

BOAT Name J LOVE POLAND Sail Nr POL 20180	GPH 335.4	HULL Length Overall 21.500m Maximum Beam 5.796m Displacement 14,021kg Draft 4.496m IMS Reg. Division Performance Dynamic Allowance 0.000% Fwd Accommodation No Hull Construction Carbon Carbon Rudder Yes Crew Arm Extension
GENERAL Class VOLVO OPEN 70 Designer JUAN YACHT DESIGN Builder CASTOMLINE YACHTS Series 01/2011 Age 01/2011 Age Allowance 0.260% Offset File FRA1953.off - 14/02/2017 19:59:28 Measurement by - 22/02/2019		IMSL 20.946m VCGD -0.376m Sink 64.02kg/mm RL 28.893m VCGM -0.461m WS 73.20m² LSM0 21.514m Displacement/Length ratio 1.4080



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	330.5			390.2		
Time on Time	1.8154			1.7298		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	403.8	296.4	235.0	546.3	398.9	314.2
Time on Time	1.6716	2.2772	2.8729	1.2355	1.6921	2.1482

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	603.7	475.8	424.5	392.8	372.0	357.2	334.1
52°	378.3	315.2	284.8	260.6	246.1	234.9	216.2
60°	346.9	294.6	266.1	241.9	227.4	216.6	199.8
75°	321.0	265.3	237.4	213.1	199.9	190.6	174.4
90°	316.3	254.9	221.6	201.3	187.0	175.8	158.4
110°	329.5	279.6	222.7	196.5	184.6	166.4	147.5
120°	345.5	303.8	260.5	208.9	186.8	173.6	146.6
135°	425.9	356.1	316.9	272.9	239.1	207.2	155.8
150°	521.6	436.1	365.6	327.4	291.1	253.0	190.8
Run VMG	602.3	503.6	422.1	378.0	336.2	292.1	220.4

Certificate

Number **1**
ORC Ref **pol00001117**
Issued On **24/02/2019**
VPP Ver. **2019 1.01**
Valid until **31/12/2019**

Crew Weight

Default **2,053kg**
Maximum **1,400kg**
Minimum* **1,050kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Double H.GPH	339.7	1.7662
Double H.OSN	335.2	1.7898
Non Spin GPH	370.8	1.6181
Non Spin OSN	364.6	1.6458

Selected Courses							
Windward / Leeward	603.0	489.7	423.3	385.4	354.1	324.6	277.2
Circular Random	479.0	381.5	325.6	289.2	262.9	242.1	209.8
Coastal / Long Distance	602.9	456.2	370.5	311.4	274.6	243.0	192.8
Non Spinnaker	540.1	425.3	359.1	316.4	285.9	262.2	224.8

Sails Limitations

Headsails	Spinnakers
8	6

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	47.3°	42.8°	38.6°	39.4°	39.8°	40.1°	41.8°
Beat VMG	5.96	7.57	8.48	9.16	9.68	10.08	10.78
52°	9.52	11.42	12.64	13.81	14.63	15.33	16.65
60°	10.38	12.22	13.53	14.88	15.83	16.62	18.02
75°	11.21	13.57	15.16	16.89	18.01	18.88	20.64
90°	11.38	14.13	16.24	17.88	19.25	20.47	22.72
110°	10.93	12.88	16.17	18.32	19.51	21.63	24.40
120°	10.42	11.85	13.82	17.23	19.27	20.74	24.56
135°	8.45	10.11	11.36	13.19	15.05	17.37	23.10
150°	6.90	8.26	9.85	11.00	12.37	14.23	18.86
Run VMG	5.98	7.15	8.53	9.52	10.71	12.32	16.34
Gybe Angles	130.5°	134.3°	145.5°	148.5°	143.0°	139.0°	133.7°

Class Division Length

CDL = **24.922**

Storm Sails Areas

Heavy Weather Jib **94.46**
Storm Jib (JL=17.20) **34.99**
Storm Trysail **41.01**

Owner

BOAT			
Name	J LOVE POLAND	Sail Nr	POL 20180
File	J Love Poland	Data in	meters/kilograms

RIG			
Forestay Tension	Aft	Spreaders	4
Inner Stay	None Fitted	Runners	2
Carbon Mast	Yes	Jumper Struts	None
Taper Hollows	No	Jib Furler	No
Fiber Rigging	Yes	Main Furler	No
Lenticular Rigging	No	Without Backstay	No
Articulated Bowsprit	No		
P	27.960	E	8.380
IG	26.350	J	9.700
ISP	29.950	SFJ	0.850
BAS	1.950	SPL	0.000
FSP	0.000	TPS	12.800
MDT1	0.156	MW	0.318
MDL1	0.318	GO	0.355
MDT2	0.132	BD	0.380
MDL2	0.216	MWT	613.00
TL	2.700	MCG	11.860

