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

	Woods Hole Oceanogra	ohic Inst.		Test Date: 8/9/18								
	R/V ATLANTIS		Re-C	Re-Certification Due Date: 8/9/2019								
-	HYDRO LAB			Hood Manufacturer: LABCONCO								
Hood #: _l	H-1		Velocity Sensor Manufacturer: None									
				Sash Type	: Vertical	☐ Hor	rizontal		Co			
_			Testing Service	es Performed								
	Velocity Profile:	☑ Pass □	Fail □N/A		ANSI/AIHA Z9.5	-92		\neg				
	Sash Height:	18" Sash W	/idth 41 1/2"		SEFA 1.2-1996							
	Sash Height authorized by:	Rick Galat - Facilities										
	Sash Operation: Hood Lighting:	OperationalOperational	□Non-operational □Non-operational	Face Velocity Sen	sor Calibrated:	□Yes	V	No				
	Certification Criteria:	- Acceptable face	velocities on "Air be modified with	ndard hood 90-110 F Sentry" hood 70 FP in reason to achieve	M (+/- 10%).).						
	Service Remarks:	raiget sasii neig	JII 13 20 .					\dashv				
		No face velocity n	nonitor									
7												
			Face Veloc	ity Profile				_				
					Velo	ocity Totals:	353					
		118	117	118	No. of	f Readings:	3					
					Average Fac	ce Velocity:	118	_				
		9	Instrume	entation								
	Test Instrument:			Calibration Date:	5/1/18							
1	Model No.:			Calibration Due Date:	5/1/19							
	Serial No.:											
	Note:	The velgrid accessory	samples air velocity of	over a one square foot are	ea.							
L		Therefore only three r	eadings are required	to obtain an accurate ave	rage face velocity.			- 1				

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The state of the s			- Contract of the Contract of								
100 mm	Woods Hole Oceanogra	ohic Inst.		Test Date: 8	9/18						
	R/V ATLANTIS		Re-Ce	ertification Due Date: 8	9/2019						
	WET LAB		Hood Manufacturer: HAMILTON								
Hood #:	H-2		Velocity Sensor Manufacturer: None								
				Sash Type: [√ Vertical	☐ Hor	rizontal		Co		
		Τε	esting Service	es Performed							
	Velocity Profile:	Pass Fa	il □N/A	ПА	NSI/AIHA Z9.5	-92					
	Sash Height:	14 1/2" Sash Width	32 1/2"	✓s	EFA 1.2-1996			- 1			
	Sash Height authorized by:	Rick Galat - Facilities						- 1			
	Sash Operation:	☑ Operational □N	lon-operational	Face Velocity Sensor	Calibrated:	□Yes	V	No			
	Hood Lighting:	☑ Operational □N	lon-operational								
	Certification Criteria:	- Acceptable face velo	ocities on stan	dard hood 90-110 FPN	1						
		- Acceptable face velo	cities on "Air	Sentry" hood 70 FPM	(+/- 10%).			- 1			
				n reason to achieve fa		i.		- 1			
		- Target sash height is	3 20".								
	Service Remarks:										
		No face velocity monit	tor ·					- 1			
								- 1			
								- 1			
			Face Veloci	ity Profile				_			
					Velo	ocity Totals:	286				
		92	96	98	No. o	f Readings:	3				
					Average Fac	ce Velocity:	95				
			Instrume	ntation							
	Test Instrument:			Calibration Date: 5/	1/18						
	Model No.:			Calibration Due Date: 5/	1/19						
	Serial No.:										
	Note:	The velgrid accessory samp	oles air velocity o	ver a one square foot area.							
	,	Therefore only three reading	gs are required to	o obtain an accurate averag	e face velocity.						

