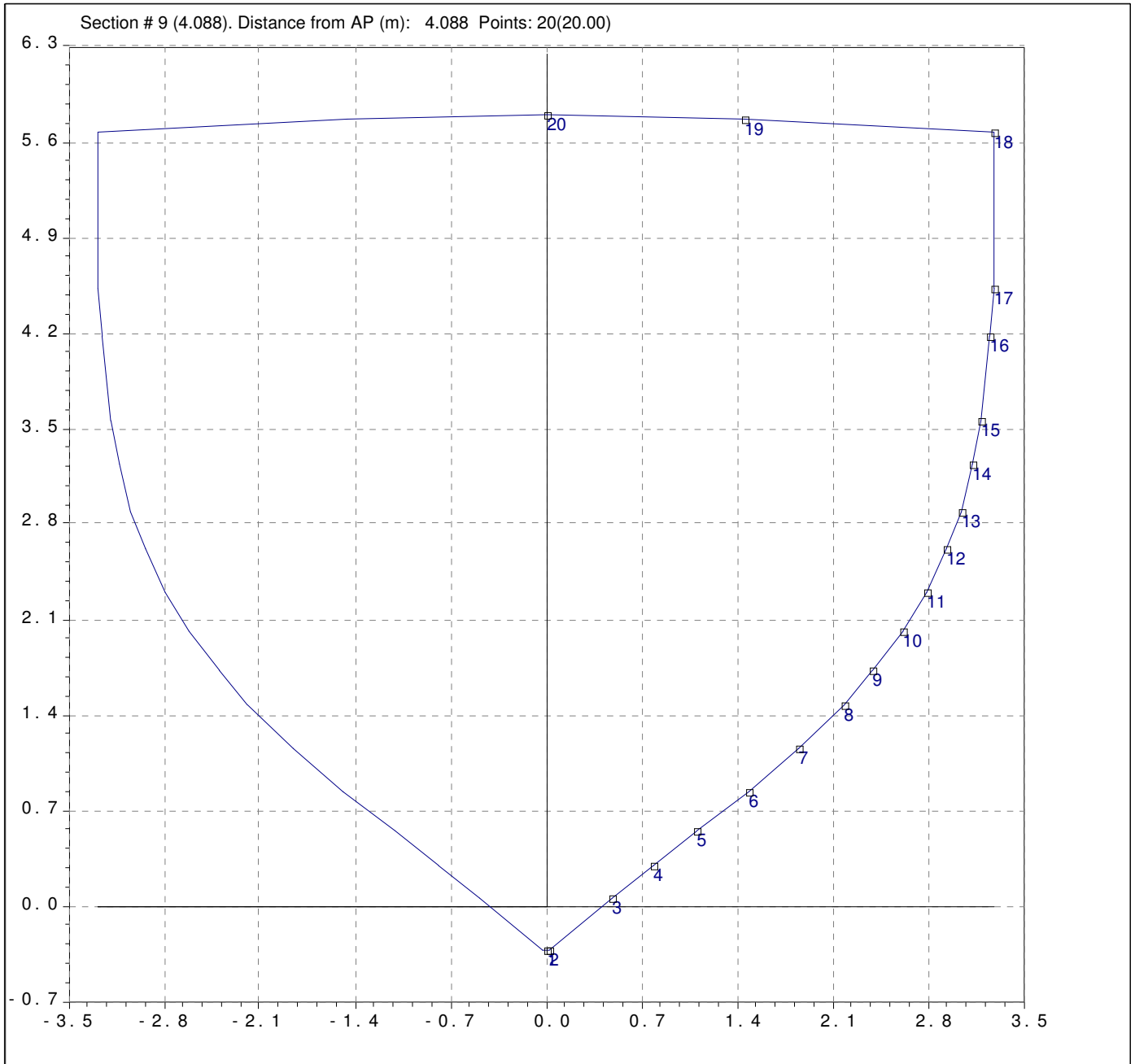
Date: 21 MAY 2019



P	Breadth (m)	Height (m)	P	Breadth (m)	Height (m)
1	0.000	-0.380	21	1.413	5.845
2	0.020	-0.380	22	0.000	5.870
3	0.240	0.030			
4	0.430	0.360			
5	0.720	0.770			
6	0.960	1.020			
7	1.240	1.250			
8	1.380	1.360			
9	1.700	1.610			
10	1.850	1.750			
11	2.100	2.000			
12	2.370	2.290			
13	2.540	2.490			
14	2.770	2.830			
15	2.860	3.010			
16	2.990	3.360			
17	3.090	3.760			
18	3.150	4.180			
19	3.180	4.620			
20	3.180	5.750			

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

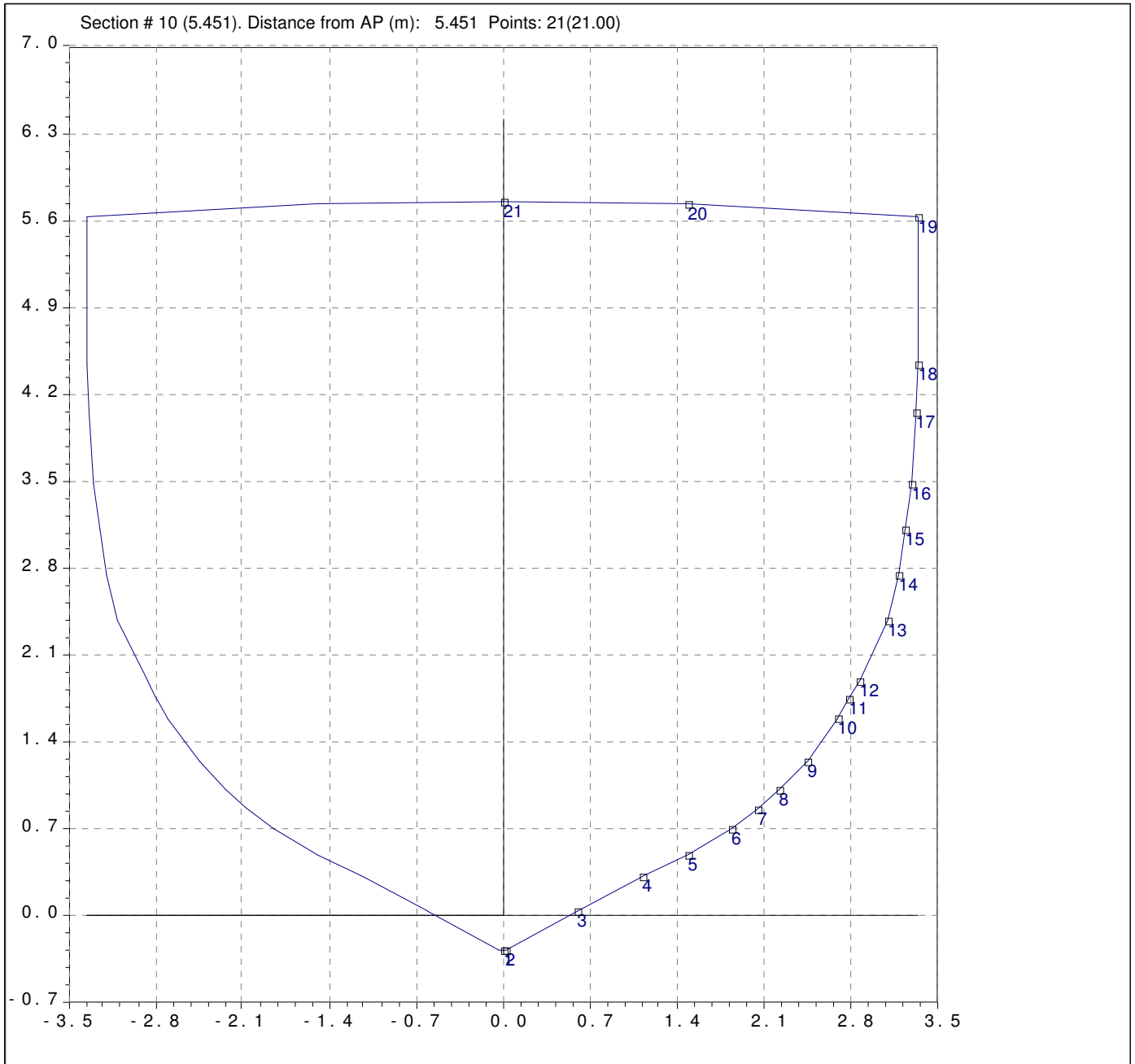
Date: 21 MAY 2019



P	Breadth (m)	Height (m)
1	0.000	-0.330
2	0.020	-0.330
3	0.490	0.060
4	0.790	0.300
5	1.110	0.550
6	1.480	0.840
7	1.850	1.160
8	2.180	1.470
9	2.400	1.730
10	2.610	2.010
11	2.790	2.300
12	2.940	2.610
13	3.040	2.890
14	3.130	3.230
15	3.190	3.550
16	3.260	4.170
17	3.290	4.520
18	3.290	5.670
19	1.462	5.771
20	0.000	5.798

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

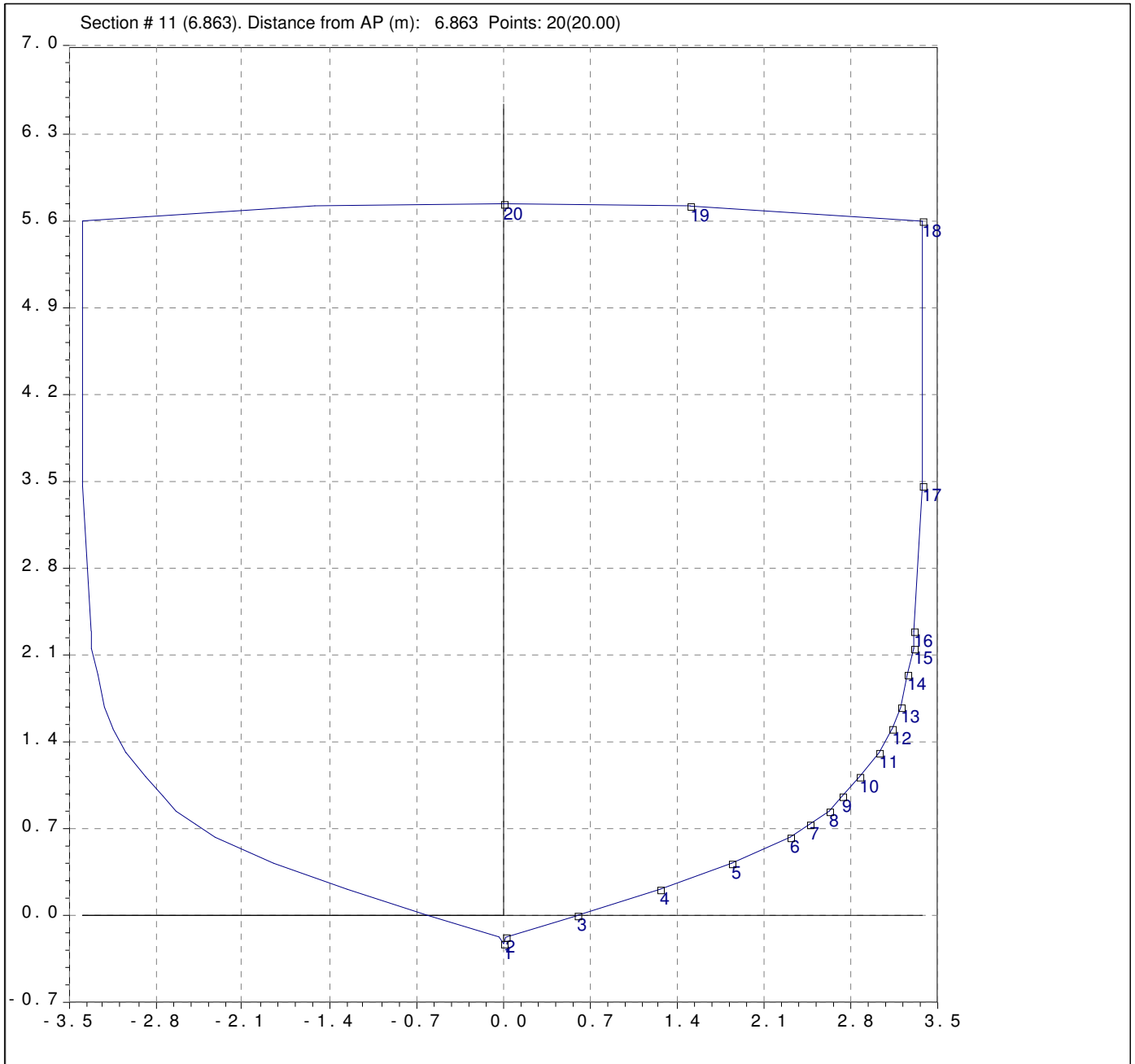
Date: 21 MAY 2019



P	Breadth (m)	Height (m)	P	Breadth (m)	Height (m)
1	0.000	-0.290	21	0.000	5.752
2	0.020	-0.290			
3	0.600	0.030			
4	1.130	0.300			
5	1.500	0.490			
6	1.850	0.700			
7	2.050	0.850			
8	2.230	1.000			
9	2.450	1.230			
10	2.700	1.590			
11	2.790	1.740			
12	2.870	1.890			
13	3.100	2.380			
14	3.190	2.740			
15	3.250	3.110			
16	3.300	3.470			
17	3.340	4.060			
18	3.350	4.440			
19	3.350	5.620			
20	1.489	5.725			

