

BOAT Name Quebramar Sail Nr ROU-412	GPH 558.9	HULL Length Overall 12.575m Maximum Beam 3.012m Displacement 6,346kg Draft 2.530m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.000% Fwd Accommodation Yes Hull Construction Cored, Light Stanch. Carbon Rudder No Crew Arm Extension
GENERAL Class JV 42 Designer Judel/Vrolijk Builder Series 05/2005 Age 05/2005 Age Allowance 0.455% Offset File QUEBRAMA.OFF - 20/04/2005 10:45:42 Measurement by - 05/05/2008		IMSL 10.976m VCGD -0.021m Sink 23.47kg/mm RL 10.230m VCGM -0.035m WS 30.30m² LSM0 10.489m Displacement/Length ratio 5.4992



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	545.1			609.4		
Time on Time	1.1007			1.1076		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	629.7	497.8	448.3	815.1	613.8	538.3
Time on Time	1.0719	1.3559	1.5056	0.8281	1.0997	1.2539

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	906.1	740.9	681.0	660.2	647.0	632.3	633.3
52°	595.1	497.2	471.5	463.3	459.4	452.8	449.8
60°	563.2	479.6	457.5	450.3	446.5	441.6	436.0
75°	540.1	469.5	444.5	433.4	427.6	424.1	412.9
90°	547.0	471.5	443.1	423.5	409.6	401.9	394.9
110°	565.7	469.9	436.1	419.7	406.8	396.0	365.2
120°	583.1	479.0	439.9	412.4	393.0	379.2	352.0
135°	649.7	521.4	461.1	431.2	403.5	376.2	323.4
150°	775.3	621.9	520.1	462.8	434.6	409.0	358.2
Run VMG	895.2	718.1	600.6	527.9	484.0	450.1	401.3

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Number **072/19**
ORC Ref **ROU10026573**
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VPP Ver. **2019 1.01**
Valid until **31/12/2019**

Crew Weight

Default **737kg**
Maximum **710kg**
Minimum* **533kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Double H.GPH	569.2	1.0542
Double H.OSN	558.1	1.0750
Non Spin GPH	588.2	1.0201
Non Spin OSN	573.5	1.0462

Selected Courses							
Windward / Leeward	900.6	729.5	640.8	594.1	565.5	541.2	517.3
Circular Random	761.7	617.9	542.6	499.9	473.7	456.0	432.1
Coastal / Long Distance	900.1	686.2	578.5	518.4	485.5	457.3	415.2
Non Spinnaker	815.4	655.6	570.2	520.7	490.2	470.0	445.2

Sails Limitations

Headsails	Spinnakers
6	4

Velocity Prediction in Knots for True Wind Speeds							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	42.6°	41.2°	39.4°	38.9°	38.5°	38.0°	38.5°
Beat VMG	3.97	4.86	5.29	5.45	5.56	5.69	5.68
52°	6.05	7.24	7.63	7.77	7.84	7.95	8.00
60°	6.39	7.51	7.87	7.99	8.06	8.15	8.26
75°	6.67	7.67	8.10	8.31	8.42	8.49	8.72
90°	6.58	7.63	8.12	8.50	8.79	8.96	9.12
110°	6.36	7.66	8.26	8.58	8.85	9.09	9.86
120°	6.17	7.51	8.18	8.73	9.16	9.49	10.23
135°	5.54	6.90	7.81	8.35	8.92	9.57	11.13
150°	4.64	5.79	6.92	7.78	8.28	8.80	10.05
Run VMG	4.02	5.01	5.99	6.82	7.44	8.00	8.97
Gybe Angles	140.9°	140.0°	147.4°	154.9°	167.5°	180.0°	180.0°

Class Division Length

CDL = **10.604**

Storm Sails Areas

Heavy Weather Jib **34.02**
Storm Jib (JL=10.32) **12.60**
Storm Trysail **17.57**

Owner

BOAT	
Name Quebramar	Sail Nr ROU-412
File ROU412	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS					
Inclining Test Current Inclining					
Flotation date 06/09/2019			SG 1.0070		
FFM 1.437	FF 1.442	SFFP 0.670			
FAM 1.120	FA 1.125	SAFP 12.070			
W1 120.0	PD1 592.8	WD 11.860			
W2 120.0	PD2 591.5	GSA 1.0			
W3 120.0	PD3 591.2	RSA 1.0			
W4 120.0	PD4 592.2	PLM 9000.0			
LCF from stem on CL / on sheer			6.793 / 6.945		
Maximum beam station from stem			8.199		
RM Measured			189.3kg-m		
RM Default			188.8kg-m		
Limit of positive stability / Stab.Index			128.3° / 135.2		
Freeboard at mast at 4.930			1.329		



