

<b>BOAT</b> Name <b>Gringo 2</b> Sail Nr <b>CRO 6482</b>	<b>GPH</b> <b>562.5</b>	<b>HULL</b> Length Overall <b>11.990m</b> Maximum Beam <b>3.762m</b> Displacement <b>5,983kg</b> Draft <b>2.430m</b> IMS Reg. Division <b>Performance</b> Dynamic Allowance <b>0.125%</b> Fwd Accommodation <b>No</b> Hull Construction <b>Solid</b> Carbon Rudder <b>No</b> Crew Arm Extension IMSL <b>11.565m</b> VCGD <b>0.020m</b> Sink <b>23.29kg/mm</b> RL <b>10.242m</b> VCGM <b>0.026m</b> WS <b>29.91m<sup>2</sup></b> LSM0 <b>11.575m</b> Displacement/Length ratio <b>3.8579</b>
<b>GENERAL</b> Class <b>A 40</b> Designer <b>Nivelt</b> Builder <b>Archambault</b> Series <b>05/2003</b> Age <b>05/2003</b> Age Allowance <b>0.487%</b> Offset File <b>GRINGO2016.off - 02/03/2016 10:27:52</b> Measurement by - <b>12/03/2014</b>		



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	<b>548.8</b>			<b>619.9</b>		
Time on Time	<b>1.0934</b>			<b>1.0888</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>641.0</b>	<b>498.9</b>	<b>445.8</b>	<b>836.6</b>	<b>619.4</b>	<b>546.6</b>
Time on Time	<b>1.0530</b>	<b>1.3529</b>	<b>1.5143</b>	<b>0.8068</b>	<b>1.0898</b>	<b>1.2350</b>

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>957.4</b>	<b>784.1</b>	<b>692.5</b>	<b>659.8</b>	<b>646.2</b>	<b>637.2</b>	<b>623.6</b>
52°	<b>625.9</b>	<b>522.8</b>	<b>478.2</b>	<b>464.3</b>	<b>458.5</b>	<b>455.6</b>	<b>446.5</b>
60°	<b>590.3</b>	<b>500.6</b>	<b>465.4</b>	<b>451.4</b>	<b>445.3</b>	<b>441.8</b>	<b>432.7</b>
75°	<b>545.3</b>	<b>471.9</b>	<b>447.6</b>	<b>437.0</b>	<b>424.9</b>	<b>417.6</b>	<b>410.9</b>
90°	<b>527.6</b>	<b>463.9</b>	<b>438.5</b>	<b>417.7</b>	<b>402.6</b>	<b>392.9</b>	<b>378.5</b>
110°	<b>563.0</b>	<b>471.0</b>	<b>437.3</b>	<b>416.7</b>	<b>395.2</b>	<b>370.9</b>	<b>342.7</b>
120°	<b>575.8</b>	<b>476.4</b>	<b>439.5</b>	<b>409.7</b>	<b>385.2</b>	<b>368.7</b>	<b>330.7</b>
135°	<b>651.5</b>	<b>514.6</b>	<b>457.7</b>	<b>428.0</b>	<b>396.8</b>	<b>365.8</b>	<b>309.1</b>
150°	<b>774.5</b>	<b>615.7</b>	<b>514.5</b>	<b>461.1</b>	<b>438.4</b>	<b>416.4</b>	<b>356.0</b>
Run VMG	<b>894.3</b>	<b>710.9</b>	<b>594.1</b>	<b>532.2</b>	<b>505.6</b>	<b>475.2</b>	<b>411.1</b>

**Certificate**

Number **008/19**  
ORC Ref **CRO00090685**  
Issued On **01/06/2019**  
VPP Ver. **2019 1.01**  
Valid until **31/12/2019**

**Crew Weight**

Default **848kg**  
Maximum **848kg**  
Minimum\* **636kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

	ToD	ToT
Non Spin GPH	<b>606.0</b>	<b>0.9901</b>
Non Spin OSN	<b>590.0</b>	<b>1.0169</b>

Selected Courses							
Windward / Leeward	<b>925.9</b>	<b>747.5</b>	<b>643.3</b>	<b>596.0</b>	<b>575.9</b>	<b>556.2</b>	<b>517.3</b>
Circular Random	<b>771.6</b>	<b>623.9</b>	<b>545.7</b>	<b>501.0</b>	<b>473.2</b>	<b>453.7</b>	<b>423.8</b>
Coastal / Long Distance	<b>922.7</b>	<b>700.8</b>	<b>580.6</b>	<b>517.9</b>	<b>486.2</b>	<b>458.4</b>	<b>405.6</b>
Non Spinnaker	<b>850.1</b>	<b>679.6</b>	<b>586.9</b>	<b>532.3</b>	<b>498.0</b>	<b>474.9</b>	<b>444.0</b>