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

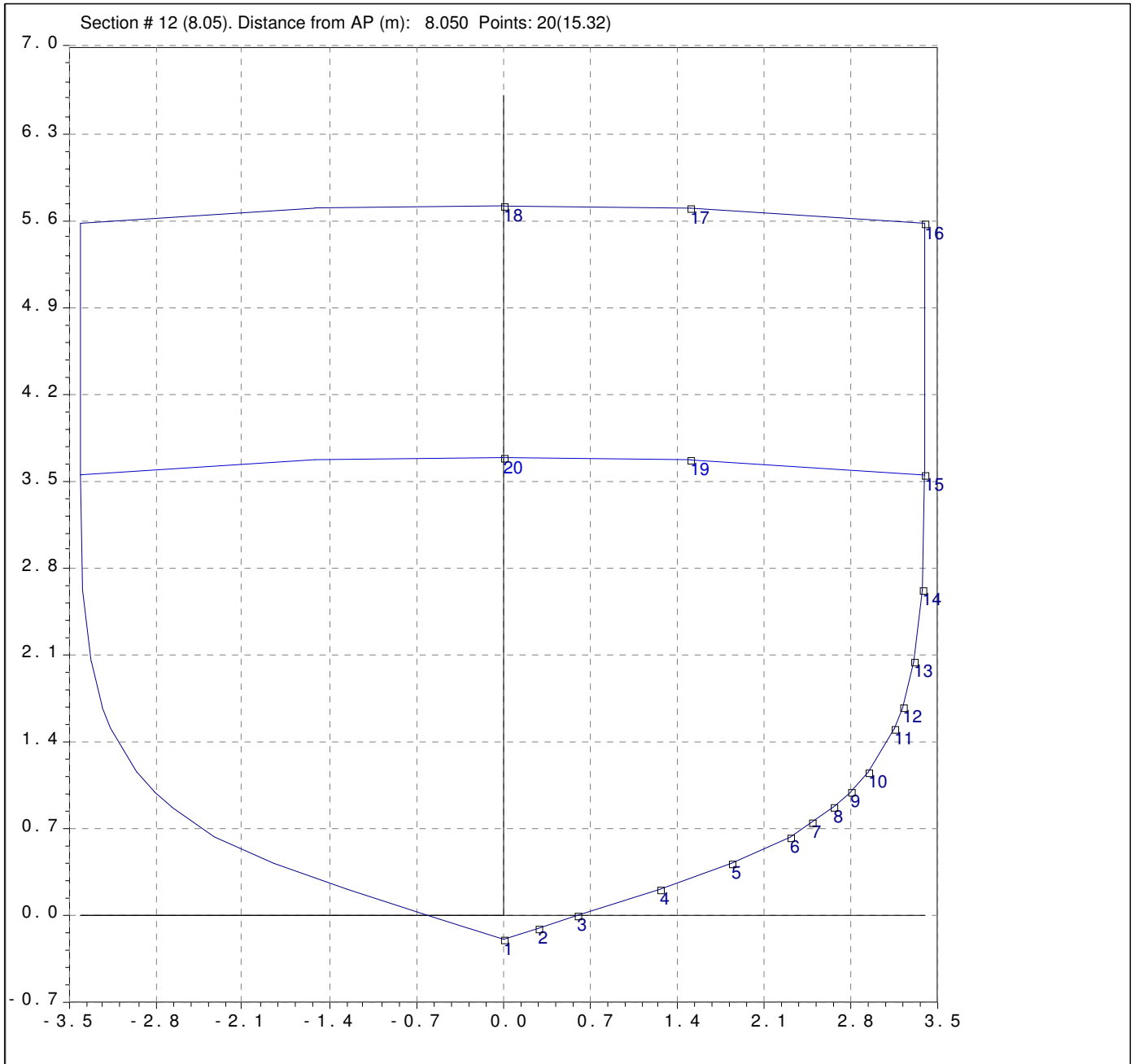
Date: 21 MAY 2019



P	Breadth (m)	Height (m)
1	0.000	-0.240
2	0.020	-0.190
3	0.600	-0.010
4	1.260	0.200
5	1.840	0.410
6	2.320	0.620
7	2.476	0.720
8	2.630	0.840
9	2.740	0.950
10	2.880	1.110
11	3.032	1.310
12	3.140	1.500
13	3.208	1.680
14	3.270	1.930
15	3.310	2.150
16	3.324	2.280
17	3.391	3.460
18	3.392	5.600
19	1.507	5.707
20	0.000	5.736

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

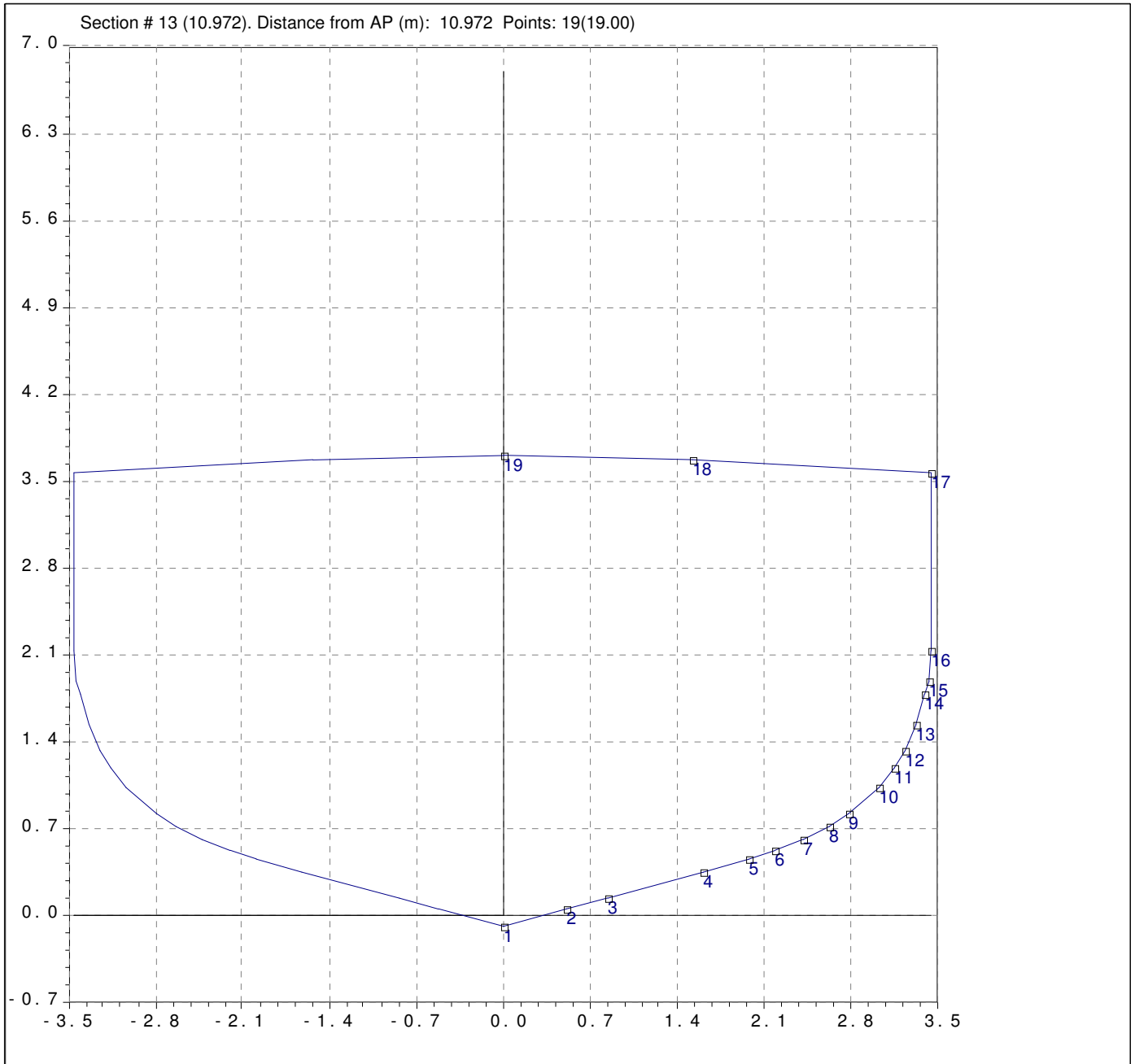
Date: 21 MAY 2019



P	Breadth (m)	Height (m)
1	0.000	-0.193
2	0.280	-0.110
3	0.600	-0.010
4	1.260	0.200
5	1.840	0.410
6	2.320	0.620
7	2.498	0.739
8	2.677	0.868
9	2.806	0.988
10	2.955	1.148
11	3.159	1.490
12	3.229	1.671
13	3.318	2.031
14	3.378	2.610
15	3.399	3.552
16	3.399	5.580
17	1.511	5.688
18	0.000	5.717
19	1.511	3.662
20	0.000	3.692