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RIG					
Forestay Tension Aft	Spreaders 2				
Inner Stay None Fitted	Runners 0				
Carbon Mast Yes	Jumper Struts None				
Taper Hollows No	Jib Furler No				
Fiber Rigging No	Main Furler No				
Lenticular Rigging No	Without Backstay No				
Articulated Bowsprit No					
P 16.450	E 6.100	MDT1 0.124	MW 0.233		
IG 15.840	J 4.680	MDL1 0.233	GO 0.243		
ISP 15.840	SFJ 0.250	MDT2 0.100	BD 0.300		
BAS 1.585	SPL 4.680	MDL2 0.150	MWT 181.00		
FSP 0.064	TPS	TL 2.300	MCG 6.630		

MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Strut	PRD 0.422		
Type Folding 2 blades	PBW		
Twin Screw No	PIPA 0.0037		
ST1 0.047	ST3	ST5 0.317	
ST2	ST4 0.111	EDL 0.750	

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COMMENTS	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	



SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.220	1.30	2.30	3.91	5.07	59.47	60.80	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL				
	16.05	16.05	16.05	9.47	8.95	125.27	SL · (SFL + 4·SHW) / 6		
Asymmetric	Not Available								

HEADSAILS												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
HBB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Fly	Meas.Date	Material	Comment
0.11	0.70	1.34	2.59	3.78	5.03	15.82	40.53	Y		12/09/2019	Carbon	J2
0.10	0.69	1.33	2.55	3.80	5.02	15.87	40.51	Y		12/09/2019	Carbon	
0.10	0.68	1.32	2.52	3.73	4.97	15.81	39.83	Y		12/09/2019	Carbon	J3
0.10	0.66	1.25	2.49	3.74	5.00	15.82	39.63			12/09/2019	Unknow	Wind seeker
0.09	0.61	1.14	2.19	3.36	4.63	14.24	32.29	Y		12/09/2019	Carbon	
					4.12	13.57	28.46			05/05/2008	Kevlar	J 4+
0.06	0.46	0.89	1.84		3.86	13.78	26.20	Y		20/04/2019	Unknow	

MEASUREMENT INVENTORY				
Measurer				
Date 12/09/2019				
Comment				
Id	Item	Weight	Distance	VCG Description
Tools				
Id	Item	Maker	Model	
1	Engine	YANMAR	3JH4E	
Id	Item	Weight Description		