**Sails Limitations**

Headsails	Spinnakers
<b>6</b>	<b>4</b>

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	<b>42.9°</b>	<b>41.3°</b>	<b>40.0°</b>	<b>38.7°</b>	<b>38.1°</b>	<b>37.7°</b>	<b>37.6°</b>
Beat VMG	<b>3.76</b>	<b>4.59</b>	<b>5.20</b>	<b>5.46</b>	<b>5.57</b>	<b>5.65</b>	<b>5.77</b>
52°	<b>5.75</b>	<b>6.89</b>	<b>7.53</b>	<b>7.75</b>	<b>7.85</b>	<b>7.90</b>	<b>8.06</b>
60°	<b>6.10</b>	<b>7.19</b>	<b>7.74</b>	<b>7.97</b>	<b>8.09</b>	<b>8.15</b>	<b>8.32</b>
75°	<b>6.60</b>	<b>7.63</b>	<b>8.04</b>	<b>8.24</b>	<b>8.47</b>	<b>8.62</b>	<b>8.76</b>
90°	<b>6.82</b>	<b>7.76</b>	<b>8.21</b>	<b>8.62</b>	<b>8.94</b>	<b>9.16</b>	<b>9.51</b>
110°	<b>6.39</b>	<b>7.64</b>	<b>8.23</b>	<b>8.64</b>	<b>9.11</b>	<b>9.71</b>	<b>10.50</b>
120°	<b>6.25</b>	<b>7.56</b>	<b>8.19</b>	<b>8.79</b>	<b>9.35</b>	<b>9.77</b>	<b>10.88</b>
135°	<b>5.53</b>	<b>7.00</b>	<b>7.87</b>	<b>8.41</b>	<b>9.07</b>	<b>9.84</b>	<b>11.65</b>
150°	<b>4.65</b>	<b>5.85</b>	<b>7.00</b>	<b>7.81</b>	<b>8.21</b>	<b>8.65</b>	<b>10.11</b>
Run VMG	<b>4.03</b>	<b>5.06</b>	<b>6.06</b>	<b>6.76</b>	<b>7.12</b>	<b>7.58</b>	<b>8.76</b>
Gybe Angles	<b>143.0°</b>	<b>145.8°</b>	<b>146.9°</b>	<b>151.2°</b>	<b>151.0°</b>	<b>175.8°</b>	<b>143.2°</b>

**Class Division Length**

CDL = **10.905**

**Storm Sails Areas**

Heavy Weather Jib **36.13**  
Storm Jib (JL=10.64) **13.38**  
Storm Trysail **14.49**

**Owner**

<b>BOAT</b>	
Name <b>Gringo 2</b>	Sail Nr <b>CRO 6482</b>
File <b>CRO6482</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>		
Inclining Test <b>Current Inclining</b>		
Flotation date <b>01/03/2019</b>	SG <b>1.0310</b>	
FFM <b>1.225</b>	FF <b>1.223</b>	SFFP <b>0.142</b>
FAM <b>1.022</b>	FA <b>1.021</b>	SAFP <b>11.381</b>
W1 <b>100.9</b>	PD1 <b>581.7</b>	WD <b>11.800</b>
W2 <b>100.9</b>	PD2 <b>581.6</b>	GSA <b>1.0</b>
W3 <b>100.9</b>	PD3 <b>581.7</b>	RSA <b>1.0</b>
W4 <b>100.9</b>	PD4 <b>581.5</b>	PLM <b>9000.0</b>
LCF from stem on CL / on sheer		<b>6.610 / 6.857</b>
Maximum beam station from stem		<b>8.236</b>
RM Measured		<b>161.2kg-m</b>
RM Default		<b>162.9kg-m</b>
Limit of positive stability / Stab.Index		<b>112.9° / 113.2</b>
Freeboard at mast at 4.695		<b>1.095</b>