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

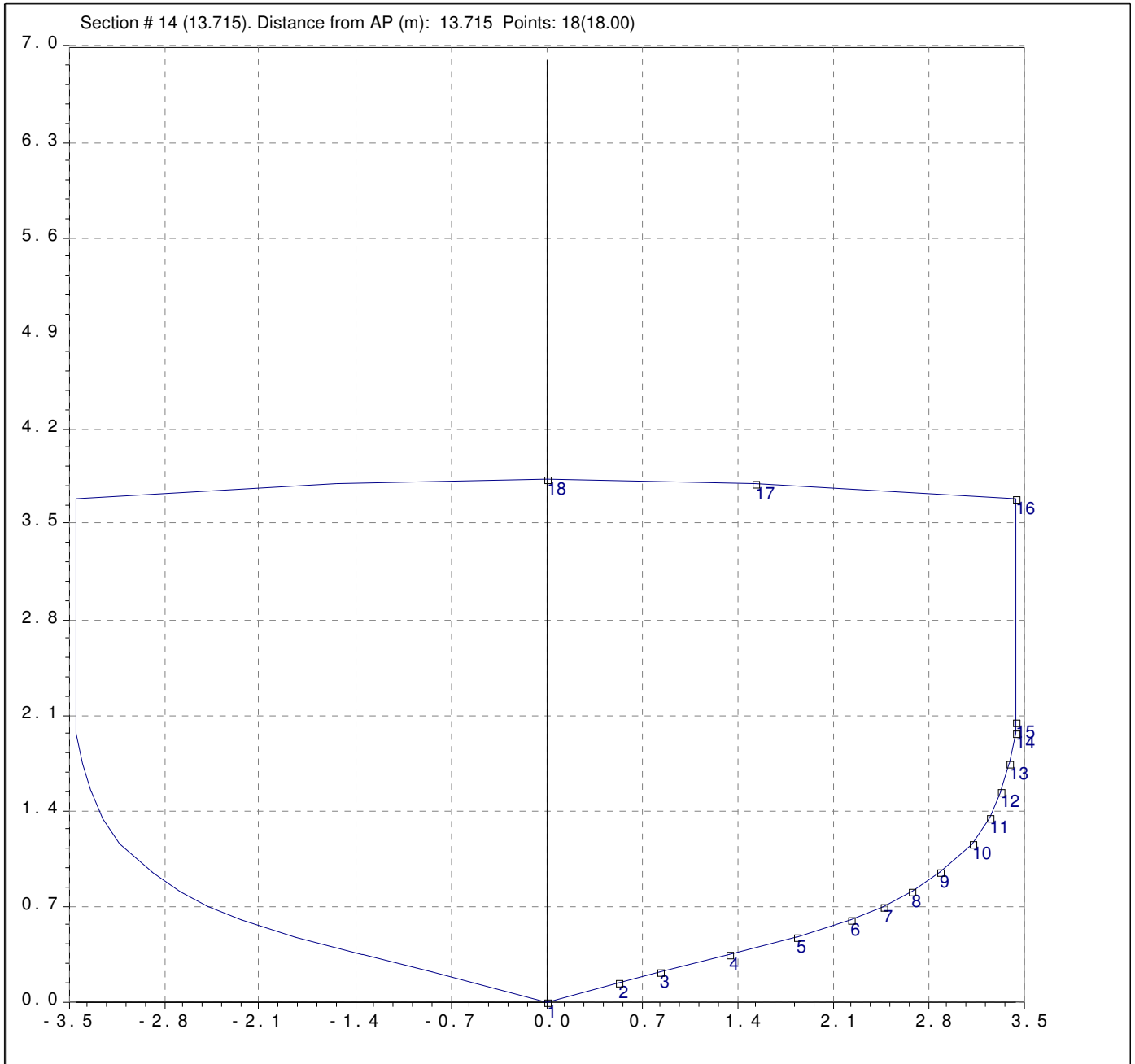
Date: 21 MAY 2019



P	Breadth (m)	Height (m)
1	0.000	-0.100
2	0.520	0.050
3	0.840	0.140
4	1.620	0.350
5	1.980	0.440
6	2.200	0.510
7	2.420	0.600
8	2.630	0.710
9	2.790	0.810
10	3.030	1.020
11	3.160	1.180
12	3.250	1.330
13	3.340	1.530
14	3.410	1.780
15	3.440	1.880
16	3.450	2.120
17	3.450	3.570
18	1.530	3.670
19	0.000	3.710

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

Date: 21 MAY 2019

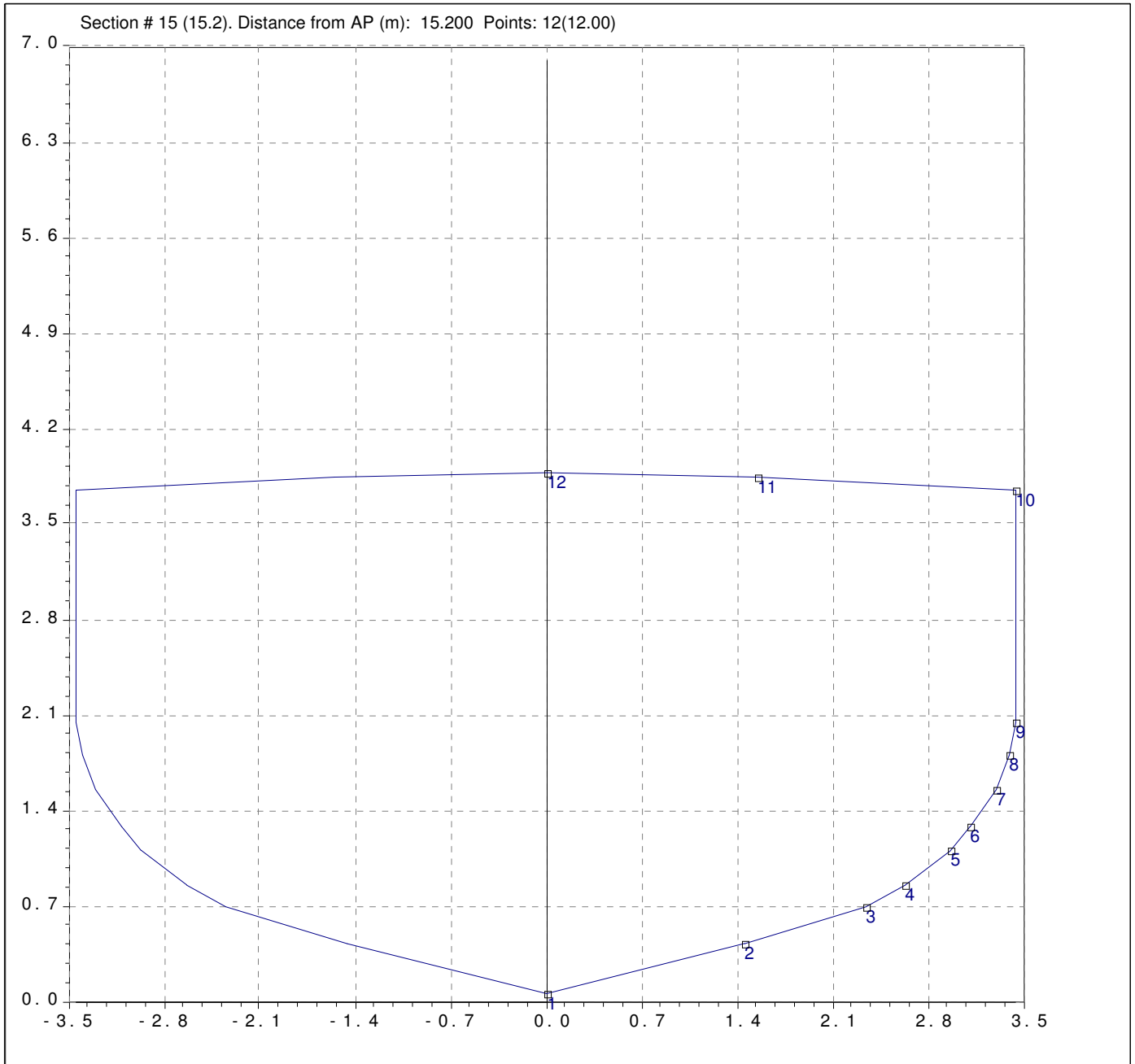


P	Breadth (m)	Height (m)
1	0.000	0.000
2	0.530	0.140
3	0.830	0.220
4	1.340	0.350
5	1.830	0.470
6	2.240	0.600
7	2.480	0.700
8	2.680	0.810
9	2.890	0.950
10	3.120	1.160
11	3.260	1.350
12	3.340	1.540
13	3.400	1.740
14	3.440	1.960
15	3.450	2.040
16	3.450	3.680
17	1.533	3.790
18	0.000	3.820



# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

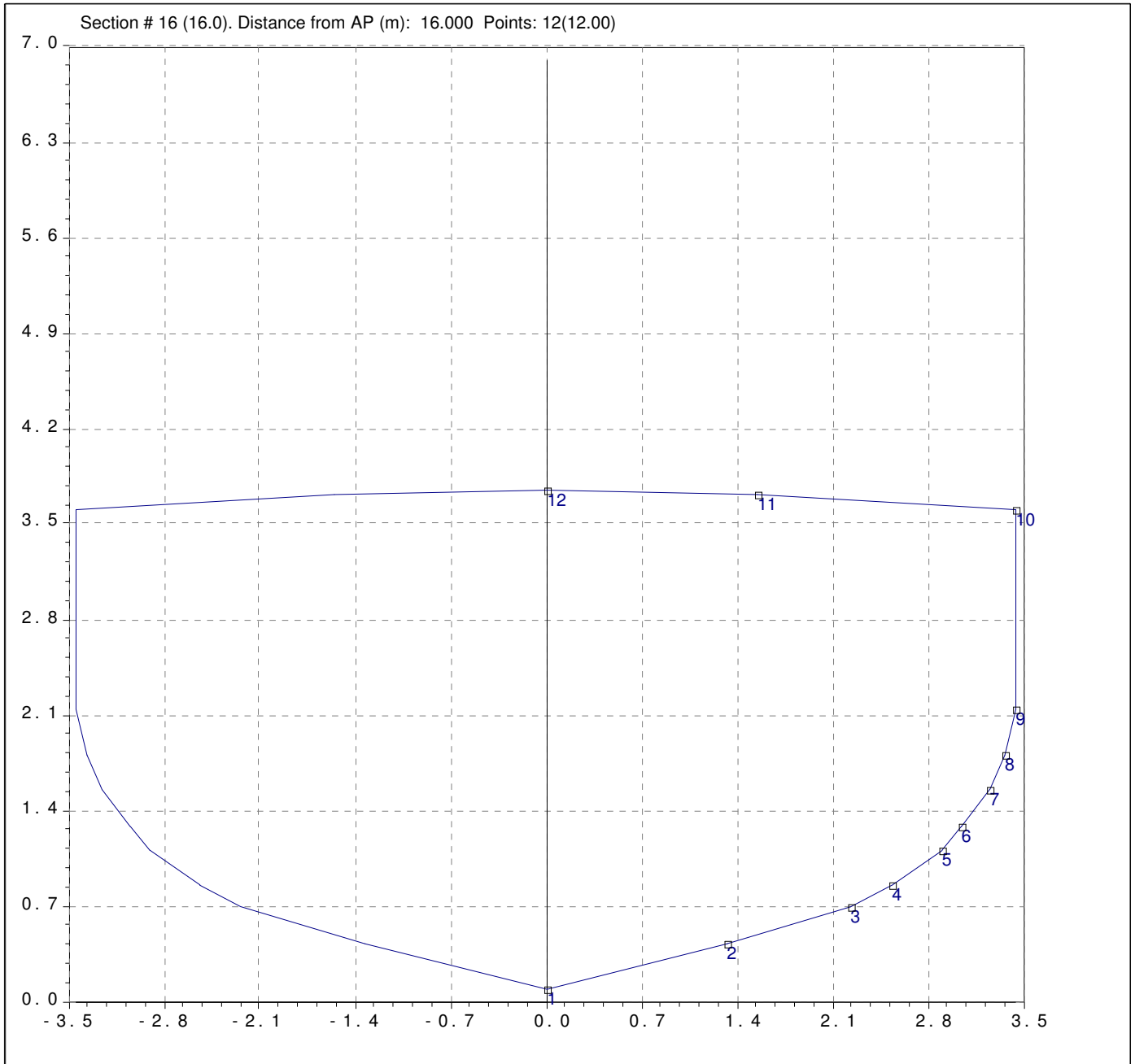
Date: 21 MAY 2019



P	Breadth (m)	Height (m)
1	0.000	0.050
2	1.450	0.428
3	2.350	0.700
4	2.640	0.857
5	2.970	1.100
6	3.110	1.286
7	3.300	1.550
8	3.400	1.800
9	3.450	2.050
10	3.450	3.740
11	1.550	3.850
12	0.000	3.880

