



September 12, 2024

Sodexo Campus Acadia University
61 University Ave
Wolfville, Nova Scotia, B4P 2R5

Re: Mould Air Sampling Report
Acadia University, 15 University Ave, Wolfville, Nova Scotia
Pinchin File: 342698.000

1.0 INTRODUCTION

Pinchin Ltd. (Pinchin) was retained by Sodexo Campus Acadia University (Client) to conduct mould air sampling within various buildings on the campus of Acadia University located at 15 University Ave, Wolfville, Nova Scotia. The sampling was undertaken to determine airborne fungal particulate concentrations in select buildings at the request of the Client for due diligence and risk management purposes. The sampling was performed by Pinchin on August 29, 2024.

2.0 SCOPE / METHODOLOGY

Pinchin collected airborne mould samples from the following locations:

- Horton 306
 - Sound End of Basement Hallway
 - North End of Basement Hallway
 - Room 107
- Chapel
 - Entrance to Basement
 - Main Basement Area
 - Basement Kitchen
- Carnegie Hall
 - Room 112
 - Room 113
 - Room 116 – West Side
 - Room 116 – East Side



- ASU Student Union
 - Entrance near South Stairwell
 - Bottom of South Stairwell
 - Basement Hallway near South Stairwell
- Bancroft House
 - Basement Hallway – South End
 - Basement Hallway – North End
- Emerson Building
 - Suite 108
 - Gene Peck Room

In addition, an outdoor reference and a field blank sample were also collected.

Samples were collected using Allergenco-D brand impactor cassettes and a calibrated sampling pump.

The mould analysis was performed at the Pinchin Environmental Microbiology Laboratory, located in Mississauga, ON. The laboratory is independently accredited to ISO/IEC 17025:2017 for mould analysis by the American Industrial Hygiene Association Laboratory Accreditation Program LLC (AIHA LAP LLC) (Lab ID 158835),¹ and the Quebec government (Lab ID 495).²

3.0 RESULTS AND CONCLUSIONS

Generally, the composition and concentrations of mould recovered from the indoor sample should be similar to the composition and concentrations of the mould recovered from the outdoor sample. Many elements inside a building can affect the concentrations and composition of indoor mould samples. These elements include occupant activities, furnishings, and the amount of air exchange.

The concentration of the outdoor reference sample was 43,000 spores/m³. The concentrations of the indoor samples ranged from 650 – 21,000 spores/m³. The concentrations of each of the indoor samples were less than the concentration of the outdoor reference sample.

1 Accredited by the American Industrial Hygiene Association Laboratory Accreditation Program LLC (AIHA LAP LLC) under the Environmental Microbiology Laboratory Accreditation Program (EMLAP), for Bulk, Surface and Air testing for moulds, Escherichia coli, Legionella by the ISO 11731 method and for Legionella pneumophila by qPCR ISO 12869 method (Lab ID 158835).

2 Accredited by the Quebec government under the Programme d'accréditation des laboratoires d'analyses (PALA) program for Air Microbiology – domains 601, 603, 604, 605, 606.



The compositions of each of the indoor samples were noted to have similar spore types compared to the corresponding outdoor reference sample. Sample results suggest that airborne mould levels were acceptable in each of the sample locations at the time of testing.

The findings of this report should be communicated to vested parties, including any staff or workers as recommended by current mould guidelines, and in workplaces, as mandated by occupational health and safety legislation.

4.0 TERMS AND LIMITATIONS

Work was performed subject to the Terms and Limitations presented or referenced in the proposal for this project.

Information provided by Pinchin is intended for Client use only. Pinchin will not provide results or information to any party unless disclosure by Pinchin is required by law. Any use by a third party of reports or documents authored by Pinchin or any reliance by a third party on or decisions made by a third party based on the findings described in said documents, is the sole responsibility of such third parties. Pinchin accepts no responsibility for damages suffered by any third party as a result of decisions made or actions conducted. No other warranties are implied or expressed.

Sincerely,

Pinchin Ltd.

Prepared by:

Reviewed by:

Chris Davison
Project Technologist, Indoor Environmental
Quality
9027172502
cdavison@pinchin.com

Shawna McIntyre, B.Sc., P.Eng
Operations Manager, OHS, HAZ & Indoor
Environmental Quality
902.222.2650
SLMcIntyre@pinchin.com

Encl.: Analytical Results

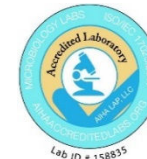
J:\342000s\0342698.000 ACADIA,61UniversityAve,Wolfville,IEQ,AIR\Deliverables\342698 Mould Air Sample 15 University Ave Wolfville NS Acadia University Sept 13 2024.docx
Template: Master Mould Air Sampling Report, IEQ, April 8, 2024



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Certificate of Analysis

Pinchin Environmental Microbiology Laboratory



Laboratoire d'analyse
accrédité par le
gouvernement du Québec



CUSTOMER: Chris Davison
COMPANY: Pinchin Ltd.
ADDRESS: 42 Dorey Avenue
Dartmouth, NS B3B 0B1

PROJECT NAME:
TYPE OF SAMPLES: AllergencoD
NO. OF SAMPLES: 2
DATE COLLECTED: August 29, 2024
DATE RECEIVED: August 30, 2024
DATE ANALYSED: September 9, 2024
DATE REPORTED: September 10, 2024

PROJECT NO: 342698
LAB REFERENCE NO: m322148
ANALYST: Lubov Beliakov, CMS (PhD)
Environmental Microbiologist
REVIEWER: Rafic Dulymamode, PhD
Laboratory Manager

CONDITION OF SAMPLES ON RECEIPT: Acceptable

Method of Analysis: Analysis of Air Samples for Fungal Spores (SOP: DME-SPT, Rev. 15, 16 May 2023)

This SOP is based on the method described in the AIHA's "Field Guide for the Determination of Biological Contaminants in the Environmental Samples" and also partially on the ASTM method D7391-20.

Results are not corrected for blanks. Estimation of the measurement of uncertainty is available upon request.

Comments/Observations (if any):

Notes:

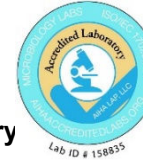
1. The laboratory is not responsible for sample collection and sample information provided by the customer on the chain of custody.
2. The report applies to the samples submitted to the laboratory and, the result(s) relate only to sample(s) tested.
3. The report shall not be reproduced except in full, without written approval of the laboratory.
4. Services are subject to Pinchin Ltd. Standard Terms and Conditions for Laboratory Services.



