

LEONHARDT COMPANY, INC.
892 Worcester Street, Suite 220
Wellesley, Massachusetts 02482
Tel: (781) 237-7200 ~ Fax: (781) 237-3399

Fume Hood Testing and Certification Report

Facility: <u>Woods Hole Oceanographic Inst.</u>	Test Date: <u>8/9/18</u>
Building: <u>R/V ATLANTIS</u>	Re-Certification Due Date: <u>8/9/2019</u>
Room #: <u>HYDRO LAB</u>	Hood Manufacturer: <u>LABCONCO</u>
Hood #: <u>H-1</u>	Velocity Sensor Manufacturer: <u>None</u>
Sash Type: <input checked="" type="checkbox"/> Vertical <input type="checkbox"/> Horizontal <input type="checkbox"/> Combo	

Testing Services Performed

Velocity Profile: <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail <input type="checkbox"/> N/A	<input type="checkbox"/> ANSI/ASHRAE Z9.5-92
Sash Height: <u>18"</u> Sash Width: <u>41 1/2"</u>	<input checked="" type="checkbox"/> SEFA 1.2-1996
Sash Height authorized by: <u>Rick Galat - Facilities</u>	
Sash Operation: <input checked="" type="checkbox"/> Operational <input type="checkbox"/> Non-operational	Face Velocity Sensor Calibrated: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Hood Lighting: <input checked="" type="checkbox"/> Operational <input type="checkbox"/> Non-operational	
Certification Criteria:	<ul style="list-style-type: none">- Acceptable face velocities on standard hood 90-110 FPM- Acceptable face velocities on "Air Sentry" hood 70 FPM (+/- 10%).- Sash height may be modified within reason to achieve face velocities.- Target sash height is 20".
Service Remarks:	<u>No face velocity monitor</u>

Face Velocity Profile

<table><tr><td>118</td><td>117</td><td>118</td></tr></table>	118	117	118	Velocity Totals: <u>353</u> No. of Readings: <u>3</u> Average Face Velocity: <u>118</u>
118	117	118		

Instrumentation

Test Instrument: <u>Shortridge</u>	Calibration Date: <u>5/1/18</u>
Model No.: <u>ADM 860</u>	Calibration Due Date: <u>5/1/19</u>
Serial No.: <u>M01411</u>	
Note: The velgrid accessory samples air velocity over a one square foot area. Therefore only three readings are required to obtain an accurate average face velocity.	

Technician: Chris Corrigan

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Room #: <u>WET LAB</u>	Hood Manufacturer: <u>HAMILTON</u>
Hood #: <u>H-2</u>	Velocity Sensor Manufacturer: <u>None</u>
Sash Type: <input checked="" type="checkbox"/> Vertical <input type="checkbox"/> Horizontal <input type="checkbox"/> Combo	

Testing Services Performed

Velocity Profile: <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail <input type="checkbox"/> N/A	<input type="checkbox"/> ANSI/ASHRAE Z9.5-92
Sash Height: <u>14 1/2"</u> Sash Width: <u>32 1/2"</u>	<input checked="" type="checkbox"/> SEFA 1.2-1996
Sash Height authorized by: <u>Rick Galat - Facilities</u>	
Sash Operation: <input checked="" type="checkbox"/> Operational <input type="checkbox"/> Non-operational	Face Velocity Sensor Calibrated: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Hood Lighting: <input checked="" type="checkbox"/> Operational <input type="checkbox"/> Non-operational	
<u>Certification Criteria:</u>	- Acceptable face velocities on standard hood 90-110 FPM - Acceptable face velocities on "Air Sentry" hood 70 FPM (+/- 10%). - Sash height may be modified within reason to achieve face velocities. - Target sash height is 20".
<u>Service Remarks:</u>	<u>No face velocity monitor</u>

Face Velocity Profile

<table><tr><td>92</td><td>96</td><td>98</td></tr></table>	92	96	98	Velocity Totals: <u>286</u> No. of Readings: <u>3</u> Average Face Velocity: <u>95</u>
92	96	98		

Instrumentation

Test Instrument: <u>Shortridge</u>	Calibration Date: <u>5/1/18</u>
Model No.: <u>ADM 860</u>	Calibration Due Date: <u>5/1/19</u>
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Room #: <u>MAINE LAB</u>	Hood Manufacturer: <u>LABCONCO</u>
Hood #: <u>H-3</u>	Velocity Sensor Manufacturer: <u>None</u>
Sash Type: <input checked="" type="checkbox"/> Vertical <input type="checkbox"/> Horizontal <input type="checkbox"/> Combo	

Testing Services Performed

Velocity Profile: <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail <input type="checkbox"/> N/A	<input type="checkbox"/> ANSI/ASHRAE Z9.5-92
Sash Height: <u>13"</u> Sash Width: <u>41"</u>	<input checked="" type="checkbox"/> SEFA 1.2-1996
Sash Height authorized by: <u>Rick Galat - Facilities</u>	
Sash Operation: <input checked="" type="checkbox"/> Operational <input type="checkbox"/> Non-operational	Face Velocity Sensor Calibrated: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Hood Lighting: <input checked="" type="checkbox"/> Operational <input type="checkbox"/> Non-operational	
<u>Certification Criteria:</u>	- Acceptable face velocities on standard hood 90-110 FPM - Acceptable face velocities on "Air Sentry" hood 70 FPM (+/- 10%). - Sash height may be modified within reason to achieve face velocities. - Target sash height is 20".
<u>Service Remarks:</u>	<u>No face velocity monitor</u>