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<b>RIG</b>			
Forestay Tension <b>Aft</b>	Spreaders <b>2</b>		Runners <b>0</b>
Inner Stay <b>None Fitted</b>	Carbon Mast <b>No</b>		Jumper Struts <b>None</b>
Taper Hollows <b>No</b>	Fiber Rigging <b>No</b>		Jib Furler <b>No</b>
Lenticular Rigging <b>No</b>	Main Furler <b>No</b>		Without Backstay <b>No</b>
Articulated Bowsprit <b>No</b>			
P <b>14.650</b>	E <b>5.650</b>	MDT1 <b>0.136</b>	MW <b>0.226</b>
IG <b>16.251</b>	J <b>4.570</b>	MDL1 <b>0.226</b>	GO <b>0.256</b>
ISP <b>16.332</b>	SFJ <b>0.125</b>	MDT2 <b>0.126</b>	BD <b>0.190</b>
BAS <b>1.902</b>	SPL <b>0.207</b>	MDL2 <b>0.207</b>	MWT <b>224.80</b>
FSP <b>0.066</b>	TPS <b>6.390</b>	TL <b>0.400</b>	MCG <b>5.160</b>

<b>MIZZEN RIG AND SAILS</b>	
N/A	

<b>PROPELLER</b>		
Installation <b>Strut</b>	PRD	
Type <b>Folding 2 blades</b>	PBW	
Twin Screw <b>No</b>	PIPA <b>0.0040</b>	
ST1 <b>0.065</b>	ST3 <b>0.180</b>	ST5 <b>0.290</b>
ST2 <b>0.180</b>	ST4 <b>0.110</b>	EDL <b>2.210</b>

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<b>COMMENTS</b>	
SPL = 4.5	

<b>MOVABLE BALLAST</b>	
N/A	

<b>CENTERBOARD</b>	
N/A	

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<b>SAILS (Maximum Areas)</b>									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.170	1.12	2.04	3.59	4.74	48.67	49.77	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				
	18.72	15.94	17.33	10.60	11.76	156.43		AS · (SFL + 4·SHW) / 6	

<b>HEADSAILS</b>												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
<b>HHB</b>	<b>HUW</b>	<b>HTW</b>	<b>HHW</b>	<b>HQW</b>	<b>HLP</b>	<b>HLU</b>	<b>Area</b>	<b>Btn</b>	<b>Fly</b>	<b>Meas.Date</b>	<b>Material</b>	<b>Comment</b>
0.02	1.20	2.35	4.37	5.75	6.69	15.83	61.69		Y	26/06/2017	Unknow	Code 0
0.11	0.74	1.39	2.54	3.61	4.68	16.16	39.89			20/06/2017	Carbon	LM
0.11	0.73	1.38	2.52	3.60	4.65	16.03	39.34	Y	N	22/03/2015	Carbon	MH
0.07	0.57	1.10	2.18	3.29	4.38	16.07	35.30	Y		04/03/2013	Carbon	
0.07	0.53	1.01	2.02	3.06	4.10	15.07	30.80	Y		04/03/2013	Carbon	J4

<b>MEASUREMENT INVENTORY</b>				
Measurer <b>CRO5</b>				
Date <b>01/03/2019</b>				
Comment				
<b>Id</b>	<b>Item</b>	<b>Weight</b>	<b>Distance</b>	<b>VCG Description</b>
<b>Id</b>	<b>Item</b>	<b>Maker</b>	<b>Model</b>	
1	Engine	Volvo	MD 2030	
<b>Id</b>	<b>Item</b>	<b>Weight Description</b>		