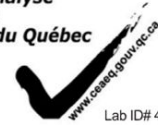
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DATE ANALYSED:

September 9, 2024

ANALYST: Lubov Beliakov, CMS (PhD)

PROJECT NO: 342698
LAB REFERENCE NO: m322148

Customer Sample No:	6003529			6003548																	
Lab Sample ID:	m322148-1			m322148-2																	
Description	Outdoor			Blank																	
Total Air Volume (L)	150			N/A																	
% of Sample Counted	9.3			25.4																	
Fungal spores identified	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³
Alternaria/Ulocladium-like																					
Ascospores, non-specified	93	15	6700																		
Aspergillus/Penicillium-like	19	3	1400																		
Basidiospores, non-specified	293	48	21000																		
Bipolaris/Drechslera/ Exserohilum/Helminthosporium																					
<i>Botrytis</i>	1	0	72																		
Chaetomium-like																					
<i>Cladosporium</i>	173	29	12000																		
<i>Coprinus</i>																					
<i>Epicoccum</i>	2	0	140																		
Fusarium-like	1	0	72																		
<i>Ganoderma</i>	6	1	430																		
Myxomycetes/Periconia/Rusts/Smuts																					
Non-specified spores																					
Oidium-like																					
Pithomyces-like	17	3	1200																		
<i>Polythrincium</i>	1	0	72																		
<i>Stachybotrys</i>																					
Pollens																					
Fungal fragments	2		140																		
Non-fungal material	2																				
Spores/sample	606																				
TOTAL SPORES/M³	43000			No fungal spores																	
A.S. (SPORES/M³)	72																				

Note: 1. Samples analysed at 600X magnification. 2. A.S. = Analytical Sensitivity
3. Total spores/m³ and counts/m³ reported to two significant figures where applicable



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Environmental Microbiology Laboratory
 Chain of Custody Form

m322148

REPORT RESULTS TO	Contact: Chris Davison			Dept: IEQ	
	Company: Pinchin Ltd			Tel: (902)-717-2502	Fax:
	Mailing Address: 42 Dorey Ave			Email: cdavison@pinchin.com	
	City: Dartmouth	Prov: NS	Postal Code: B3B 0B1	Customer Job / P.O. #: NA	
Special Instructions: Please cc: SLMcIntyre@pinchin.com				Project: 342698	
Report Language	English <input checked="" type="checkbox"/>	French <input type="checkbox"/>	No. Samples Submitted: 2	Invoice To: Accounts Payable	

ANALYSIS TYPES			
1. <input checked="" type="checkbox"/> Total Fungal Particulate (Spore Count and Identification)	5. <input type="checkbox"/> Bacteria (Quantification / Gram Staining)		
2. <input type="checkbox"/> Direct Microscope Examination (Fungal)	6. <input type="checkbox"/> Heterotrophic Plate Counts (HPC)		
3. <input type="checkbox"/> Direct Microscope Examination (Particulate):	a: Quantitative <input type="checkbox"/> b: Qualitative <input type="checkbox"/>	7. <input type="checkbox"/> E. coli / Total Coliforms	
4. <input type="checkbox"/> Fungal Qualification & Identification (Anderson / RCS)	8. <input type="checkbox"/> Legionella	a: Culture <input type="checkbox"/> b: QPCR <input type="checkbox"/>	

Sample #	Description	Analysis Requested (e.g. 3a)	Date Sampled	Vol (L) or Area (cm ²)	TAT		FOR LAB USE ONLY LAB #
					REG.	RUSH	
6003529	Outdoor	1	Aug 29/24	150	X		<i>m322148-1</i>
6003548	Blank	1	Aug 29/24	n/a	X		<i>2</i>

CHAIN OF CUSTODY	Collected by: Chris Davison			
	Relinquished by: Chris Davison	Date/Time: Aug 29/24	Received by: <i>MA</i>	Date/Time: 8/30/24 3:01 pm
	Method of Shipment: Courier	<i>1600</i>	Sample Condition Upon Receipt: Acceptable <input checked="" type="checkbox"/> Other (explain) <input type="checkbox"/>	

Authorized by: *CD* Chris Davison Date: Aug 29/24

Customer Signature MUST Accompany Request. Customer accepts Pinchin Ltd. Standard Terms and Conditions for laboratory Services (See Over)

Distribution: White = Laboratory, Yellow = Customer Copy

Pinchin Ambient Mould Index (PAMI) ©

Region:	Maritimes
Month:	August
# Samples:	74
Period:	2016 – 2022

Mould/Groups Recorded	Frequency of detects (%)	Min (spores/m ³)	5 th percentile (spores/m ³)	50 th percentile (spores/m ³)	95 th percentile (spores/m ³)	Max (spores/m ³)
Basidiospores non-specified	100.00	160	513	6900	9115	51000
Ascospores non-specified	100.00	26	150	1450	31700	18000
Cladosporium	98.65	52	122	1000	8375	140000
<i>Ganoderma</i>	95.95	26	50	290	7340	2700
Aspergillus/Penicillium-like	71.62	26	26	190	1400	13000
Non-specified spores	56.76	26	26	52	1280	820
<i>Coprinus</i>	52.70	26	26	79	430	2400
Myxomycetes/Periconia/Rusts/Smuts	51.35	26	26	52	930	1200
Alternaria/Ulocladium-like	22.97	26	26	33	334	530
Helicospores	17.57	26	26	52	338	470
Oidium-like	13.51	26	26	37	302	190
Pithomyces-like	13.51	26	26	26	154	1700
<i>Epicoccum</i>	12.16	26	26	52	984	170
<i>Botrytis</i>	12.16	26	26	33	146	370
<i>Cercospora</i>	10.81	26	26	43	314	140
<i>Polythrincium</i>	8.11	26	26	26	140	96
<i>Arthrnuim</i>	6.76	26	26	33	85	130
Bipolaris/Drechslera/ Exserohilum/Helminthosporium	6.76	26	26	26	120	96
<i>Stemphylium</i>	4.05	26	26	26	88	48
<i>Curvularia</i>	2.70	26	26	29	46	33
<i>Torula</i>	1.35	26	26	26	32	26
<i>Fusicladium</i>	1.35	65	65	65	26	65

Based on detection limit of 26 spores per cubic metre of air. The Pinchin Ambient Mould Index (PAMI) ©, is a measure of "typical" outdoor mould air quality and can assist in the interpretation of indoor mould air samples. PAMI is derived from over 30,000 outdoor mould spore trap air samples analysed in the Pinchin Environmental Microbiology Laboratory over the period shown above. This data is analysed on a monthly basis for 18 regions across Canada, based on a minimum of 30 samples per region per month. © PINCHIN LTD.