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	Woods Hole Oceanograp	ohic Inst.		Test Date:	8/9/18						
	R/V ATLANTIS		Re-Certification Due Date: 8/9/2019								
	MAINE LAB	4;		Hood Manufacturer: LABCONCO							
Hood #:	H-3		Velocity :	Sensor Manufacturer:	None						
				Sash Type:	∨ertical	□ Но	rizontal		С		
		Т	esting Servic	es Performed							
	Velocity Profile:	☑ Pass ☐ F	ail □N/A		ANSI/AIHA Z9.5-9	2					
	Sash Height:	13" Sash Width	41"		SEFA 1.2-1996	_		- 1			
	Sash Height authorized by:	Rick Galat - Facilities						- 1			
	Sash Operation:		Non-operational	Face Velocity Sens	or Calibrated:	□Yes	7	No			
	Hood Lighting:		Non-operational	· also valually dalla	or odnoratou.	_100		110			
		,						- 1			
	Certification Criteria:	- Acceptable face vel	locities on star	ndard hood 90-110 FP	PM						
				Sentry" hood 70 FPM				- 1			
		- Sash height may be	modified with	in reason to achieve f	face velocities			- 1			
		- Target sash height	is 20".	rodoon to domove i	acc velocities.						
	Service Remarks:							\neg			
		No face velocity mon	itor					- 1			
		The fact to				_					
	1			*****				- 1			
	İ							- 1			
	,	-	Face Veloc	rity Profile							
			r doc veloc	nty i forme							
		***			Veloc	ity Totals: _	284				
		93	96	95	No. of F	Readings:	3				
					Average Face	Velocity:	95				
			Instrume	entation							
	Test Instrument:		0	Calibration Date:	5/1/18						
	Model No.:	ADM 860		Calibration Due Date:							
	Serial No.:	M01411		-							
	Note:	The velgrid accessory sam	nples air velocity o	over a one square foot area	l.						
		Therefore only three readi	ngs are required t	to obtain an accurate avera	ige face velocity.						
					J						

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Fume Hood Testing and Certification Report

	Woods Hole Oceanogra	phic Inst.	_	Test Date:							
	R/V ATLANTIS		Re-Certification Due Date: 8/9/2019								
	BIO-CLEAN LAB		Hood Manufacturer: HAMILTON								
Hood #:	H-4		_ Velocity S	Sensor Manufacturer: I							
				Sash Type:	∨ertical	☐ Ho	rizontal		Combo		
		Te	stina Servic	es Performed							
	Velocity Profile:	THE RESERVE THE PERSON NAMED IN COLUMN 2 I			ANSI/AIHA Z9.5-9	12					
	Sash Height:		39"		SEFA 1.2-1996	2		- 1			
	Sash Height authorized by:			۵,	DLI A 1.2-1990						
	Sash Operation: Hood Lighting:	☑ Operational ☐No	– on-operational on-operational	Face Velocity Senso	r Calibrated:	□Yes	V	No			
	riood Lighting.	D Operational Link	on-operational					- 1			
	Certification Criteria:	- Acceptable face velo	cities on stan	dard hood 90-110 FP	M			-			
		- Acceptable face velo	cities on "Air	Sentry" hood 70 FPM	(+/- 10%).			- 1			
		- Sash height may be r	modified with	n reason to achieve fa	ace velocities.						
		- Target sash height is	20".					- 1			
	Service Remarks:										
		No face velocity monitor	or								
								- 1			
								- 1			
		-				_					
			Face Veloc	ity Profile							
					Veloc	ity Totals:	354	- 1			
		119	118	117	No. of I	Readings:	3	12			
					Average Face	Velocity:	118				
				3							
			Instrume	ntation							
	Test Instrument:	Shortridge		Calibration Date: 5	/1/18						
	Model No.:	ADM 860		Calibration Due Date: 5							
	Serial No.:	M01411									
	Note:	The velgrid accessory samp	les air velocity o	ver a one square foot area.							
	1	Therefore only three reading	gs are required to	o obtain an accurate avera	ge face velocity.						