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

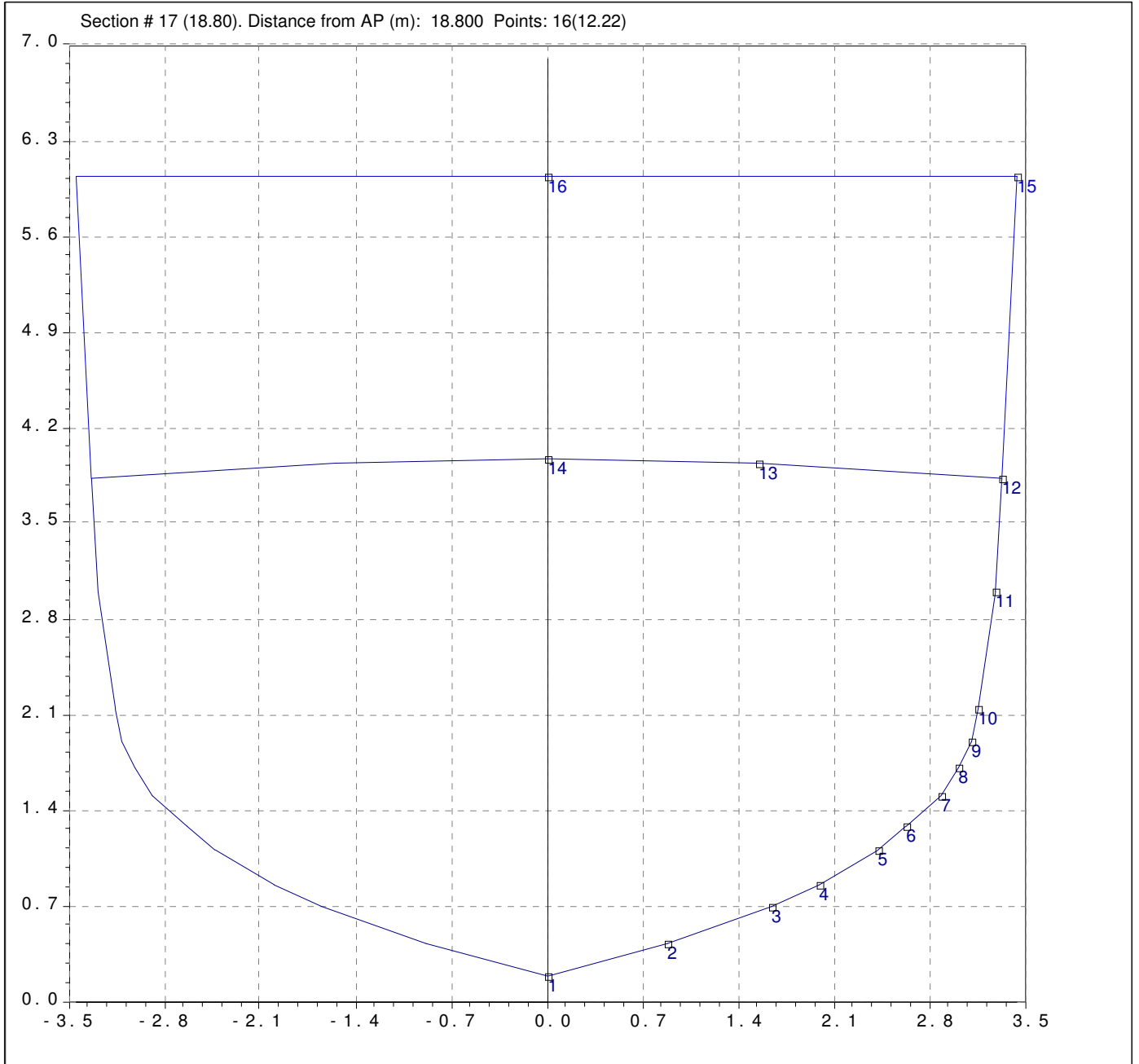
Date: 21 MAY 2019



P	Breadth (m)	Height (m)
1	0.000	0.080
2	1.330	0.428
3	2.230	0.700
4	2.540	0.857
5	2.900	1.100
6	3.050	1.286
7	3.250	1.550
8	3.360	1.800
9	3.450	2.143
10	3.450	3.600
11	1.550	3.710
12	0.000	3.740

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

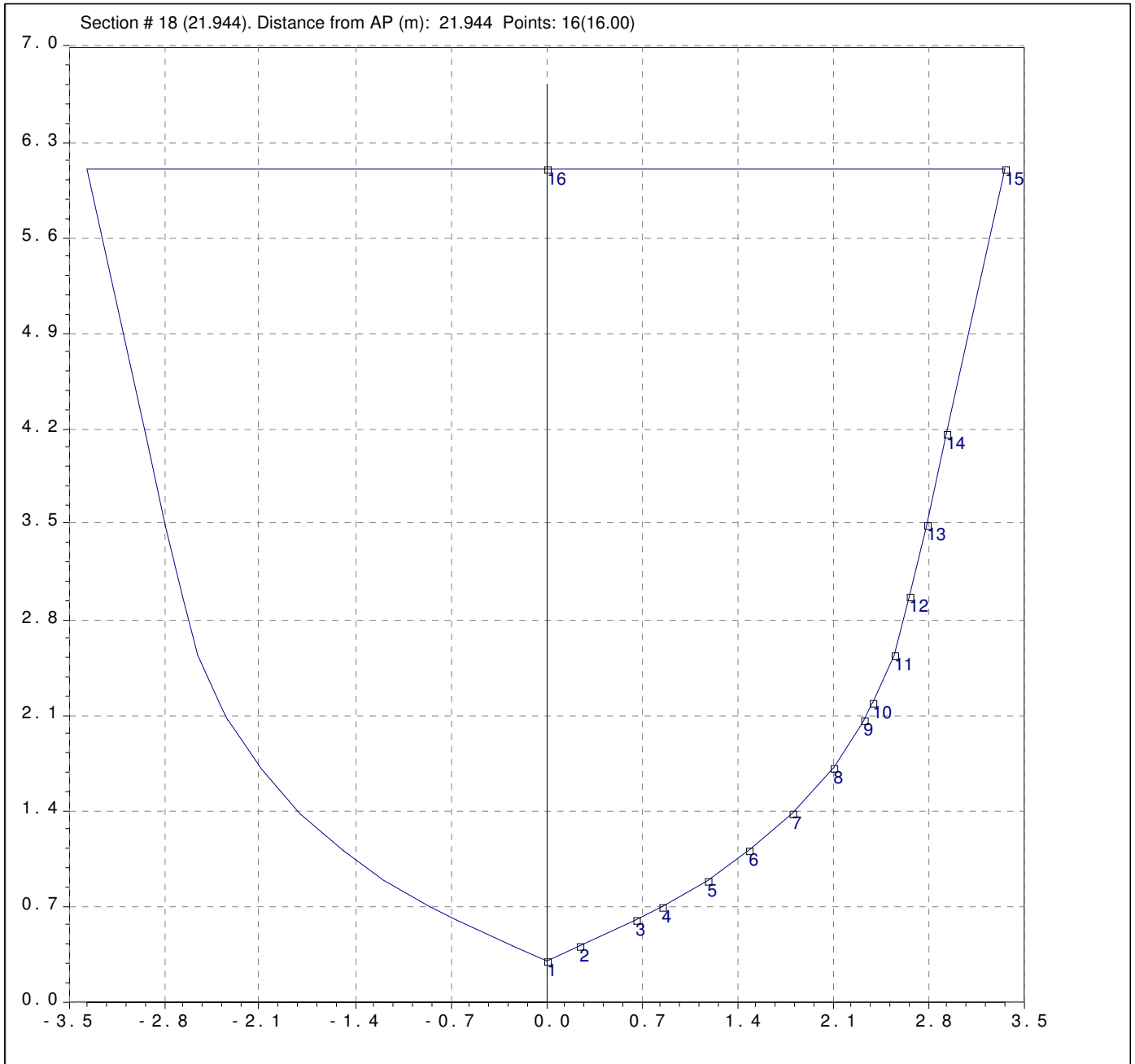
Date: 21 MAY 2019



P	Breadth (m)	Height (m)
1	0.000	0.180
2	0.880	0.428
3	1.640	0.700
4	1.995	0.857
5	2.425	1.100
6	2.640	1.286
7	2.890	1.500
8	3.010	1.714
9	3.110	1.900
10	3.160	2.143
11	3.280	3.000
12	3.330	3.830
13	1.550	3.940
14	0.000	3.970
15	3.450	6.030
16	0.000	6.030

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

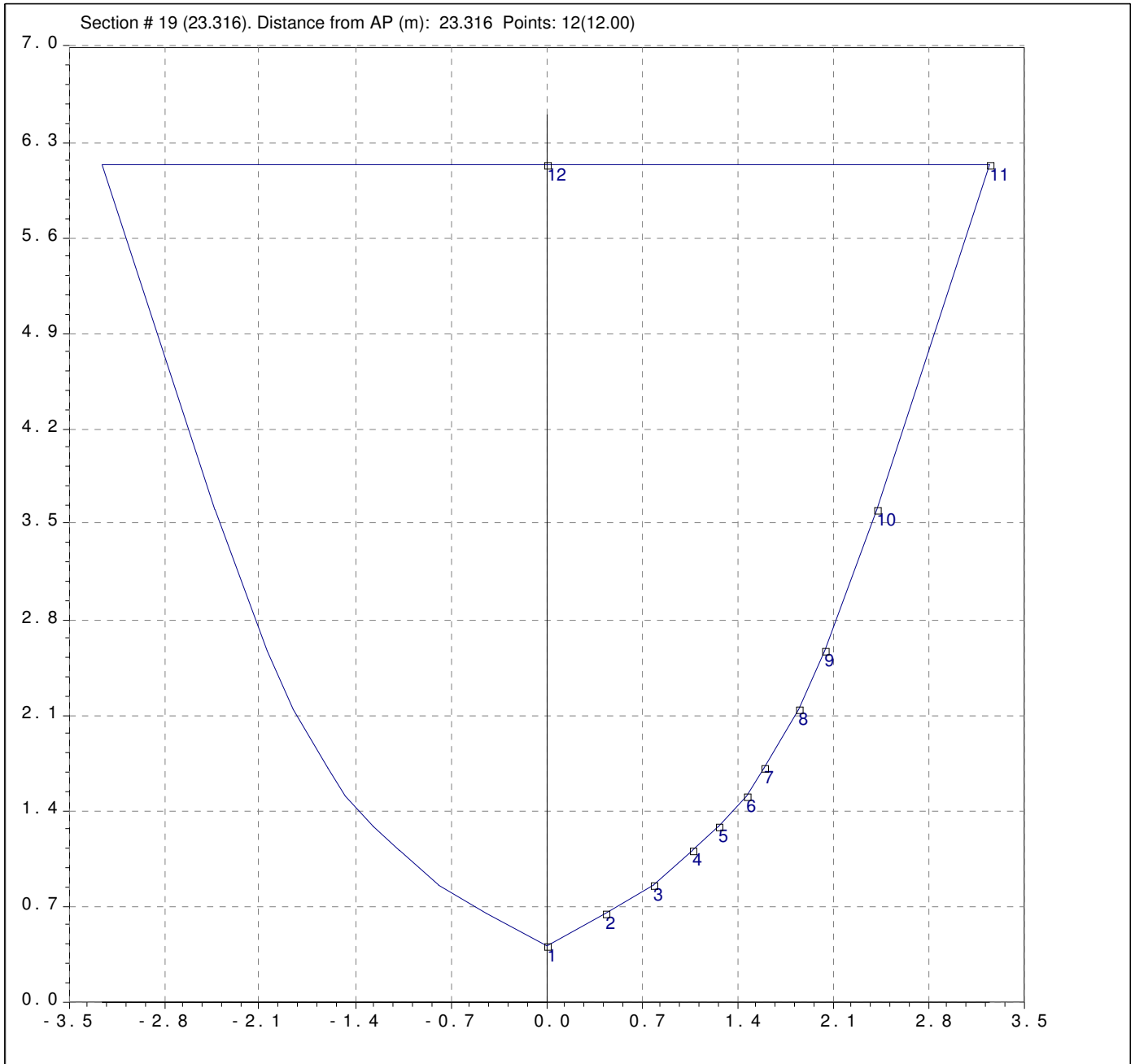
Date: 21 MAY 2019



P	Breadth (m)	Height (m)
1	0.000	0.290
2	0.240	0.400
3	0.660	0.590
4	0.850	0.690
5	1.190	0.880
6	1.490	1.100
7	1.810	1.370
8	2.100	1.710
9	2.330	2.060
10	2.400	2.190
11	2.550	2.530
12	2.670	2.970
13	2.790	3.500
14	2.930	4.160
15	3.360	6.100
16	0.000	6.100