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CUSTOMER: Chris Davison
COMPANY: Pinchin Ltd.
ADDRESS: 42 Dorey Avenue
Dartmouth, NS B3B 0B1

PROJECT NAME:
TYPE OF SAMPLES: AllergencoD
NO. OF SAMPLES: 3
DATE COLLECTED: August 29, 2024
DATE RECEIVED: August 30, 2024
DATE ANALYSED: September 10, 2024
DATE REPORTED: September 10, 2024

PROJECT NO: 342698
LAB REFERENCE NO: m322153
ANALYST: Lubov Beliakov, CMS (PhD)
Environmental Microbiologist
REVIEWER: Rafic Dulyamode, PhD
Laboratory Manager

CONDITION OF SAMPLES ON RECEIPT: Acceptable

Method of Analysis: Analysis of Air Samples for Fungal Spores (SOP: DME-SPT, Rev. 15, 16 May 2023)

This SOP is based on the method described in the AIHA's "Field Guide for the Determination of Biological Contaminants in the Environmental Samples" and also partially on the ASTM method D7391-20.

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Comments/Observations (if any):

Notes:

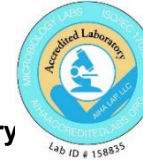
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DATE ANALYSED: September 10, 2024 **ANALYST:** Lubov Beliakov, CMS (PhD) **PROJECT NO:** 342698
LAB REFERENCE NO: m322153

Customer Sample No:	6003518			6003526			6003546												
Lab Sample ID:	m322153-1			m322153-2			m322153-3												
Description	Horton 306 Southend of Hall			Horton 306 Northend of Hall			Horton 306 Room 107												
Total Air Volume (L)	150			150			150												
% of Sample Counted	25.4			25.4			25.4												
Fungal spores identified	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	
Alternaria/Ulocladium-like				2	1	52													
Ascospores, non-specified	34	13	890	25	11	660	14	14	370										
Aspergillus/Penicillium-like	13	5	340	10	4	260	8	8	210										
Basidiospores, non-specified	137	52	3600	102	44	2700	53	52	1400										
Bipolaris/Drechslera/ Exserohilum/Helminthosporium																			
<i>Botrytis</i>																			
Chaetomium-like																			
Cladosporium	60	23	1600	86	37	2300	24	24	630										
Coprinus	1	0	26																
Epicoccum																			
Fusarium-like																			
Ganoderma	7	3	180	4	2	110	1	1	26										
Myxomycetes/Periconia/Rusts/Smuts	6	2	160	1	0	26	1	1	26										
Non-specified spores																			
Oidium-like				1	0	26													
Pithomyces-like	4	2	110	2	1	52													
Polythrincium				1	0	26													
Stachybotrys																			
Pollens																			
Fungal fragments																			
Non-fungal material	2			2			2												
Spores/sample	262			234			101												
TOTAL SPORES/M³	6900			6200			2700												
A.S. (SPORES/M³)	26			26			26												

Note: 1. Samples analysed at 600X magnification. 2. A.S. = Analytical Sensitivity
3. Total spores/m³ and counts/m³ reported to two significant figures where applicable



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m322153

REPORT RESULTS TO	Contact: Chris Davison		Dept: IEQ		
	Company: Pinchin Ltd		Tel: (902)-717-2502	Fax:	
	Mailing Address: 42 Dorey Ave		Email: cdavison@pinchin.com		
	City: Dartmouth	Prov: NS	Postal Code: B3B 0B1	Customer Job / P.O. #: NA	
Special Instructions: Please cc: SLMcIntyre@pinchin.com				Project: 342698	
Report Language	English <input checked="" type="checkbox"/>	French <input type="checkbox"/>	No. Samples Submitted: 3	Invoice To: Accounts Payable	

ANALYSIS TYPES			
1. <input checked="" type="checkbox"/> Total Fungal Particulate (Spore Count and Identification)	5. <input type="checkbox"/> Bacteria (Quantification / Gram Staining)		
2. <input type="checkbox"/> Direct Microscope Examination (Fungal)	6. <input type="checkbox"/> Heterotrophic Plate Counts (HPC)		
3. <input type="checkbox"/> Direct Microscope Examination (Particulate):	a: Quantitative <input type="checkbox"/>	7. <input type="checkbox"/> E. coli / Total Coliforms	
	b: Qualitative <input type="checkbox"/>		
4. <input type="checkbox"/> Fungal Qualification & Identification (Anderson / RCS)	8. <input type="checkbox"/> Legionella	a: Culture <input type="checkbox"/>	b: QPCR <input type="checkbox"/>

Sample #	Description	Analysis Requested (e.g. 3a)	Date Sampled	Vol (L) or Area (cm ²)	TAT		FOR LAB USE ONLY LAB #
					REG.	RUSH	
6003518	Horton 306 Southend of Hall	1	Aug 29/24	150	X		m322153-1
6003526	Horton 306 Northend of Hall	1	Aug 29/24	150	X		2
6003546	Horton 306 Room 107	1	Aug 29/24	150	X		3

CHAIN OF CUSTODY	Collected by: Chris Davison			
	Relinquished by: Chris Davison	Date/Time: Aug 29/24	Received by: <i>MA</i>	Date/Time: 8/30/24 3:24pm
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Authorized by: *CD* Chris Davison Date: Aug 29/24

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<i>Torula</i>	1.35	26	26	26	32	26
<i>Fusicladium</i>	1.35	65	65	65	26	65

Based on detection limit of 26 spores per cubic metre of air. The Pinchin Ambient Mould Index (PAMI) ©, is a measure of "typical" outdoor mould air quality and can assist in the interpretation of indoor mould air samples. PAMI is derived from over 30,000 outdoor mould spore trap air samples analysed in the Pinchin Environmental Microbiology Laboratory over the period shown above. This data is analysed on a monthly basis for 18 regions across Canada, based on a minimum of 30 samples per region per month. © PINCHIN LTD.