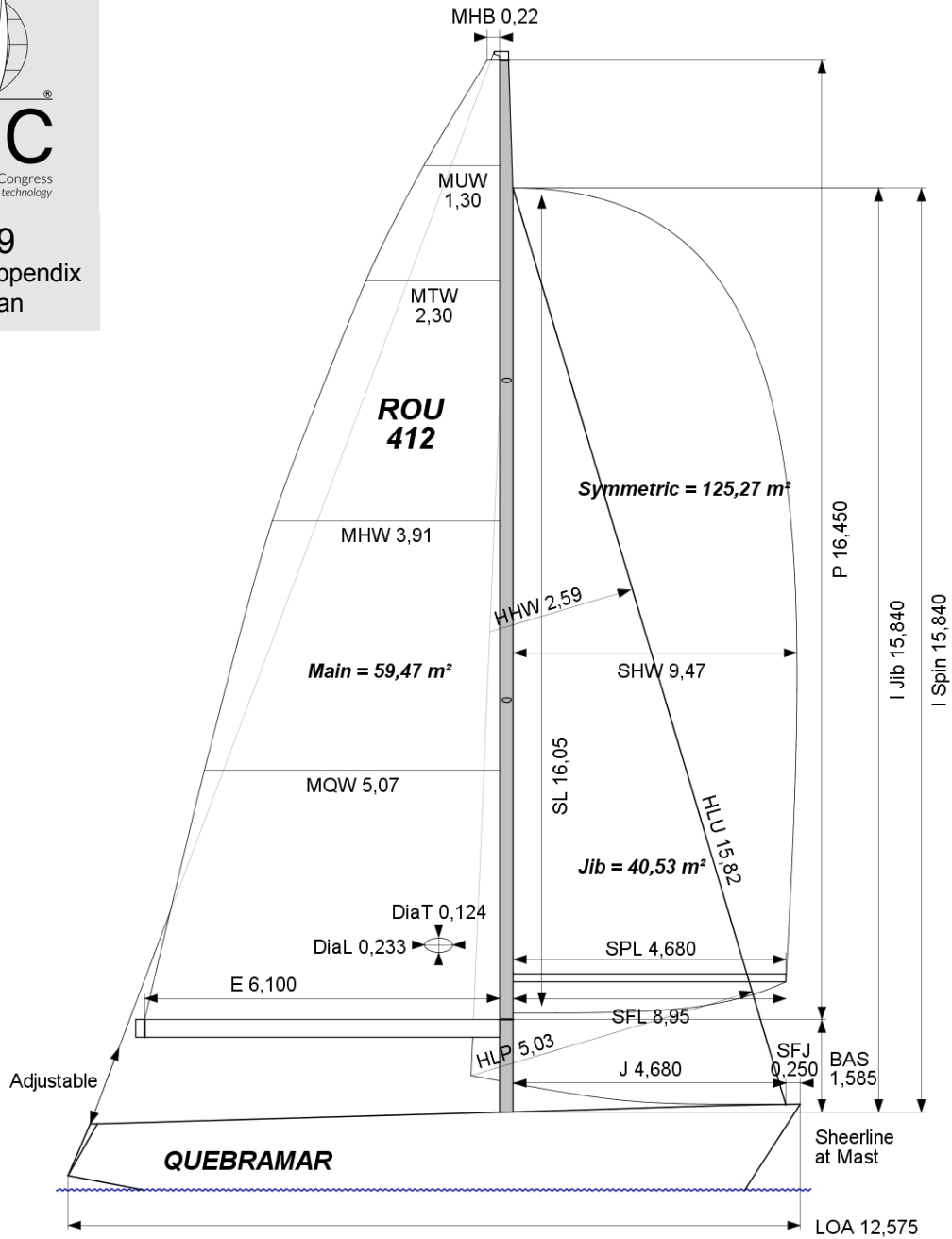
MEASUREMENT INVENTORY							
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condtn Description
1	Tank	WATER	PVC	80.0	6.20		0-0
2	Tank	WATER	PVC	80.0	6.90		0-0
3	Tank	DIESEL	INOX	90.0	8.80		0-0
Id	Item	Weight	Distance	VCG Description			
1	Ballast	140.5	8.48	No 1 - 6 + S1-S3 starboard			
2	Ballast	126.9	6.80	No 7 - 12 + P1-P2 port			
3	Ballast	441.8	7.20	No 13 - 37 + 62+63+64 starboard			
4	Ballast	438.1	7.20	No 38 - 61+65+66+67 port			
5	Ballast	311.6	6.98	26 pieces			
1	Battery		6.68	60 Ah			
2	Battery		7.00	100 Ah Starboard			
3	Battery		7.00	100 Ah port			



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Sail Plan



SAILS INVENTORY																
MAINSAIL (2)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
MS2 3di 2018	0.22	1.30	2.30	3.91	5.07	59.47		12/09/2019	North	Carbon						
2	0.21	1.30	2.26	3.84	4.99	58.72		12/09/2019	North sails	Carbon						
HEADSAILS (7)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
3	0.11	0.70	1.34	2.59	3.78	5.03	15.82	107%	40.53	Y			12/09/2019	North sails	Carbon	J2
#1	0.10	0.69	1.33	2.55	3.80	5.02	15.87	107%	40.51	Y			12/09/2019	North sails	Carbon	
2	0.10	0.68	1.32	2.52	3.73	4.97	15.81	106%	39.83	Y			12/09/2019	North sails	Carbon	J3
6	0.10	0.66	1.25	2.49	3.74	5.00	15.82	107%	39.63				12/09/2019	North sails	Carbon	Wind seeker
#3.5	0.09	0.61	1.14	2.19	3.36	4.63	14.24	99%	32.29	Y			12/09/2019	North Sails	Carbon	
5						4.12	13.57	88%	28.46				05/05/2008	North sails	Kevlar	J 4+
SS	0.06	0.46	0.89	1.84		3.86	13.78	82%	26.20		Y		20/04/2019		Unknow	
SYMMETRIC SPINNAKERS (4)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
S2 2018	16.05	16.05	16.05	9.47	8.95	125.28		12/09/2019	North	Nylon						
S1.5 2018	16.04	16.04	16.04	9.20	9.05	122.58		12/09/2019	North	Nylon						
S3	15.63	15.63	15.63	8.32	8.36	108.48		12/09/2019	NORTH	Nylon						
4	15.58	15.58	15.58	6.64	8.40	90.78		12/09/2019	NORTH	Nylon	C0					
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				