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date	02/11/2016	SG	1.0260
FFM	0.688	FF	0.688
FAM	1.397	FA	1.397
SFFP	0.036	SAFP	21.500
W1	367.0	PD1	428.0
W2	367.0	PD2	427.8
W3	367.0	PD3	428.2
W4	367.0	PD4	427.3
WD	16.750	GSA	1.0
		RSA	1.0
		PLM	9000.0
LCF from stem on CL / on sheer	12.535 / 12.807		
Maximum beam station from stem	20.400		
RM Measured	1131.5kg·m		
RM Default	496.0kg·m		
Limit of positive stability / Stab.Index	100.6° / 104.3		
Freeboard at mast at 10.550	1.536		



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MIZZEN RIG AND SAILS			
N/A			

PROPELLER			
Type No Propeller			

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COMMENTS			

MOVABLE BALLAST			
Keel Angle	13.0	Water Ballast Volume	1,580
List Angle	42.0	Water Ballast LCG	20.80
BLR Index	1.0221	Water Ballast VCG	0.45
		Water Ballast TCG	0.00

BILGEBOARD			
BS	3.720	BT	0.080
BF	0.100	BX	9.370
BC	0.550	BY	1.090
		BA	-3.0



Invalid for Racing

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SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	2.700	3.43	4.42	6.05	7.25	162.13	165.59	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric Not Available									
Asymmetric on centerline	SLU	SLE	SL	SHW	SFL	Area	Formula		
	33.21	30.10	31.66	18.73	19.86	500.04	AS · (SFL + 4·SHW) / 6		

HEADSAILS												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
HHB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Fly	Meas.Date	Material	Comment
0.06	2.86	5.58	10.74	15.50	20.18	31.80	332.31		Y	02/11/2016	Unknow	MHO-3
0.06	2.32	4.57	8.85	13.00	17.34	29.20	256.08		Y	02/11/2016	Unknow	FRO-3
0.13	1.72	3.41	6.76	10.04	13.30	27.60	185.41			15/01/2017	Unknow	G1-9
0.16	1.53	2.93	5.62	8.28	10.93	31.60	176.31	Y	Y	12/12/2016	Unknow	J0-Blade
0.15	1.30	2.43	4.58	6.76	9.10	27.30	125.45	Y	Y	02/11/2016	Unknow	J2-6
0.15	1.05	1.98	3.84	5.84	7.87	23.50	92.07	Y	Y	02/11/2016	Unknow	J4-4
0.10	1.03	2.00	3.90	5.86	7.78	23.40	91.72	N	Y	02/11/2016	Unknow	SS-2

MEASUREMENT INVENTORY				
Measurer				
Date				
Comment				
Id	Item	Weight	Distance	VCG Description
SaS	Tools	9.0	44.85	0.00 Sailor-Services
Id	Item	Weight Description		