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COMPANY: Pinchin Ltd.
ADDRESS: 42 Dorey Avenue
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PROJECT NAME:
TYPE OF SAMPLES: AllergencoD
NO. OF SAMPLES: 3
DATE COLLECTED: August 29, 2024
DATE RECEIVED: August 30, 2024
DATE ANALYSED: September 9, 2024
DATE REPORTED: September 10, 2024

PROJECT NO: 342698
LAB REFERENCE NO: m322150
ANALYST: Lubov Beliakov, CMS (PhD)
Environmental Microbiologist
REVIEWER: Rafic Dulyamode, PhD
Laboratory Manager

CONDITION OF SAMPLES ON RECEIPT: Acceptable

Method of Analysis: Analysis of Air Samples for Fungal Spores (SOP: DME-SPT, Rev. 15, 16 May 2023)

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Comments/Observations (if any):

Notes:

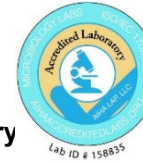
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DATE ANALYSED:

September 9, 2024

ANALYST: Lubov Beliakov, CMS (PhD)

PROJECT NO: 342698
LAB REFERENCE NO: m322150

Customer Sample No:	6003582			6003552			6003527															
Lab Sample ID:	m322150-1			m322150-2			m322150-3															
Description	Chapel Basement Kitchenette			Chapel Main Basement Space			Chapel Entrance to Basement															
Total Air Volume (L)	150			150			150															
% of Sample Counted	25.4			25.4			16.2															
Fungal spores identified	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	
Alternaria/Ulocladium-like																						
Ascospores, non-specified	95	19	2500	110	25	2900	103	21	4200													
Aspergillus/Penicillium-like	15	3	390	4	1	110	6	1	250													
Basidiospores, non-specified	348	71	9100	320	72	8400	342	68	14000													
Bipolaris/Drechslera/ Exserohilum/Helminthosporium																						
<i>Botrytis</i>																						
Chaetomium-like																						
Cladosporium	27	6	710	11	2	290	39	8	1600													
Coprinus	1	0	26				1	0	41													
Epicoccum	1	0	26																			
Fusarium-like																						
Ganoderma	1	0	26	1	0	26	4	1	170													
Myxomycetes/Periconia/Rusts/Smuts	1	0	26				2	0	82													
Non-specified spores																						
Oidium-like																						
Pithomyces-like							3	1	120													
Polythrincium							1	0	41													
Scopulariopsis							1	0	41													
Stachybotrys																						
Pollens																						
Fungal fragments	1		26																			
Non-fungal material	1			1			1															
Spores/sample	489			446			502															
TOTAL SPORES/M³	13000			12000			21000															
A.S. (SPORES/M³)	26			26			41															

Note: 1. Samples analysed at 600X magnification. 2. A.S. = Analytical Sensitivity
3. Total spores/m³ and counts/m³ reported to two significant figures where applicable



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m322150

REPORT RESULTS TO	Contact: Chris Davison			Dept: IEQ	
	Company: Pinchin Ltd			Tel: (902)-717-2502	Fax:
	Mailing Address: 42 Dorey Ave			Email: cdavison@pinchin.com	
	City: Dartmouth	Prov: NS	Postal Code: B3B 0B1	Customer Job / P.O. #: NA	
Special Instructions: Please cc: SLMcIntyre@pinchin.com				Project: 342698	
Report Language		English <input checked="" type="checkbox"/>	French <input type="checkbox"/>	No. Samples Submitted: 3	Invoice To: Accounts Payable

ANALYSIS TYPES					
1. <input checked="" type="checkbox"/> Total Fungal Particulate (Spore Count and Identification)			5. <input type="checkbox"/> Bacteria (Quantification / Gram Staining)		
2. <input type="checkbox"/> Direct Microscope Examination (Fungal)			6. <input type="checkbox"/> Heterotrophic Plate Counts (HPC)		
3. <input type="checkbox"/> Direct Microscope Examination (Particulate):	a: Quantitative <input type="checkbox"/>	b: Qualitative <input type="checkbox"/>	7. <input type="checkbox"/> E. coli / Total Coliforms		
4. <input type="checkbox"/> Fungal Qualification & Identification (Anderson / RCS)			8. <input type="checkbox"/> Legionella	a: Culture <input type="checkbox"/>	b: QPCR <input type="checkbox"/>

Sample #	Description	Analysis Requested (e.g. 3a)	Date Sampled	Vol (L) or Area (cm ²)	TAT		FOR LAB USE ONLY LAB #
					REG.	RUSH	
6003582	Chapel Basement Kitchenette	1	Aug 29/24	150	X		m322150-1
6003552	Chapel Main Basement Space	1	Aug 29/24	150	X		2
6003527	Chapel Entrance to Basement	1	Aug 29/24	150	X		3

CHAIN OF CUSTODY	Collected by: Chris Davison			
	Relinquished by: Chris Davison	Date/Time: Aug 29/24	Received by: <i>MS</i>	Date/Time: 8/30/24 3:06pm
	Method of Shipment: Courier		Sample Condition Upon Receipt: Acceptable <input checked="" type="checkbox"/> Other (explain) <input type="checkbox"/>	

Authorized by: **Chris Davison** Date: **Aug 29/24**

Customer Signature MUST Accompany Request. Customer accepts Pinchin Ltd. Standard Terms and Conditions for laboratory Services (See Over)

Distribution: White = Laboratory, Yellow = Customer Copy

Pinchin Ambient Mould Index (PAMI) ©

Region:	Maritimes
Month:	August
# Samples:	74
Period:	2016 – 2022

Mould/Groups Recorded	Frequency of detects (%)	Min (spores/m ³)	5 th percentile (spores/m ³)	50 th percentile (spores/m ³)	95 th percentile (spores/m ³)	Max (spores/m ³)
Basidiospores non-specified	100.00	160	513	6900	9115	51000
Ascospores non-specified	100.00	26	150	1450	31700	18000
Cladosporium	98.65	52	122	1000	8375	140000
<i>Ganoderma</i>	95.95	26	50	290	7340	2700
Aspergillus/Penicillium-like	71.62	26	26	190	1400	13000
Non-specified spores	56.76	26	26	52	1280	820
<i>Coprinus</i>	52.70	26	26	79	430	2400
Myxomycetes/Periconia/Rusts/Smuts	51.35	26	26	52	930	1200
Alternaria/Ulocladium-like	22.97	26	26	33	334	530
Helicospores	17.57	26	26	52	338	470
Oidium-like	13.51	26	26	37	302	190
Pithomyces-like	13.51	26	26	26	154	1700
<i>Epicoccum</i>	12.16	26	26	52	984	170
<i>Botrytis</i>	12.16	26	26	33	146	370
<i>Cercospora</i>	10.81	26	26	43	314	140
<i>Polythrincium</i>	8.11	26	26	26	140	96
<i>Arthrnuim</i>	6.76	26	26	33	85	130
Bipolaris/Drechslera/ Exserohilum/Helminthosporium	6.76	26	26	26	120	96
<i>Stemphylium</i>	4.05	26	26	26	88	48
<i>Curvularia</i>	2.70	26	26	29	46	33
<i>Torula</i>	1.35	26	26	26	32	26
<i>Fusicladium</i>	1.35	65	65	65	26	65