Face Velocity Profile

<table><tr><td>93</td><td>96</td><td>95</td></tr></table>	93	96	95	Velocity Totals: <u>284</u> No. of Readings: <u>3</u> Average Face Velocity: <u>95</u>
93	96	95		

Instrumentation

Test Instrument: <u>Shortridge</u>	Calibration Date: <u>5/1/18</u>
Model No.: <u>ADM 860</u>	Calibration Due Date: <u>5/1/19</u>
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Room #: <u>BIO-CLEAN LAB</u>	Hood Manufacturer: <u>HAMILTON</u>
Hood #: <u>H-4</u>	Velocity Sensor Manufacturer: <u>None</u>
Sash Type: <input checked="" type="checkbox"/> Vertical <input type="checkbox"/> Horizontal <input type="checkbox"/> Combo	

Testing Services Performed

Velocity Profile: <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail <input type="checkbox"/> N/A	<input type="checkbox"/> ANSI/ASHRAE Z9.5-92
Sash Height: <u>18"</u> Sash Width: <u>39"</u>	<input checked="" type="checkbox"/> SEFA 1.2-1996
Sash Height authorized by: <u>Rick Galat - Facilities</u>	
Sash Operation: <input checked="" type="checkbox"/> Operational <input type="checkbox"/> Non-operational	Face Velocity Sensor Calibrated: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Hood Lighting: <input checked="" type="checkbox"/> Operational <input type="checkbox"/> Non-operational	
<u>Certification Criteria:</u>	- Acceptable face velocities on standard hood 90-110 FPM - Acceptable face velocities on "Air Sentry" hood 70 FPM (+/- 10%). - Sash height may be modified within reason to achieve face velocities. - Target sash height is 20".
<u>Service Remarks:</u>	<u>No face velocity monitor</u>

Face Velocity Profile

<table><tr><td>119</td><td>118</td><td>117</td></tr></table>	119	118	117	Velocity Totals: <u>354</u> No. of Readings: <u>3</u> Average Face Velocity: <u>118</u>
119	118	117		

Instrumentation

Test Instrument: <u>Shortridge</u>	Calibration Date: <u>5/1/18</u>
Model No.: <u>ADM 860</u>	Calibration Due Date: <u>5/1/19</u>
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Vented Work Station Testing and Certification Report

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Building: <u>R/V ATLANTIS</u>	Re-Certification Due Date: <u>8/9/2019</u>
Room #: <u>ISOTOPE VAN</u>	Hood Manufacturer: <u>FLOW SCIENCES</u>
Hood #: <u>H-5 FLOW SCIENCE</u>	Velocity Sensor Manufacturer: <u>None</u>
<u>VENTED WORK STATION</u>	
Sash Type: <input checked="" type="checkbox"/> Vertical <input type="checkbox"/> Horizontal <input type="checkbox"/> Combo	

Testing Services Performed

Velocity Profile: <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail <input type="checkbox"/> N/A	<input type="checkbox"/> ANSI/ASHRAE Z9.5-92
Sash Height: _____ Sash Width: _____	<input type="checkbox"/> SEFA 1.2-1996
Sash Height authorized by: <u>Rick Galat - Facilities</u>	
Sash Operation: <input checked="" type="checkbox"/> Operational <input type="checkbox"/> Non-operational	Face Velocity Sensor Calibrated: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Hood Lighting: <input checked="" type="checkbox"/> Operational <input type="checkbox"/> Non-operational	
<u>Certification Criteria:</u>	- Acceptable face velocities on standard hood 90-110 FPM - Acceptable face velocities on "Air Sentry" hood 70 FPM (+/- 10%). - Sash height may be modified within reason to achieve face velocities. - Target sash height is 20".
<u>Service Remarks:</u>	<u>fan on high speed</u> <u>No face velocity monitor</u> <u>All cowlings need to be opened 100%</u>

Face Velocity Profile

19"			8"		19"	8"
108	98	101	132		Velocity Totals:	307 132
					No. of Readings:	3 1
					Average Face Velocity:	102 132

Instrumentation

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Room #: ISOTOPE VAN	Hood Manufacturer: FLOW SCIENCES
Hood #: FLOW SCIENCE	Velocity Sensor Manufacturer: None
VENTED WORK STATION	Sash Type: <input checked="" type="checkbox"/> Vertical <input type="checkbox"/> Horizontal <input type="checkbox"/> Combo

Testing Services Performed

Velocity Profile: <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail <input type="checkbox"/> N/A	<input type="checkbox"/> ANSI/ASHRAE Z9.5-92
Sash Height: _____ Sash Width: _____	<input type="checkbox"/> SEFA 1.2-1996
Sash Height authorized by: Rick Galat - Facilities	
Sash Operation: <input checked="" type="checkbox"/> Operational <input type="checkbox"/> Non-operational	Face Velocity Sensor Calibrated: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Hood Lighting: <input checked="" type="checkbox"/> Operational <input type="checkbox"/> Non-operational	
Certification Criteria:	- Acceptable face velocities on standard hood 90-110 FPM - Acceptable face velocities on "Air Sentry" hood 70 FPM (+/- 10%). - Sash height may be modified within reason to achieve face velocities. - Target sash height is 20".
Service Remarks:	Fan on high speed No face velocity monitor All cowlings need to be opened 100%

Face Velocity Profile

19"			8"	19"	8"
96	90	95	122	Velocity Totals: 281	122
				No. of Readings: 3	1
				Average Face Velocity: 94	122

Instrumentation

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