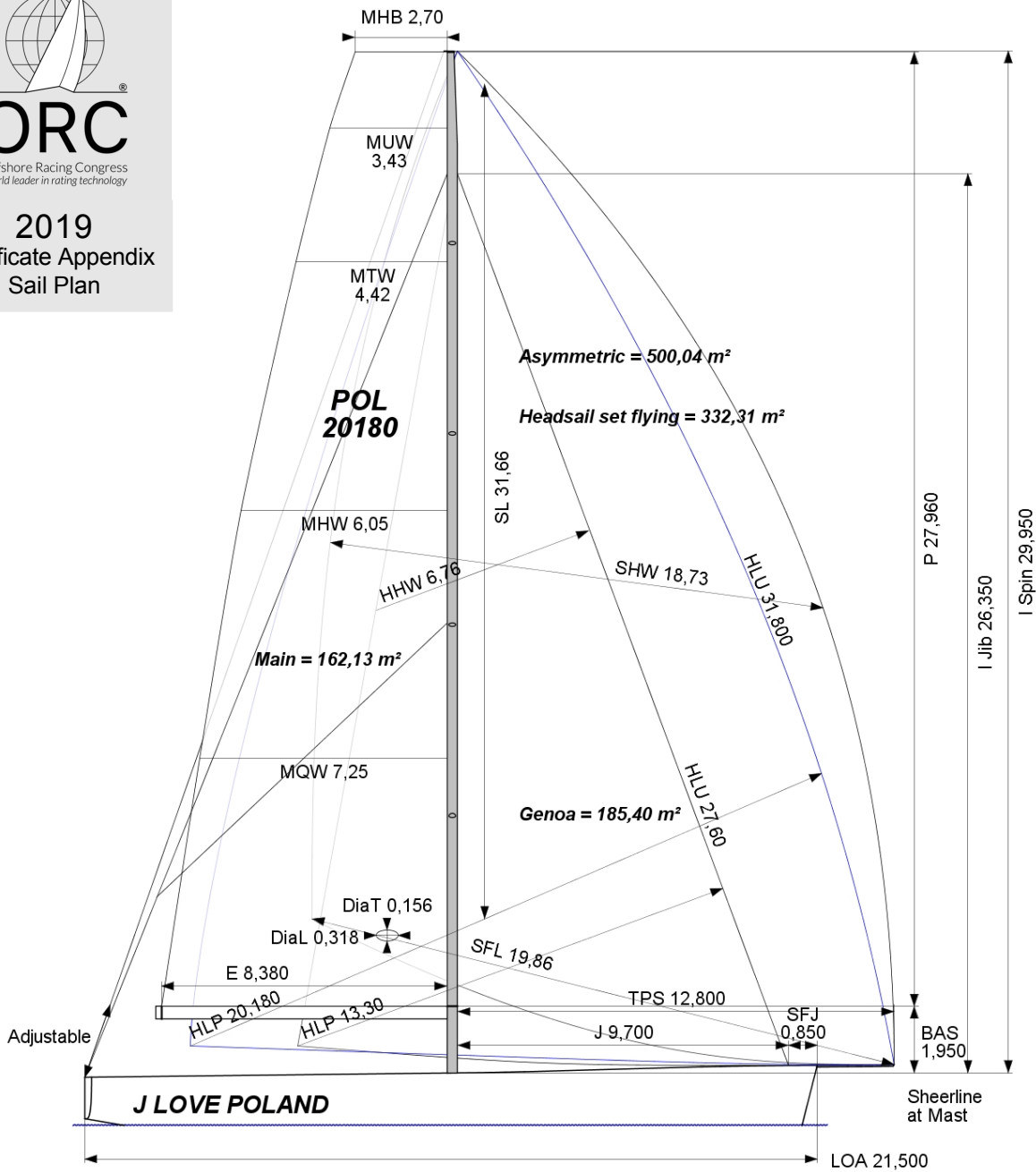
MEASUREMENT INVENTORY				
Id	Item	Weight	Distance	VCG Description
Water Ballast Tanks				
Id	Volume	Distance	VCG	TCG Description
A	1,580	20.80	0.45	0.00



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Sail Plan



SAILS INVENTORY

MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
A	2.70	3.43	4.42	6.05	7.25	162.14		02/06/2016		Unknown	MN-5					
HEADSAILS (7)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
A	0.06	2.86	5.58	10.74	15.50	20.18	31.80	208%	332.31		Y		02/11/2016		Unknown	MHO-3
B	0.06	2.32	4.57	8.85	13.00	17.34	29.20	179%	256.08		Y		02/11/2016		Unknown	FRO-3
F	0.13	1.72	3.41	6.76	10.04	13.30	27.60	137%	185.41				15/01/2017		Unknown	G1-9
C	0.16	1.53	2.93	5.62	8.28	10.93	31.60	113%	176.31	Y	Y		12/12/2016		Unknown	J0-Blade
D	0.15	1.30	2.43	4.58	6.76	9.10	27.30	94%	125.45	Y	Y		02/11/2016		Unknown	J2-6
E	0.15	1.05	1.98	3.84	5.84	7.87	23.50	81%	92.07	Y	Y		02/11/2016		Unknown	J4-4
G	0.10	1.03	2.00	3.90	5.86	7.78	23.40	80%	91.72	N	Y		02/11/2016		Unknown	SS-2
SYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
ASYMMETRIC SPINNAKERS (3)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
D	33.21	30.10	31.66	18.73	19.86	500.05	asym			nORT sAILS	Nylon	A4-1				
A2-H	33.80	29.34	31.57	18.51	19.76	493.55	asym		13/02/2019	North Sails	Nylon	A2-H				
E	32.05	29.87	30.96	17.85	19.20	467.50	asym		14/02/2019	North Sails	Nylon	A4-A 2011				