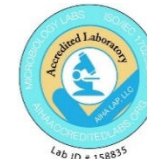
Based on detection limit of 26 spores per cubic metre of air. The Pinchin Ambient Mould Index (PAMI) ©, is a measure of "typical" outdoor mould air quality and can assist in the interpretation of indoor mould air samples. PAMI is derived from over 30,000 outdoor mould spore trap air samples analysed in the Pinchin Environmental Microbiology Laboratory over the period shown above. This data is analysed on a monthly basis for 18 regions across Canada, based on a minimum of 30 samples per region per month. © PINCHIN LTD.



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gouvernement du Québec



CUSTOMER: Chris Davison
COMPANY: Pinchin Ltd.
ADDRESS: 42 Dorey Avenue
Dartmouth, NS B3B 0B1

PROJECT NAME:
TYPE OF SAMPLES: AllergencoD
NO. OF SAMPLES: 4
DATE COLLECTED: August 29, 2024
DATE RECEIVED: August 30, 2024
DATE ANALYSED: September 10, 2024
DATE REPORTED: September 10, 2024

PROJECT NO: 342698
LAB REFERENCE NO: m322154
ANALYST: Lubov Beliakov, CMS (PhD)
Environmental Microbiologist
REVIEWER: Rafic Dulyamode, PhD
Laboratory Manager

CONDITION OF SAMPLES ON RECEIPT: Acceptable

Method of Analysis: Analysis of Air Samples for Fungal Spores (SOP: DME-SPT, Rev. 15, 16 May 2023)

This SOP is based on the method described in the AIHA's "Field Guide for the Determination of Biological Contaminants in the Environmental Samples" and also partially on the ASTM method D7391-20.

Results are not corrected for blanks. Estimation of the measurement of uncertainty is available upon request.

Comments/Observations (if any):

Notes:

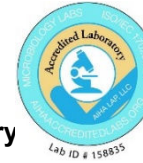
1. The laboratory is not responsible for sample collection and sample information provided by the customer on the chain of custody.
2. The report applies to the samples submitted to the laboratory and, the result(s) relate only to sample(s) tested.
3. The report shall not be reproduced except in full, without written approval of the laboratory.
4. Services are subject to Pinchin Ltd. Standard Terms and Conditions for Laboratory Services.



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DATE ANALYSED:

September 10, 2024

ANALYST: Lubov Beliakov, CMS (PhD)

PROJECT NO: 342698

LAB REFERENCE NO: m322154

Customer Sample No:	6003542			6003519			6003517			6003521					
Lab Sample ID:	m322154-1			m322154-2			m322154-3			m322154-4					
Description	Carnegie West End Room 116			Carnegie East End Room 116			Carnegie Room 113			Carnegie Room 112					
Total Air Volume (L)	150			150			150			150					
% of Sample Counted	25.4			25.4			25.4			25.4					
Fungal spores identified	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³
Alternaria/Ulocladium-like															
Ascospores, non-specified	45	25	1200	18	13	470	10	17	260	5	8	130			
Aspergillus/Penicillium-like	11	6	290	9	6	240	5	8	130	5	8	130			
Basidiospores, non-specified	99	55	2600	101	70	2600	36	61	940	30	48	790			
Bipolaris/Drechslera/ Exserohilum/Helminthosporium															
<i>Botrytis</i>															
Chaetomium-like															
Cladosporium	21	12	550	16	11	420	8	14	210	14	22	370			
Coprinus	1	1	26												
Epicoccum										2	3	52			
Fusarium-like															
Ganoderma	1	1	26							2	3	52			
Myxomycetes/Periconia/Rusts/Smuts										1	2	26			
Non-specified spores															
Oidium-like															
Pithomyces-like	1	1	26							3	5	79			
Polythrincium															
Scopulariopsis										1	2	26			
Stachybotrys															
Pollens										3					
Fungal fragments				1		26	1		26	2		52			
Non-fungal material	2			2			1			2					
Spores/sample	179			144			59			63					
TOTAL SPORES/M³	4700			3700			1500			1700					
A.S. (SPORES/M³)	26			26			26			26					

Note: 1. Samples analysed at 600X magnification. 2. A.S. = Analytical Sensitivity
3. Total spores/m³ and counts/m³ reported to two significant figures where applicable



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 Chain of Custody Form

m322154

REPORT RESULTS TO	Contact: Chris Davison		Dept: IEQ		
	Company: Pinchin Ltd		Tel: (902)-717-2502	Fax:	
	Mailing Address: 42 Dorey Ave		Email: cdavison@pinchin.com		
	City: Dartmouth	Prov: NS	Postal Code: B3B 0B1	Customer Job / P.O. #: NA	
Special Instructions: Please cc: SLMcIntyre@pinchin.com				Project: 342698	
Report Language	English <input checked="" type="checkbox"/>	French <input type="checkbox"/>	No. Samples Submitted: 4	Invoice To: Accounts Payable	

ANALYSIS TYPES			
1. <input checked="" type="checkbox"/> Total Fungal Particulate (Spore Count and Identification)	5. <input type="checkbox"/> Bacteria (Quantification / Gram Staining)		
2. <input type="checkbox"/> Direct Microscope Examination (Fungal)	6. <input type="checkbox"/> Heterotrophic Plate Counts (HPC)		
3. <input type="checkbox"/> Direct Microscope Examination (Particulate):	a: Quantitative <input type="checkbox"/>	7. <input type="checkbox"/> E. coli / Total Coliforms	
	b: Qualitative <input type="checkbox"/>		
4. <input type="checkbox"/> Fungal Qualification & Identification (Anderson / RCS)	8. <input type="checkbox"/> Legionella	a: Culture <input type="checkbox"/>	b: QPCR <input type="checkbox"/>