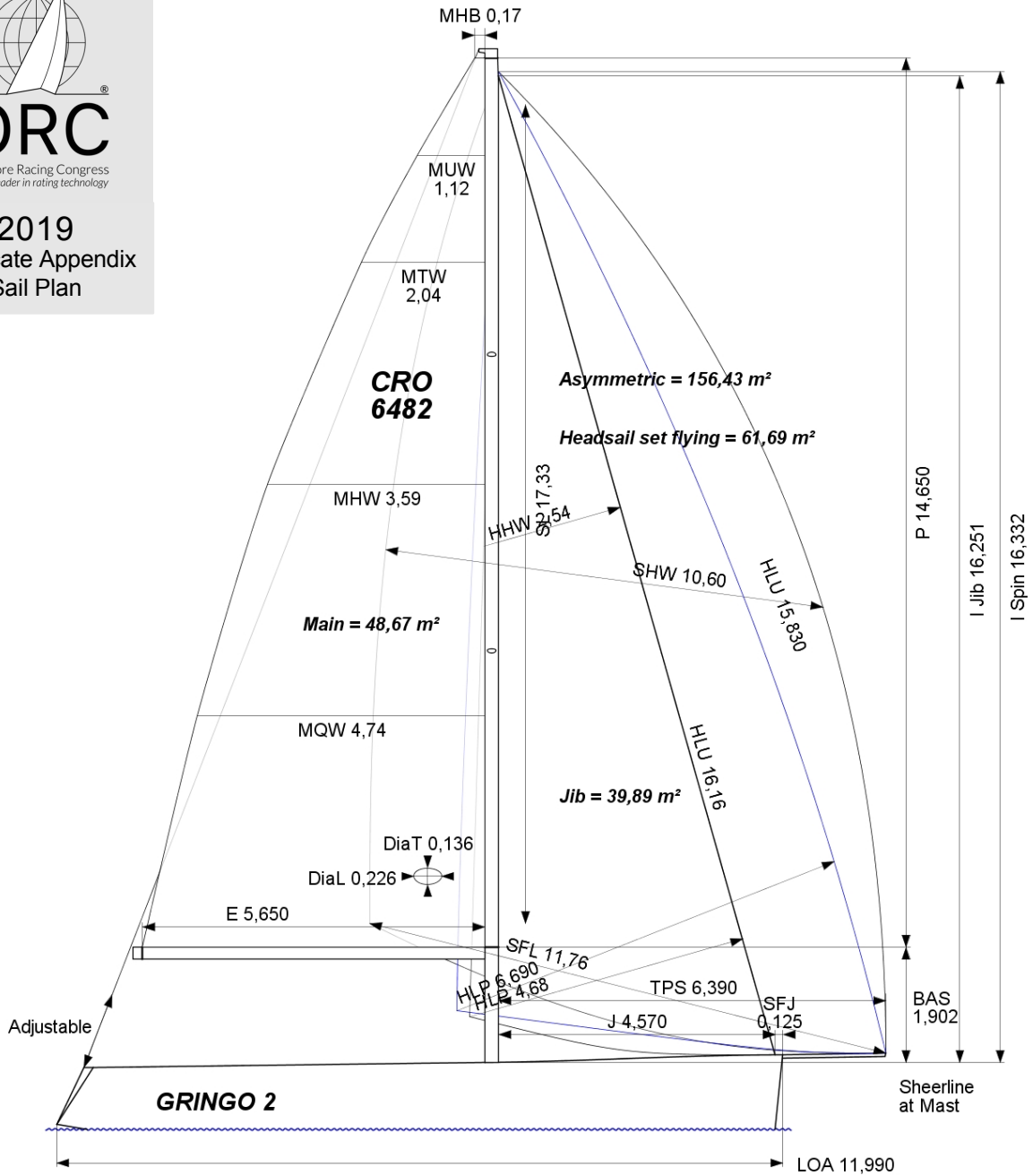
<b>MEASUREMENT INVENTORY</b>						
<b>Id</b>	<b>Item</b>	<b>Tank Use</b>	<b>Tank Type</b>	<b>Capcty</b>	<b>Dist.</b>	<b>VCG Condtn Description</b>
1	Tank Water		Fix	100.0	5.75	0-0
2	Tank Water		Fix	100.0	5.75	0-0
3	Tank Fuel		Fix	80.0	9.50	0-0
<b>Id</b>	<b>Item</b>	<b>Weight</b>	<b>Distance</b>	<b>VCG Description</b>		
4	Ballast	26.6	5.67	Port side		
3	Ballast	27.3	5.47	Port side		
2	Ballast	26.0	5.67	Stb side		
1	Ballast	28.5	5.47	Stb side		
1	Battery		7.30	1 x 105 Ah		
2	Battery		7.30	1 x 75 Ah		



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Sail Plan



SAILS INVENTORY																
MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
2	0.17	1.12	2.04	3.59	4.74	48.67		05/04/2017	North Sails	Unknown						
HEADSAILS (5)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
5	0.02	1.20	2.35	4.37	5.75	6.69	15.83	146%	61.69		Y		26/06/2017	North sails	Unknown	Code 0
4	0.11	0.74	1.39	2.54	3.61	4.68	16.16	102%	39.89				20/06/2017	North Sails	Carbon	LM
1	0.11	0.73	1.38	2.52	3.60	4.65	16.03	102%	39.34	Y	N		22/03/2015	North sails	Carbon	MH
3	0.07	0.57	1.10	2.18	3.29	4.38	16.07	96%	35.30	Y			04/03/2013	North sails	Carbon	
2	0.07	0.53	1.01	2.02	3.06	4.10	15.07	90%	30.80	Y			04/03/2013	North sails	Carbon	J4
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				
2	18.72	15.94	17.33	10.60	11.76	156.44	asym		09/03/2019	North sails	Nylon	A 1,5				
1	18.58	16.30	17.44	10.02	8.80	142.08	asym		09/03/2019	North sails	Nylon					
3	18.45	17.10	17.77	8.69	11.30	136.46	asym		10/03/2019	North sails	Nylon					