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

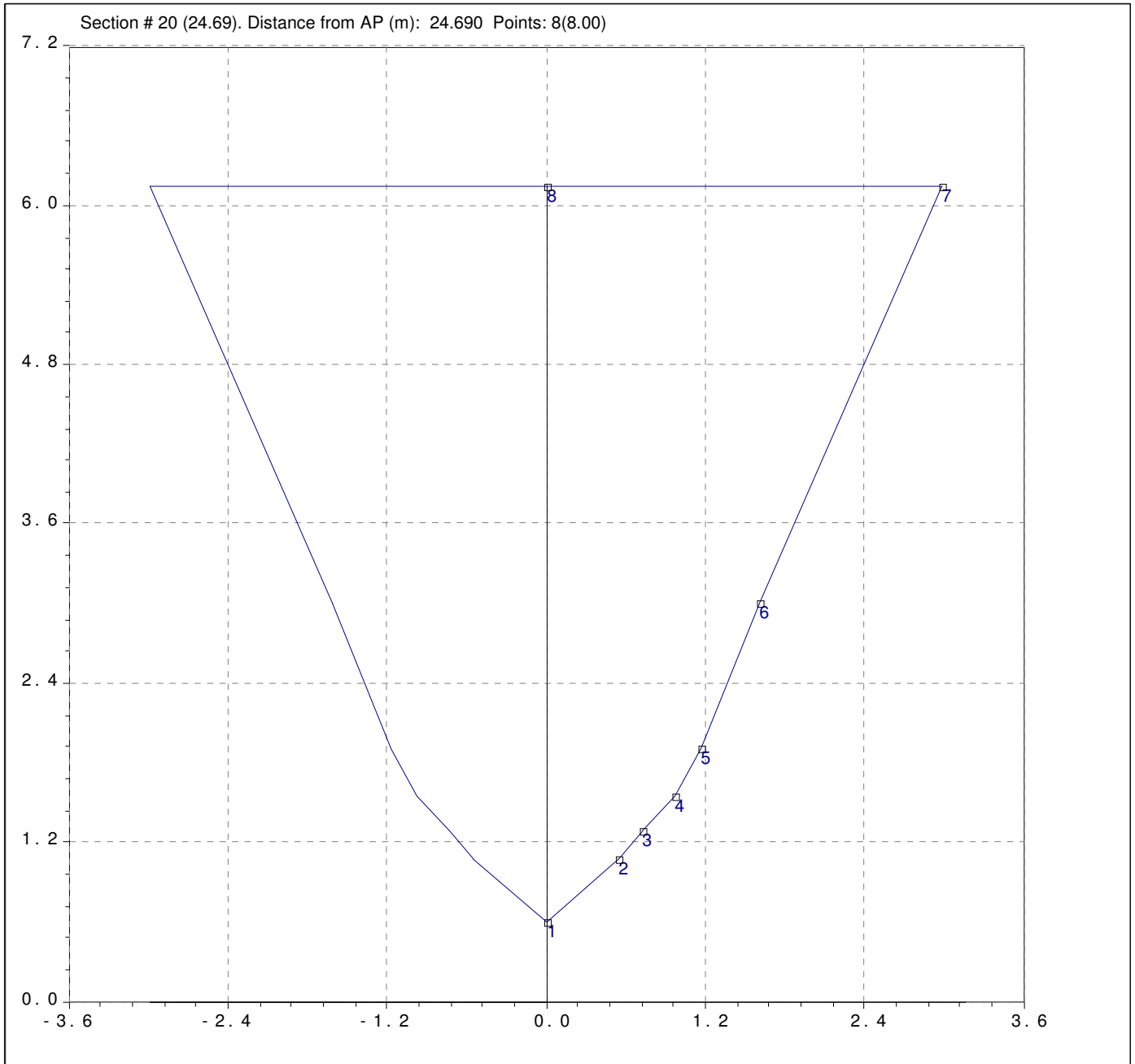
Date: 21 MAY 2019



P	Breadth (m)	Height (m)
1	0.000	0.400
2	0.440	0.650
3	0.780	0.857
4	1.080	1.100
5	1.260	1.286
6	1.470	1.500
7	1.600	1.714
8	1.850	2.143
9	2.050	2.571
10	2.430	3.600
11	3.250	6.130
12	0.000	6.130

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

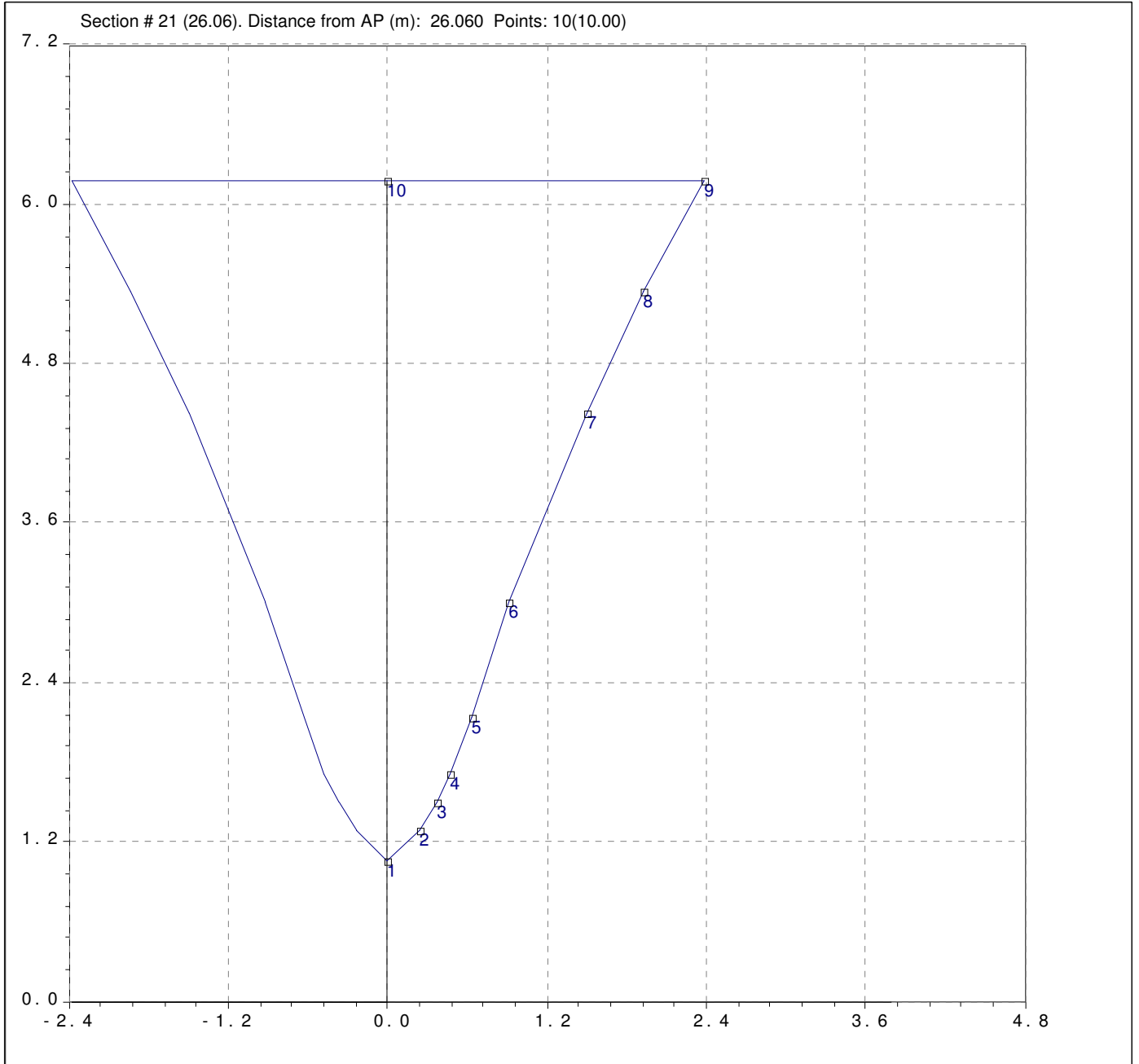
Date: 21 MAY 2019



P	Breadth (m)	Height (m)
1	0.000	0.600
2	0.550	1.080
3	0.730	1.286
4	0.970	1.550
5	1.170	1.900
6	1.610	3.000
7	2.990	6.150
8	0.000	6.150

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

Date: 21 MAY 2019

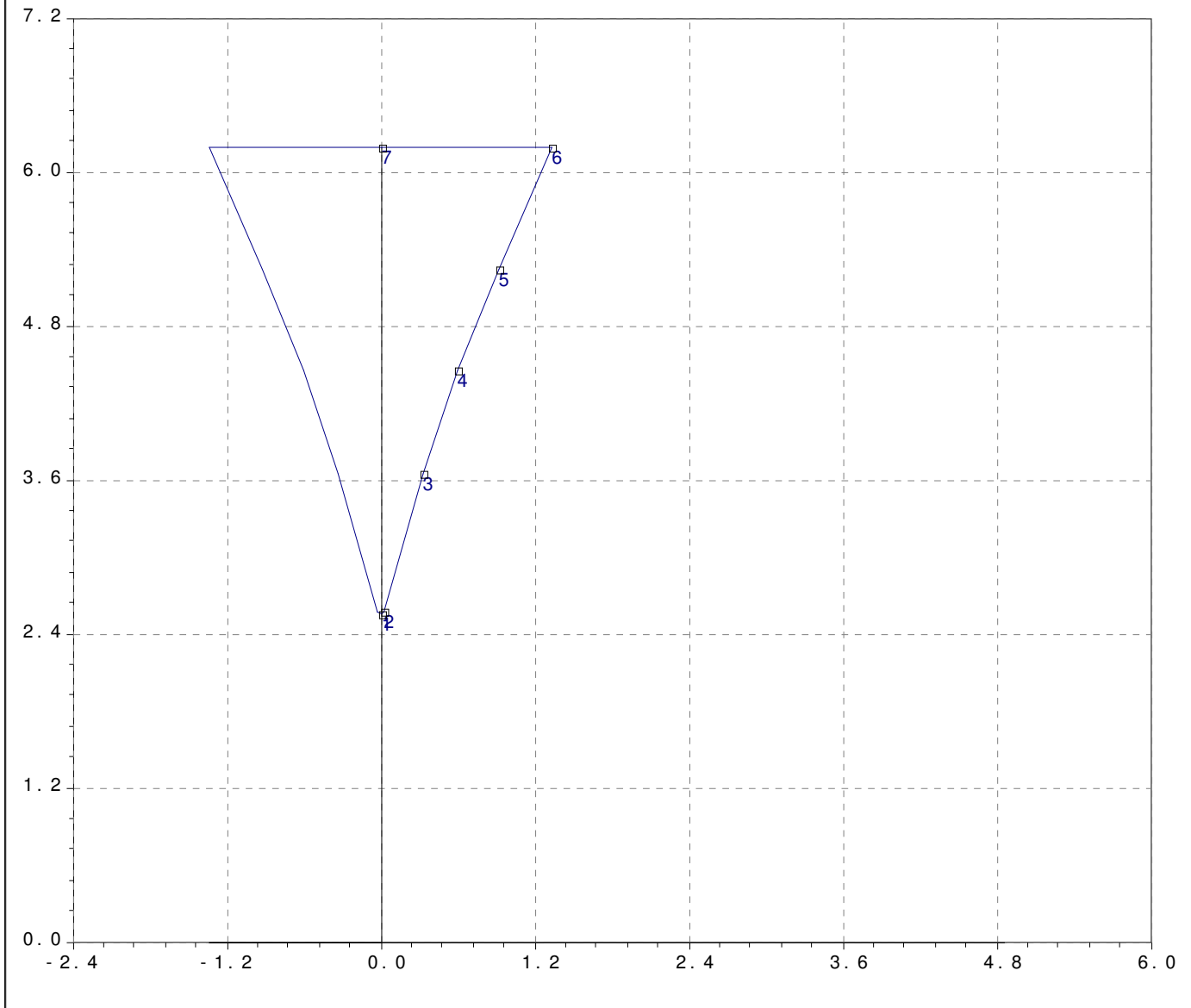


P	Breadth (m)	Height (m)
1	0.000	1.050
2	0.240	1.286
3	0.370	1.500
4	0.470	1.714
5	0.630	2.143
6	0.920	3.000
7	1.500	4.420
8	1.930	5.350
9	2.380	6.170
10	0.000	6.170

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

Date: 21 MAY 2019

Section # 22 (27.43). Distance from AP (m): 27.430 Points: 7(7.00)