Sample #	Description	Analysis Requested (e.g. 3a)	Date Sampled	Vol (L) or Area (cm ²)	TAT		FOR LAB USE ONLY LAB #
					REG.	RUSH	
6003542	Carnegie West End Room 116	1	Aug 29/24	150	X		m322154-1
6003519	Carnegie East End Room 116	1	Aug 29/24	150	X		2
6003517	Carnegie Room 113	1	Aug 29/24	150	X		3
6003521	Carnegie Room 112	1	Aug 29/24	150	X		4

CHAIN OF CUSTODY	Collected by: Chris Davison			
	Relinquished by: Chris Davison	Date/Time: Aug 29/24	Received by: <i>[Signature]</i>	Date/Time: 8/30/24 3:30pm
	Method of Shipment: Courier		Sample Condition Upon Receipt: Acceptable <input type="checkbox"/> Other (explain) <input type="checkbox"/>	

Authorized by: *[Signature]* Chris Davison Date: Aug 29/24

Customer Signature MUST Accompany Request. Customer accepts Pinchin Ltd. Standard Terms and Conditions for laboratory Services (See Over)

Distribution: White = Laboratory, Yellow = Customer Copy

Pinchin Ambient Mould Index (PAMI) ©

Region:	Maritimes
Month:	August
# Samples:	74
Period:	2016 – 2022

Mould/Groups Recorded	Frequency of detects (%)	Min (spores/m ³)	5 th percentile (spores/m ³)	50 th percentile (spores/m ³)	95 th percentile (spores/m ³)	Max (spores/m ³)
Basidiospores non-specified	100.00	160	513	6900	9115	51000
Ascospores non-specified	100.00	26	150	1450	31700	18000
Cladosporium	98.65	52	122	1000	8375	140000
<i>Ganoderma</i>	95.95	26	50	290	7340	2700
Aspergillus/Penicillium-like	71.62	26	26	190	1400	13000
Non-specified spores	56.76	26	26	52	1280	820
<i>Coprinus</i>	52.70	26	26	79	430	2400
Myxomycetes/Periconia/Rusts/Smuts	51.35	26	26	52	930	1200
Alternaria/Ulocladium-like	22.97	26	26	33	334	530
Helicospores	17.57	26	26	52	338	470
Oidium-like	13.51	26	26	37	302	190
Pithomyces-like	13.51	26	26	26	154	1700
<i>Epicoccum</i>	12.16	26	26	52	984	170
<i>Botrytis</i>	12.16	26	26	33	146	370
<i>Cercospora</i>	10.81	26	26	43	314	140
<i>Polythrincium</i>	8.11	26	26	26	140	96
<i>Arthrnuim</i>	6.76	26	26	33	85	130
Bipolaris/Drechslera/ Exserohilum/Helminthosporium	6.76	26	26	26	120	96
<i>Stemphylium</i>	4.05	26	26	26	88	48
<i>Curvularia</i>	2.70	26	26	29	46	33
<i>Torula</i>	1.35	26	26	26	32	26
<i>Fusicladium</i>	1.35	65	65	65	26	65

Based on detection limit of 26 spores per cubic metre of air. The Pinchin Ambient Mould Index (PAMI) ©, is a measure of "typical" outdoor mould air quality and can assist in the interpretation of indoor mould air samples. PAMI is derived from over 30,000 outdoor mould spore trap air samples analysed in the Pinchin Environmental Microbiology Laboratory over the period shown above. This data is analysed on a monthly basis for 18 regions across Canada, based on a minimum of 30 samples per region per month. © PINCHIN LTD.



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CUSTOMER: Chris Davison
COMPANY: Pinchin Ltd.
ADDRESS: 42 Dorey Avenue
Dartmouth, NS B3B 0B1

PROJECT NAME:
TYPE OF SAMPLES: AllergencoD
NO. OF SAMPLES: 3
DATE COLLECTED: August 29, 2024
DATE RECEIVED: August 30, 2024
DATE ANALYSED: September 9, 2024
DATE REPORTED: September 10, 2024

PROJECT NO: 342698
LAB REFERENCE NO: m322151
ANALYST: Rawah Naeem, M.Sc.
Environmental Microbiologist
REVIEWER: Rafic Dulymamode, PhD
Laboratory Manager

CONDITION OF SAMPLES ON RECEIPT: Acceptable

Method of Analysis: Analysis of Air Samples for Fungal Spores (SOP: DME-SPT, Rev. 15, 16 May 2023)

This SOP is based on the method described in the AIHA's "Field Guide for the Determination of Biological Contaminants in the Environmental Samples" and also partially on the ASTM method D7391-20.

Results are not corrected for blanks. Estimation of the measurement of uncertainty is available upon request.

Comments/Observations (if any):

Notes:

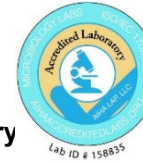
1. The laboratory is not responsible for sample collection and sample information provided by the customer on the chain of custody.
2. The report applies to the samples submitted to the laboratory and, the result(s) relate only to sample(s) tested.
3. The report shall not be reproduced except in full, without written approval of the laboratory.
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DATE ANALYSED:

September 9, 2024

ANALYST: Rawah Naeem, M.Sc.

PROJECT NO: 342698
LAB REFERENCE NO: m322151

Customer Sample No:	6003571			6003557			6003516												
Lab Sample ID:	m322151-1			m322151-2			m322151-3												
Description	ASU South Stairwell Entrance			ASU Bottom of South Stairwell			ASU Basement Hallway to South Stairwell												
Total Air Volume (L)	150			150			150												
% of Sample Counted	25.4			25.4			25.4												
Fungal spores identified	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	
0																			
Alternaria/Ulocladium-like																			
Ascospores, non-specified	16	14	420	4	11	110	2	8	52										
Aspergillus/Penicillium-like	35	30	920	4	11	110	3	12	79										
Basidiospores, non-specified	37	31	970	23	64	600	18	72	470										
Bipolaris/Drechslera/ Exserohilum/Helminthosporium																			
Botrytis	1	1	26																
Chaetomium-like																			
Cladosporium	20	17	520	4	11	110	1	4	26										
Coprinus																			
Epicoccum																			
Fusarium-like																			
Ganoderma	3	3	79				1	4	26										
Myxomycetes/Periconia/Rusts/Smuts	1	1	26																
Non-specified spores	5	4	130																
Oidium-like																			
Pithomyces-like				1	3	26													
Polythrincium																			
Stachybotrys																			
Pollens							1												
Fungal fragments	1		26																
Non-fungal material	1			1			1												
Spores/sample	118			36			25												
TOTAL SPORES/M³	3100			960			650												
A.S. (SPORES/M³)	26			26			26												