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

Vented Work Station Testing and Certification Report

		Woods Hole Oceanogra	phic Inst.	_	Test Date: 8	9/18					
		R/V ATLANTIS		Re-Certification Due Date: 8/9/2019							
		ISOTOPE VAN		Hood Manufacturer: FLOW SCIENCES							
	Hood #:	H-5 FLOW SCIENCE		Velocity	Sensor Manufacturer: N	one					
		VENTED WORK STAT	ION		Sash Type:	√ Vertical	ΠН	lorizonta		Comb	
									Ш		
			<u></u>								
			the same of the sa	The same of the sa	es Performed						
		Velocity Profile:		□N/A	1	NSI/AIHA Z9.5-92					
		Sash Height:			⊔s	EFA 1.2-1996					
		Sash Height authorized by:		_	Name William III Now York			_			
		Sash Operation:		n-operational	Face Velocity Sensor	Calibrated:	□Yes	1	No		
		Hood Lighting:	☑ Operational ☐No	n-operational					- 1		
		Cartification Critoria:	Acceptable face volce	ition on oto	adard band 00 110 FDN	4					
		Gertification Chiena.									
			Sach haight may be n	andified with	Sentry nood 70 FPIVI	(+/- 10%).			- 1		
					iin reason to achieve fa	ce velocities.					
									-		
		Service Kernarks.		\r							
					70/				- 1		
			All cowilligs fleed to be	opened 10	J 70						
									- 1		
	108 98 101 132 No. of Readings: 3										
		101							8"		
						Velocity	y Totals:	307	132		
			108 98	101	132				1		
				70,000 10			_		132		
			r.	Instrume	entation						
		Test Instrument:	Shortridge		Calibration Date: 5	1/18					
		Model No.:			Calibration Due Date: 5						
		Serial No.:			- Instance Duto Duto.						
		Note:	The velgrid accessory sample	es air velocity	over a one square foot area						
			Therefore only 3/1 readings a	are required to	obtain an accurate average t	ace velocity.					

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Fume Hood Testing and Certification Report

THE RESERVE AND DESCRIPTION OF THE PERSON NAMED IN				-			The second second				-	
	Woods Hole Oceanograp	st.	Test Date: 8/9/18									
	g: R/V ATLANTIS				Re-Certification Due Date: 8/9/2019							
	ISOTOPE VAN	Hood Manufacturer: FLOW SCIENCES										
Hood #:	FLOW SCIENCE		Velocity	Sensor Manufacture	r: None	е						
	VENTED WORK STAT	ION				Sash Type	e: 🗸	Vertical		lorizont	al _	C
								The second second second				
ĵ						es Performed						
	Velocity Profile:		Pass [] Fail	□N/A			SI/AIHA Z9.5-9	2			
	Sash Height:			-			□SEF.	A 1.2-1996				
	Sash Height authorized by:								_	_	_	1
	Sash Operation:		Operational		n-operational	Face Velocity Ser	nsor Ca	alibrated:	□Yes	[-	No.	
	Hood Lighting:	\checkmark	Operational	∐Non	n-operational							
	Certification Criteria:	- Acc	ceptable face	veloci	ities on sta	ndard hood 90-110 F	PM					1
		- Acc	ceptable face	veloci	ities on "Air	Sentry" hood 70 FP	M (+/	/- 10%).				1
		- Sas	sh height ma	y be m	odified with	nin reason to achieve	face	velocities.				1
		- Tar	get sash hei	ght is 2	20".							
	Service Remarks: Fan on high speed											1
		No fa	ace velocity i	monitor	r					-		1
		All co	owlings need	to be	opened 10	0%						1
										-		
										-		
												1
					Face Velo	city Profile						7
			19"			8"				19"	8''	
							1	Veloc	city Totals:	281	122	1
		9	96 9	90	95	122		No. of	Readings:	3	1	1
		1						Average Face	e Velocity:	94	122	1
												-
					Instrum	entation						
	Test Instrument:	Shortr	ridge			Calibration Date	: 5/1/1	18				1
	Model No.:	ADM	860			Calibration Due Date	-					
	Serial No.:	M014	11				-					
	Note:	The v	elgrid accessor	y sample	s air velocity	over a one square foot ar	ea.					1
						obtain an accurate avera		e velocity.				
	THE RESERVE OF THE PARTY OF THE	_							THE RESERVE AND ADDRESS.			-1