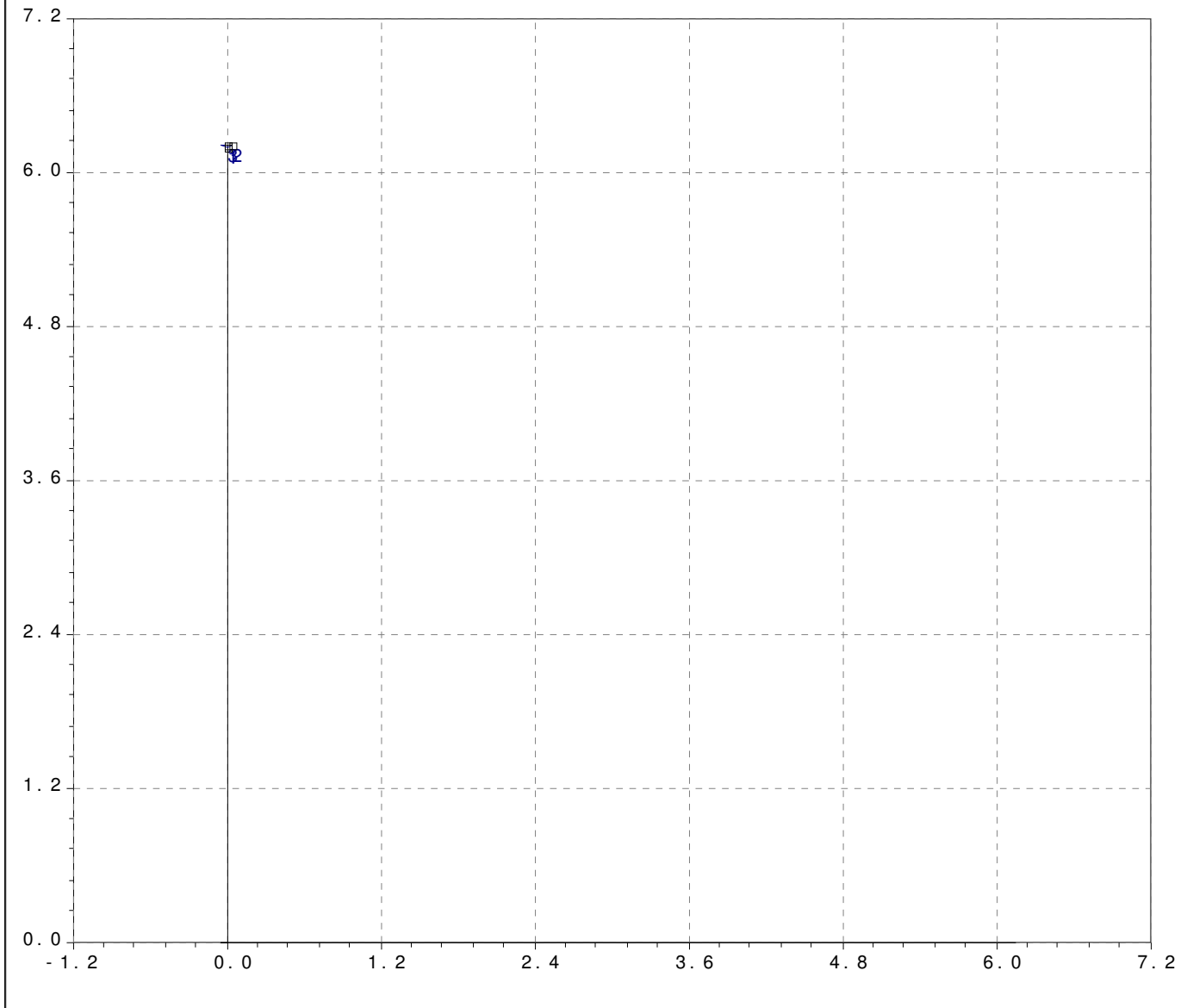
P	Breadth (m)	Height (m)
1	0.000	2.550
2	0.020	2.570
3	0.340	3.650
4	0.600	4.450
5	0.920	5.240
6	1.330	6.190
7	0.000	6.190



# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

Date: 21 MAY 2019

Section # 23 (28.357). Distance from AP (m): 28.357 Points: 3(3.00)



P	Breadth (m)	Height (m)
1	0.000	6.190
2	0.050	6.200
3	0.000	6.200

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

Sp.gravity: 1.0250 (t/m3)

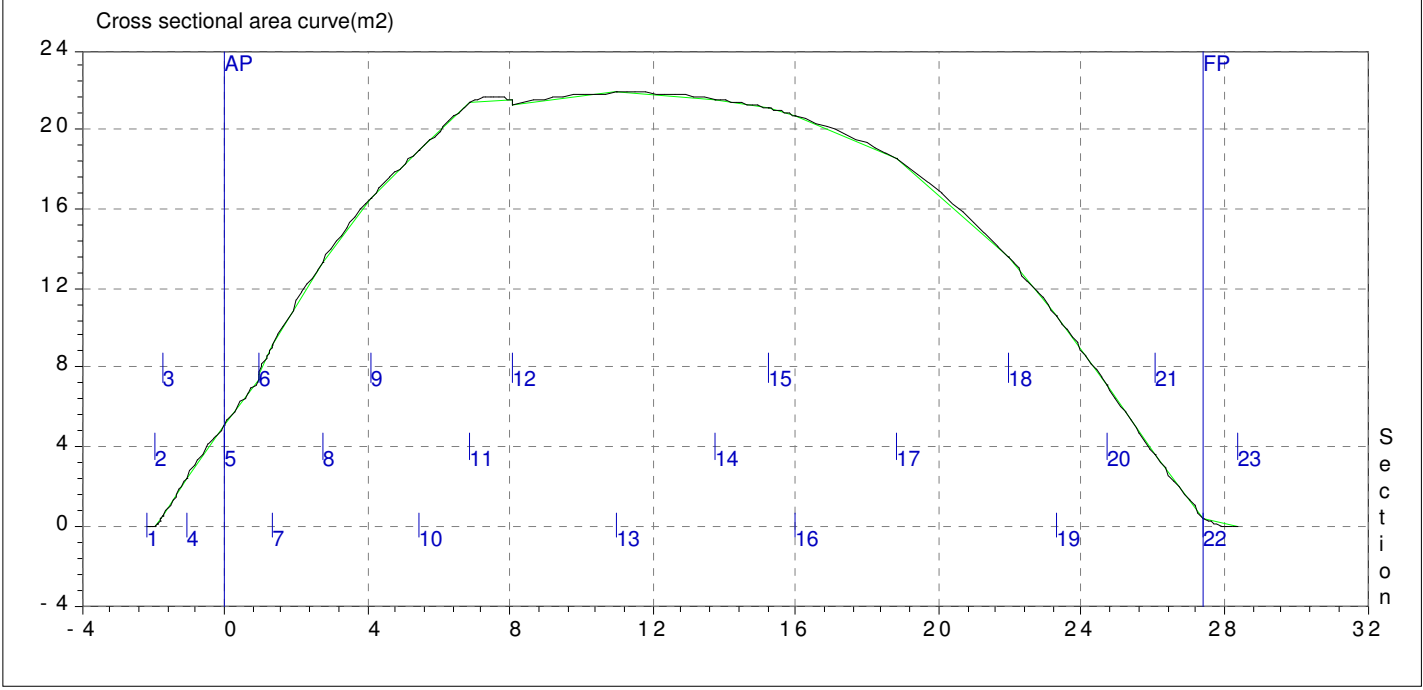
Hull data for given water line

21 MAY 2019

**Draft AP (m):** 3.667      **Draft FP (m):** 3.667      **Heel angle (°):** 0.0  
**Used boxes:** 1-6,8-9,12-14,16-18  
**Used Vol.Sect.:** 10,16-17,32-33

Sect. No	Draft (m)	Area (m2)		VCG (m)		Volume (m3)	Sect. No	Draft (m)	Area (m2)		VCG (m)		Volume (m3)
		1	2	1	2				1	2	1	2	
1	3.667	0.00		5.100		0.00	13	3.667	21.86		2.027		63.24
2	3.667	0.00		4.100		0.00	14	3.667	21.55		2.077		59.73
3	3.667	0.55		3.410		0.05	15	3.667	21.10		2.107		31.69
4	3.667	2.46		3.154		0.98	16	3.667	20.70		2.121		16.72
5	3.667	5.11		2.990		4.00	17	3.667	18.52	18.52	2.203	2.203	55.19
6	3.667	7.34	7.68	2.837	2.745	5.95	18	3.667	13.52		2.329		51.01
7	3.667	9.15		2.670		3.45	19	3.667	10.58		2.399		16.59
8	3.667	13.27		2.368		15.41	20	3.667	7.13		2.512		12.22
9	3.667	16.53		2.200		20.39	21	3.667	3.58		2.691		7.34
10	3.667	18.93		2.108		24.26	22	3.667	0.40		3.281		2.68
11	3.667	21.36		2.031		28.46	23	3.667	0.00		6.190		0.08
12	3.667	21.49	21.27	2.031	2.014	25.61							

W. line	Vol(m3)	Displ(t)	M.Vol(m3)	LCB(m)	VCB(m)	TCB(m)	KMT(m)	WA(m2)	LCF(m)	TCF(m)	IT(m4)	Min.IT(m4)	WSurf(m2)
<b>Hull</b>	446.83	458.00	445.05	12.509	2.184	0.000	3.020	143.12	12.285	-0.000	372	372	314.12
<b>+ App</b>	445.55	456.69	443.77	12.498	2.189	-0.000	3.082	145.27	12.316	-0.005	396	396	



## M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

### The list of volume sections.

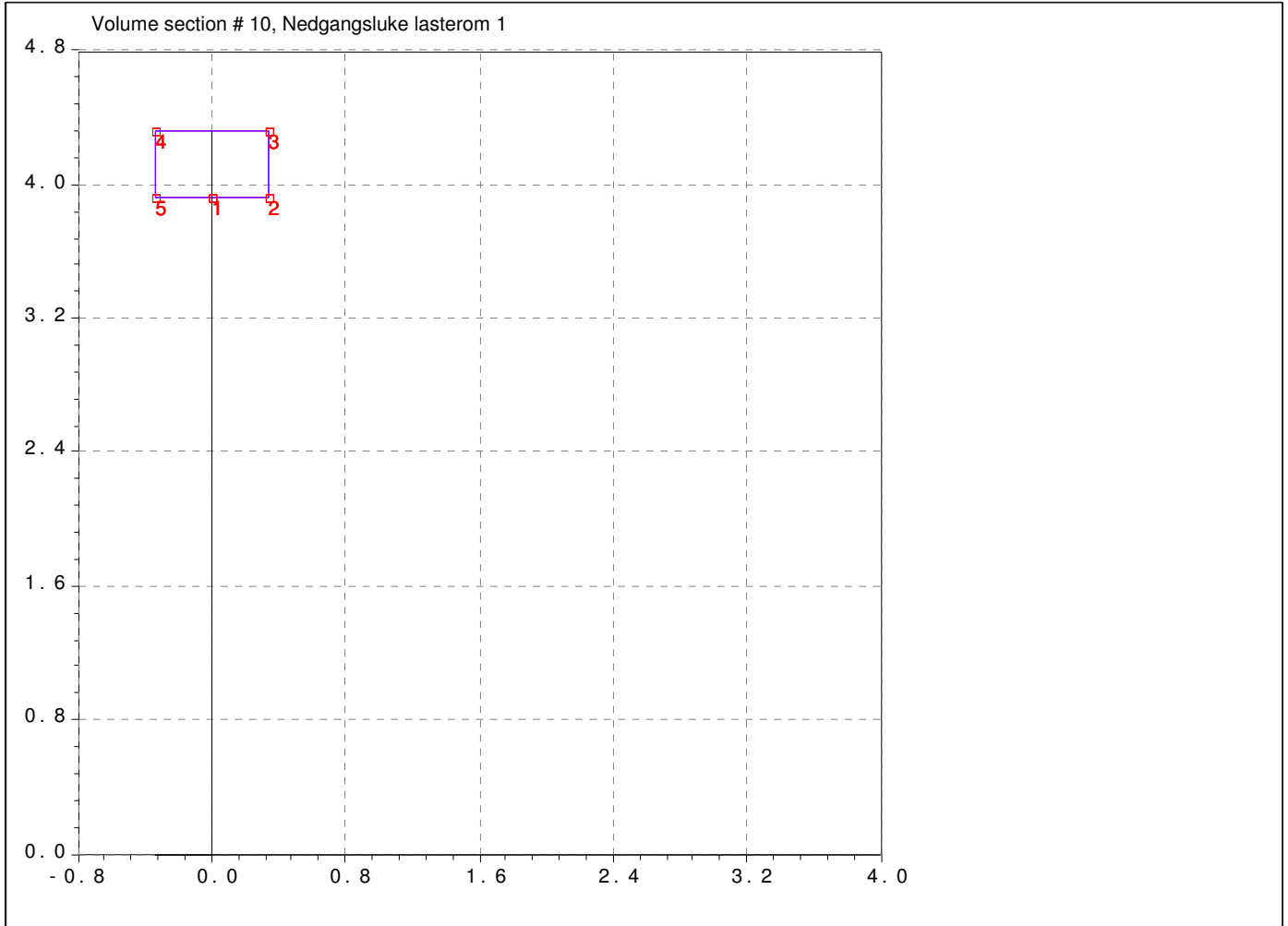
Date: 21 MAY 2019

No	+/-	G	Description	From (m)	To (m)	Volume (m3)	LCG (m)	VCG (m)	TCG (m)	Corr. f.	Opt. Ang.
10	+	G	Nedgangsluke lasterom 1	S32	13.47	0.18	13.135	4.128	0.000	1.00000	
16	+	G	Nedgangsluke lasterom 2 SB	16.95	17.45	0.16	17.198	4.009	0.251	1.00000	
17	+	G	Nedgangsluke lasterom 3 BB	16.95	17.45	0.16	17.198	4.009	-0.251	1.00000	
32	+	G	Nedgangsluke Trosserom	10.35	11.25	0.42	10.797	3.962	0.000	1.00000	
33	+	G	Nedgangsluke (400mm bak bakkskott)	17.65	18.35	0.28	17.988	4.071	0.501	1.00000	