Note: 1. Samples analysed at 600X magnification. 2. A.S. = Analytical Sensitivity
3. Total spores/m³ and counts/m³ reported to two significant figures where applicable



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m322151

REPORT RESULTS TO	Contact: Chris Davison			Dept: IEQ	
	Company: Pinchin Ltd			Tel: (902)-717-2502	Fax:
	Mailing Address: 42 Dorey Ave			Email: cdavison@pinchin.com	
	City: Dartmouth	Prov: NS	Postal Code: B3B 0B1	Customer Job / P.O. #: NA	
Special Instructions: Please cc: SLMcIntyre@pinchin.com				Project: 342698	
Report Language	English <input checked="" type="checkbox"/>	French <input type="checkbox"/>	No. Samples Submitted: 3	Invoice To: Accounts Payable	

ANALYSIS TYPES			
1. <input checked="" type="checkbox"/> Total Fungal Particulate (Spore Count and Identification)	5. <input type="checkbox"/> Bacteria (Quantification / Gram Staining)		
2. <input type="checkbox"/> Direct Microscope Examination (Fungal)	6. <input type="checkbox"/> Heterotrophic Plate Counts (HPC)		
3. <input type="checkbox"/> Direct Microscope Examination (Particulate):	a: Quantitative <input type="checkbox"/>	7. <input type="checkbox"/> E. coli / Total Coliforms	
	b: Qualitative <input type="checkbox"/>		
4. <input type="checkbox"/> Fungal Qualification & Identification (Anderson / RCS)	8. <input type="checkbox"/> Legionella	a: Culture <input type="checkbox"/>	b: QPCR <input type="checkbox"/>

Sample #	Description	Analysis Requested (e.g. 3a)	Date Sampled	Vol (L) or Area (cm ²)	TAT		FOR LAB USE ONLY LAB #
					REG.	RUSH	
6003571	ASU South Stairwell Entrance	1	Aug 29/24	150	X		<i>m322151-1</i>
6003557	ASU Bottom of South Stairwell	1	Aug 29/24	150	X		<i>2</i>
6003516	ASU Basement Hallway to South Stairwell	1	Aug 29/24	150	X		<i>3</i>

CHAIN OF CUSTODY	Collected by: Chris Davison			
	Relinquished by: Chris Davison	Date/Time: Aug 29/24	Received by: <i>MS</i>	Date/Time: 8/30/24 3:14pm
	Method of Shipment: Courier	<i>1600</i>	Sample Condition Upon Receipt: Acceptable <input checked="" type="checkbox"/> Other (explain) <input type="checkbox"/>	

Authorized by: *CD* **Chris Davison** Date: **Aug 29/24**

Customer Signature MUST Accompany Request. Customer accepts Pinchin Ltd. Standard Terms and Conditions for laboratory Services (See Over)

Distribution: White = Laboratory, Yellow = Customer Copy

Pinchin Ambient Mould Index (PAMI) ©

Region:	Maritimes
Month:	August
# Samples:	74
Period:	2016 – 2022

Mould/Groups Recorded	Frequency of detects (%)	Min (spores/m ³)	5 th percentile (spores/m ³)	50 th percentile (spores/m ³)	95 th percentile (spores/m ³)	Max (spores/m ³)
Basidiospores non-specified	100.00	160	513	6900	9115	51000
Ascospores non-specified	100.00	26	150	1450	31700	18000
Cladosporium	98.65	52	122	1000	8375	140000
<i>Ganoderma</i>	95.95	26	50	290	7340	2700
Aspergillus/Penicillium-like	71.62	26	26	190	1400	13000
Non-specified spores	56.76	26	26	52	1280	820
<i>Coprinus</i>	52.70	26	26	79	430	2400
Myxomycetes/Periconia/Rusts/Smuts	51.35	26	26	52	930	1200
Alternaria/Ulocladium-like	22.97	26	26	33	334	530
Helicospores	17.57	26	26	52	338	470
Oidium-like	13.51	26	26	37	302	190
Pithomyces-like	13.51	26	26	26	154	1700
<i>Epicoccum</i>	12.16	26	26	52	984	170
<i>Botrytis</i>	12.16	26	26	33	146	370
<i>Cercospora</i>	10.81	26	26	43	314	140
<i>Polythrincium</i>	8.11	26	26	26	140	96
<i>Arthrnuim</i>	6.76	26	26	33	85	130
Bipolaris/Drechslera/ Exserohilum/Helminthosporium	6.76	26	26	26	120	96
<i>Stemphylium</i>	4.05	26	26	26	88	48
<i>Curvularia</i>	2.70	26	26	29	46	33
<i>Torula</i>	1.35	26	26	26	32	26
<i>Fusicladium</i>	1.35	65	65	65	26	65

Based on detection limit of 26 spores per cubic metre of air. The Pinchin Ambient Mould Index (PAMI) ©, is a measure of "typical" outdoor mould air quality and can assist in the interpretation of indoor mould air samples. PAMI is derived from over 30,000 outdoor mould spore trap air samples analysed in the Pinchin Environmental Microbiology Laboratory over the period shown above. This data is analysed on a monthly basis for 18 regions across Canada, based on a minimum of 30 samples per region per month. © PINCHIN LTD.



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Certificate of Analysis

Pinchin Environmental Microbiology Laboratory



Laboratoire d'analyse
accrédité par le
gouvernement du Québec



CUSTOMER: Chris Davison
COMPANY: Pinchin Ltd.
ADDRESS: 42 Dorey Avenue
Dartmouth, NS B3B 0B1

PROJECT NAME:
TYPE OF SAMPLES: AllergencoD
NO. OF SAMPLES: 2
DATE COLLECTED: August 29, 2024
DATE RECEIVED: August 30, 2024
DATE ANALYSED: September 9, 2024
DATE REPORTED: September 10, 2024

PROJECT NO: 342698
LAB REFERENCE NO: m322152
ANALYST: Rawah Naeem, M.Sc.
Environmental Microbiologist
REVIEWER: Rafic Dulymamode, PhD
Laboratory Manager

CONDITION OF SAMPLES ON RECEIPT: Acceptable

Method of Analysis: Analysis of Air Samples for Fungal Spores (SOP: DME-SPT, Rev. 15, 16 May 2023)

This SOP is based on the method described in the AIHA's "Field Guide for the Determination of Biological Contaminants in the Environmental Samples" and also partially on the ASTM method D7391-20.