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

## Nedgangsluke lasterom 1

Date: 21 MAY 2019



Gen.code: 0,3.928;0.335,z;y,z+0.4;M (Used optimize angle: 0.0)

Volume= 0.180m<sup>3</sup> LCG= 13.135m VCG= 4.128m TCG= 0.000m

From AP:S32 ( 12.800m)

From AP:S32+335 ( 13.135m)

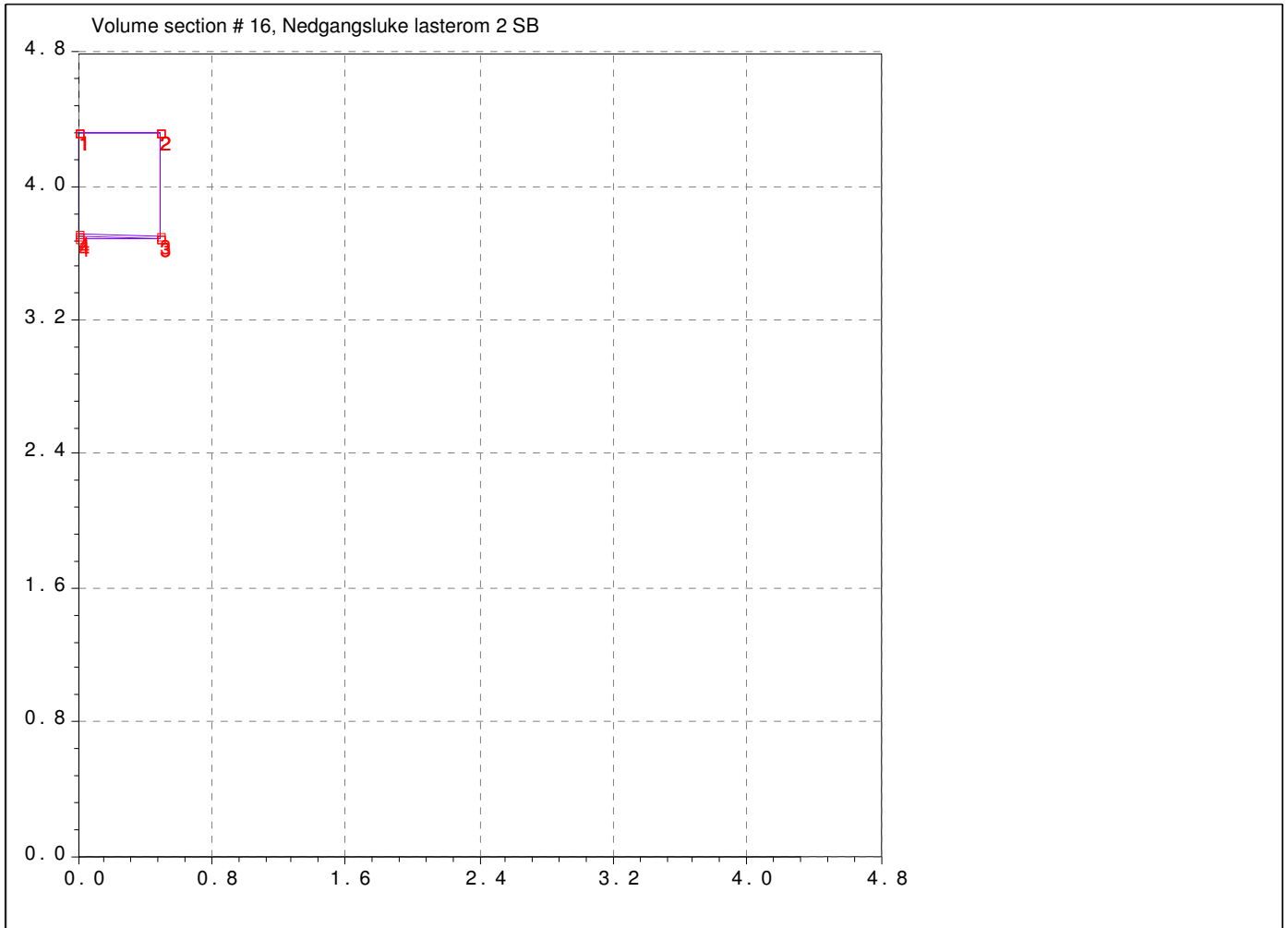
From AP:13.47 ( 13.470m)

P	Breadth (m)	Height (m)	P	Breadth (m)	Height (m)	P	Breadth (m)	Height (m)
1	0.000	3.928	1	0.000	3.928	1	0.000	3.928
2	0.335	3.928	2	0.335	3.928	2	0.335	3.928
3	0.335	4.328	3	0.335	4.328	3	0.335	4.328
4	-0.335	4.328	4	-0.335	4.328	4	-0.335	4.328
5	-0.335	3.928	5	-0.335	3.928	5	-0.335	3.928

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

## Nedgangsluke lasterom 2 SB

Date: 21 MAY 2019



Gen.code: 0,4.321;0.5,z;<-90,#;0,#; (Used optimize angle: 0.0)

Volume= 0.156m3 LCG= 17.198m VCG= 4.009m TCG= 0.251m

From AP:16.95 ( 16.950m)

From AP: 17.200 ( 17.200m)

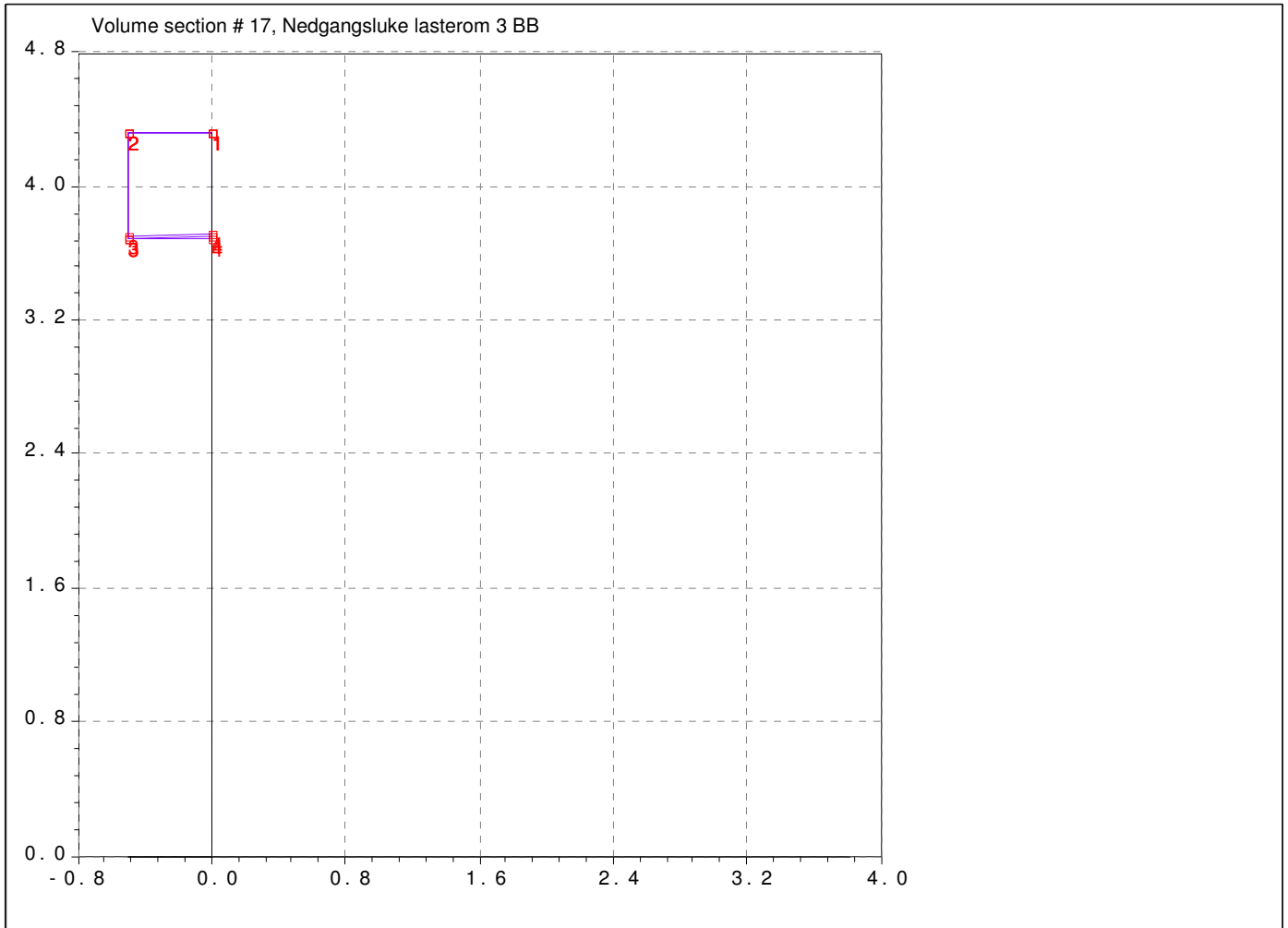
From AP:17.45 ( 17.450m)

P	Breadth (m)	Height (m)	P	Breadth (m)	Height (m)	P	Breadth (m)	Height (m)
1	0.000	4.321	1	0.000	4.321	1	0.000	4.321
2	0.500	4.321	2	0.500	4.321	2	0.500	4.321
3	0.500	3.683	3	0.500	3.692	3	0.500	3.710
4	0.000	3.693	4	0.000	3.701	4	0.000	3.719

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

## Nedgangsluke lasterom 3 BB

Date: 21 MAY 2019



Gen.code: 0,4.321;0.5,z;<-90,#;0,#; @ (Used optimize angle: 0.0)

Volume= 0.156m3 LCG= 17.198m VCG= 4.009m TCG= -0.251m

From AP:16.95 ( 16.950m)

From AP: 17.200 ( 17.200m)

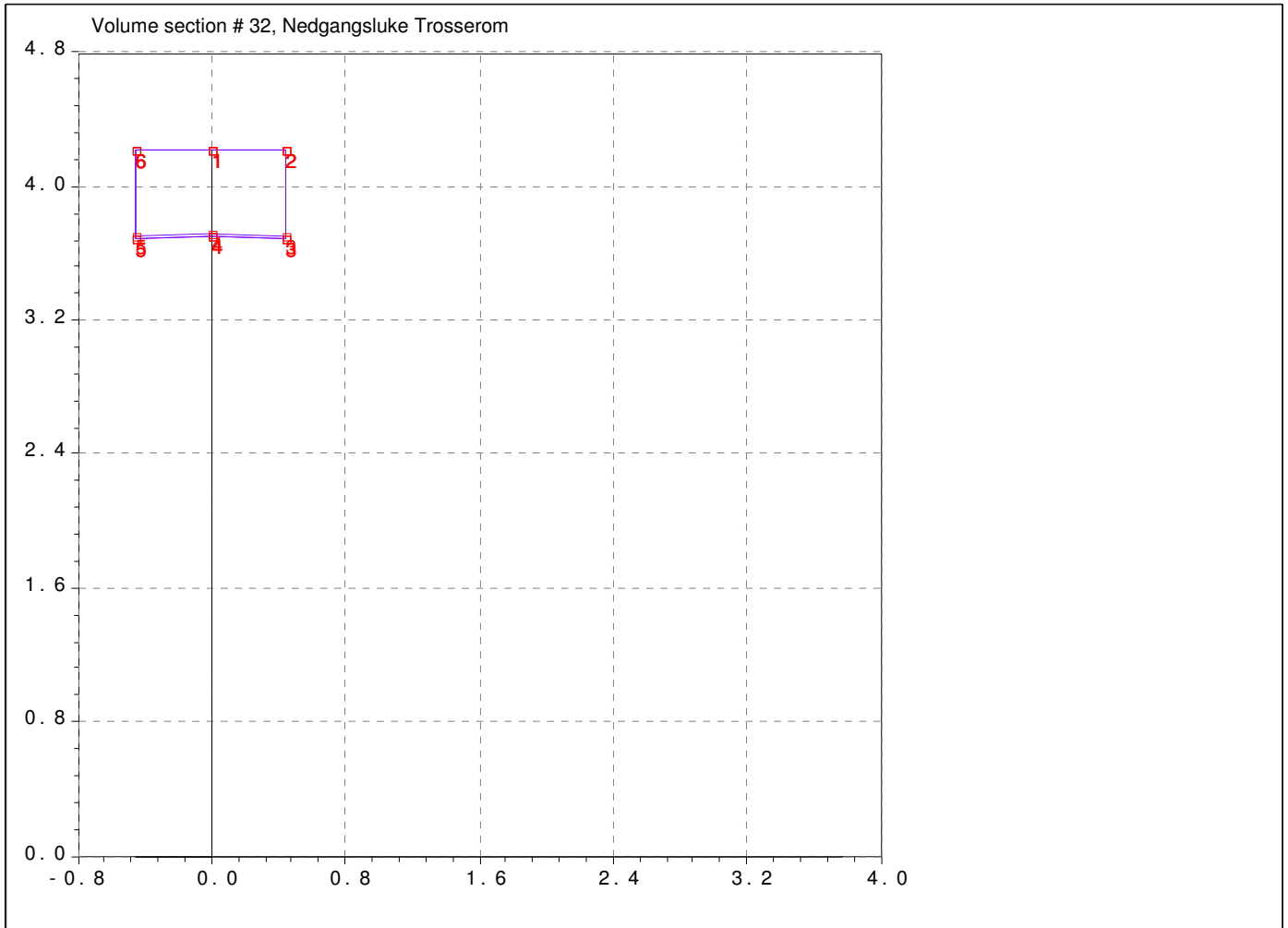
From AP:17.45 ( 17.450m)

P	Breadth (m)	Height (m)	P	Breadth (m)	Height (m)	P	Breadth (m)	Height (m)
1	0.000	4.321	1	0.000	4.321	1	0.000	4.321
2	-0.500	4.321	2	-0.500	4.321	2	-0.500	4.321
3	-0.500	3.683	3	-0.500	3.692	3	-0.500	3.710
4	0.000	3.693	4	0.000	3.701	4	0.000	3.719

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

## Nedgangsluke Trosserom

Date: 21 MAY 2019



Gen.code: 0,4.224;0.45,z;<-90,#;0,#; M (Used optimize angle: 0.0)

Volume= 0.424m<sup>3</sup> LCG= 10.797m VCG= 3.962m TCG= 0.000m

From AP:10.35 ( 10.350m)

From AP: 10.800 ( 10.800m)

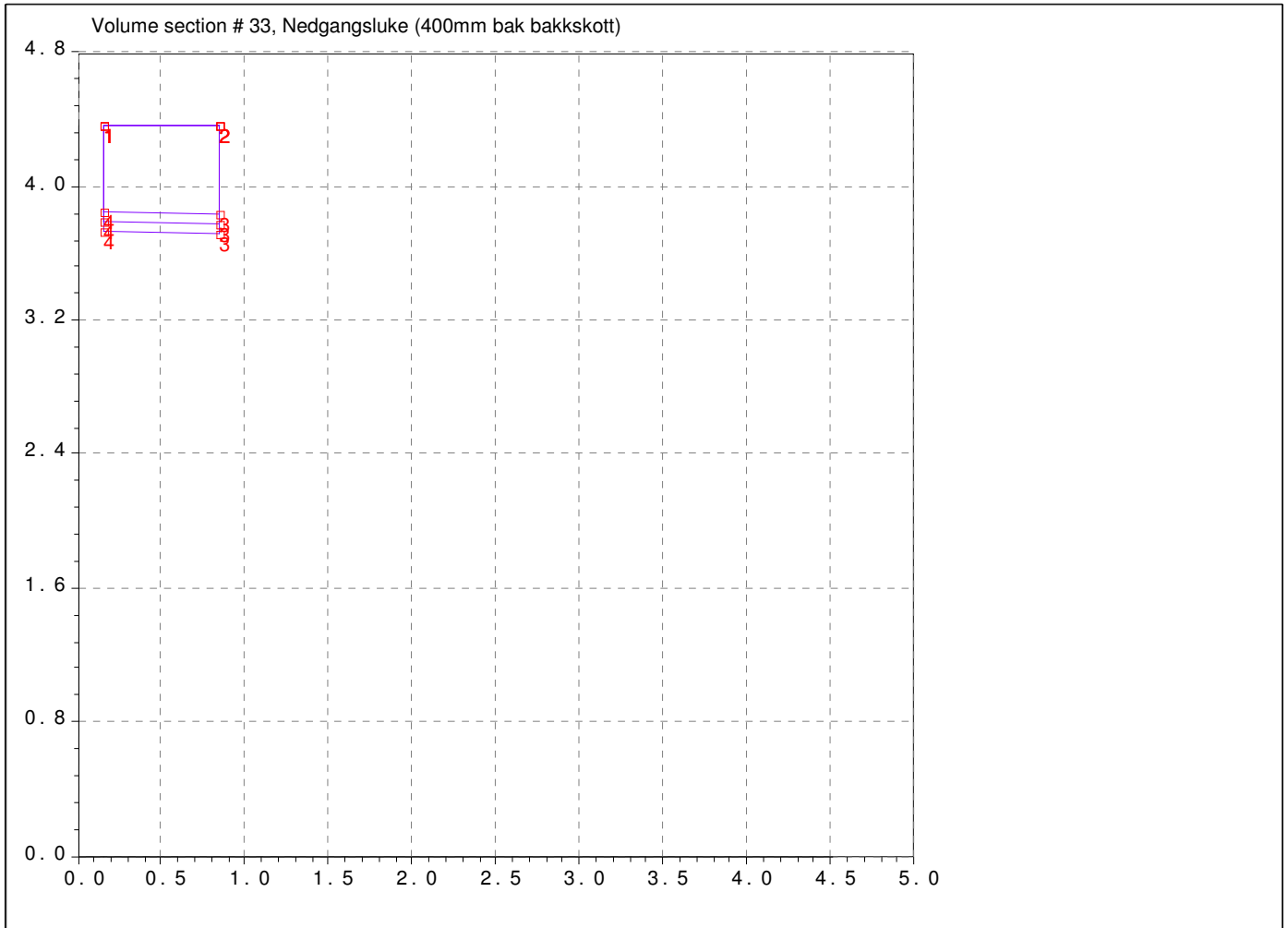
From AP:11.25 ( 11.250m)

P	Breadth (m)	Height (m)	P	Breadth (m)	Height (m)	P	Breadth (m)	Height (m)
1	0.000	4.224	1	0.000	4.224	1	0.000	4.224
2	0.450	4.224	2	0.450	4.224	2	0.450	4.224
3	0.450	3.686	3	0.450	3.694	3	0.450	3.705
4	0.000	3.698	4	0.000	3.706	4	0.000	3.717
5	-0.450	3.686	5	-0.450	3.694	5	-0.450	3.705
6	-0.450	4.224	6	-0.450	4.224	6	-0.450	4.224

# M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

## Nedgangsluke (400mm bak bakkskott)

Date: 21 MAY 2019



Gen.code: 0.15,4.36;0.85,z;<-90,#;0.15,#; (Used optimize angle: 0.0)

Volume= 0.283m3 LCG= 17.988m VCG= 4.071m TCG= 0.501m

From AP:17.65 ( 17.650m)

From AP: 18.000 ( 18.000m)

From AP:18.35 ( 18.350m)

P	Breadth (m)	Height (m)	P	Breadth (m)	Height (m)	P	Breadth (m)	Height (m)
1	0.150	4.360	1	0.150	4.360	1	0.150	4.360
2	0.850	4.360	2	0.850	4.360	2	0.850	4.360
3	0.850	3.723	3	0.850	3.773	3	0.850	3.841
4	0.150	3.737	4	0.150	3.787	4	0.150	3.854



## M/S AQUAFISK SENIOR - JWUO - 3 LASTEROM

Appe1 (Boxes):

Date: 21 MAY 2019

No	+/-	Description	Length(m)	Breadth(m)	Height(m)	Volume (m3)
1	+	DEKKSHUS SPT.44-47 BB.	1.200	2.200	2.170	5.73
2	+	STYREHUSSOKKEL FREMRE DEL AV STYREHUS	0.900	2.000	0.550	0.99
3	+	SYUREHUS OVER SOKKEL FREMRE DEL	1.600	3.644	2.150	12.54
4	+	STYREHUS 4.0M-7.2M	3.200	2.170	2.650	18.40
5	+	CASING	1.700	1.960	2.550	8.50
6	+	SKORSTEIN	1.700	0.580	1.100	1.08
8	-	SIDEPROPELL AKTER	0.532	1.260	0.532	-0.36
9	-	SIDEPROPELL FORUT	0.532	3.400	0.532	-0.96
12	+	Rekke BB Del1	7.700	0.205	0.745	1.18
13	+	Rekke BB Del2	2.400	0.205	0.880	0.43
14	-	Skalkeport 6stykker	4.320	0.205	0.300	-0.27
16	+	Rekke SB Del1	7.700	0.145	0.770	0.86
17	+	Rekke SB Del2	3.600	0.145	0.920	0.48
18	-	Skalkeport 6 stykker	4.620	0.145	0.330	-0.22

No	+/-	X1 (Input)	X2 (Input)	X1 (m)	X2 (m)	Y1 (m)	Y2 (m)	Z1 (m)	Z2 (m)	Volume (m3)
1	+	17.6	18.8	17.600	18.800	-3.400	-1.200	3.850	6.020	5.73
2	+	7.2	8.1	7.200	8.100	-1.000	1.000	5.700	6.250	0.99
3	+	7.2	8.80	7.200	8.800	-1.822	1.822	6.250	8.400	12.54
4	+	4.0	7.2	4.000	7.200	-1.085	1.085	5.750	8.400	18.40
5	+	2.3	4.0	2.300	4.000	-0.980	0.980	5.850	8.400	8.50
6	+	2.5	4.2	2.500	4.200	-0.290	0.290	8.400	9.500	1.08
8	-	3.735	4.267	3.735	4.267	-0.630	0.630	-0.040	0.492	-0.36
9	-	20.534	21.066	20.534	21.066	-1.700	1.700	0.710	1.242	-0.96
12	+	S18+300	15.2	7.500	15.200	-3.450	-3.245	3.650	4.395	1.18
13	+	15.2	17.6	15.200	17.600	-3.450	-3.245	3.650	4.530	0.43
14	-	S21	12.72	8.400	12.720	-3.450	-3.245	3.650	3.950	-0.27
16	+	S18+300	15.2	7.500	15.200	3.305	3.450	3.650	4.420	0.86
17	+	15.2	18.8	15.200	18.800	3.305	3.450	3.650	4.570	0.48
18	-	S21	13.02	8.400	13.020	3.305	3.450	3.650	3.980	-0.22

X1 / X2: Dist. from AP to After end/ Front edge of the Appe. Minus(-) values: Aft of AP, Pluss(+) values: Front of AP

Y1 / Y2: Dist. from CL to PS / SB of Appe seen from aft. Minus(-) values for PS and Plus(+) values for SB.

Z1 / Z2: Dist. from BASE to Lower edge/ Upper edge of Appe. Minus(-) values: Below BASE and Pluss(+) values: Above BASE.