Results are not corrected for blanks. Estimation of the measurement of uncertainty is available upon request.

Comments/Observations (if any):

Notes:

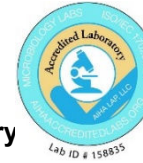
1. The laboratory is not responsible for sample collection and sample information provided by the customer on the chain of custody.
2. The report applies to the samples submitted to the laboratory and, the result(s) relate only to sample(s) tested.
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Lab ID# 495

DATE ANALYSED:

September 9, 2024

ANALYST: Rawah Naeem, M.Sc.

PROJECT NO: 342698

LAB REFERENCE NO: m322152

Customer Sample No:	6003513			6003549																		
Lab Sample ID:	m322152-1			m322152-2																		
Description	Bancroft North end of Basement Hall			Bancroft South end of Basement Hall																		
Total Air Volume (L)	150			150																		
% of Sample Counted	25.4			25.4																		
Fungal spores identified	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	
Alternaria/Ulocladium-like	1	0	26																			
Ascospores, non-specified	38	12	1000	34	14	890																
Aspergillus/Penicillium-like	117	37	3100	11	4	290																
Basidiospores, non-specified	84	27	2200	73	29	1900																
Bipolaris/Drechslera/ Exserohilum/Helminthosporium																						
<i>Botrytis</i>																						
Chaetomium-like																						
Cladosporium	64	20	1700	123	50	3200																
Coprinus	6	2	160																			
<i>Epicoccum</i>																						
Fusarium-like																						
Ganoderma	1	0	26	4	2	110																
Myxomycetes/Periconia/Rusts/Smuts	1	0	26																			
Non-specified spores																						
Oidium-like																						
Pithomyces-like				3	1	79																
Polythrincium	1	0	26																			
Stachybotrys																						
Pollens																						
Fungal fragments	4		110	1		26																
Non-fungal material	2			1																		
Spores/sample	313			248																		
TOTAL SPORES/M³	8300			6500																		
A.S. (SPORES/M³)	26			26																		

Note: 1. Samples analysed at 600X magnification. 2. A.S. = Analytical Sensitivity
3. Total spores/m³ and counts/m³ reported to two significant figures where applicable



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Environmental Microbiology Laboratory
 Chain of Custody Form

m32252

REPORT RESULTS TO	Contact: Chris Davison			Dept: IEQ		
	Company: Pinchin Ltd			Tel: (902)-717-2502	Fax:	
	Mailing Address: 42 Dorey Ave			Email: cdavison@pinchin.com		
	City: Dartmouth	Prov: NS	Postal Code: B3B 0B1	Customer Job / P.O. #: NA		
Special Instructions: Please cc: SLMcIntyre@pinchin.com				Project: 342698		
Report Language		English <input checked="" type="checkbox"/>	French <input type="checkbox"/>	No. Samples Submitted: 2	Invoice To: Accounts Payable	

ANALYSIS TYPES			
1. <input checked="" type="checkbox"/> Total Fungal Particulate (Spore Count and Identification)	5. <input type="checkbox"/> Bacteria (Quantification / Gram Staining)		
2. <input type="checkbox"/> Direct Microscope Examination (Fungal)	6. <input type="checkbox"/> Heterotrophic Plate Counts (HPC)		
3. <input type="checkbox"/> Direct Microscope Examination (Particulate):	a: Quantitative <input type="checkbox"/>	7. <input type="checkbox"/> E. coli / Total Coliforms	
	b: Qualitative <input type="checkbox"/>		
4. <input type="checkbox"/> Fungal Qualification & Identification (Anderson / RCS)	8. <input type="checkbox"/> Legionella	a: Culture <input type="checkbox"/>	b: QPCR <input type="checkbox"/>

Sample #	Description	Analysis Requested (e.g. 3a)	Date Sampled	Vol (L) or Area (cm ²)	TAT		FOR LAB USE ONLY LAB #
					REG.	RUSH	
6003513	Bancroft Northend of Basement Hall	1	Aug 29/24	150	X		<i>m32252-1</i>
6003549	Bancroft Southend of Basement Hall	1	Aug 29/24	150	X		<i>2</i>

CHAIN OF CUSTODY	Collected by: Chris Davison			
	Relinquished by: Chris Davison	Date/Time: Aug 29/24	Received by: <i>MD</i>	Date/Time: 8/30/24 3:20pm
	Method of Shipment: Courier		Sample Condition Upon Receipt: Acceptable <input checked="" type="checkbox"/> Other (explain) <input type="checkbox"/>	

Authorized by: *CD* **Chris Davison** Date: **Aug 29/24**

Customer Signature MUST Accompany Request. Customer accepts Pinchin Ltd. Standard Terms and Conditions for laboratory Services (See Over)

Distribution: White = Laboratory, Yellow = Customer Copy

Pinchin Ambient Mould Index (PAMI) ©

Region:	Maritimes
Month:	August
# Samples:	74
Period:	2016 – 2022

Mould/Groups Recorded	Frequency of detects (%)	Min (spores/m ³)	5 th percentile (spores/m ³)	50 th percentile (spores/m ³)	95 th percentile (spores/m ³)	Max (spores/m ³)
Basidiospores non-specified	100.00	160	513	6900	9115	51000
Ascospores non-specified	100.00	26	150	1450	31700	18000
Cladosporium	98.65	52	122	1000	8375	140000
<i>Ganoderma</i>	95.95	26	50	290	7340	2700
Aspergillus/Penicillium-like	71.62	26	26	190	1400	13000
Non-specified spores	56.76	26	26	52	1280	820
<i>Coprinus</i>	52.70	26	26	79	430	2400
Myxomycetes/Periconia/Rusts/Smuts	51.35	26	26	52	930	1200
Alternaria/Ulocladium-like	22.97	26	26	33	334	530
Helicospores	17.57	26	26	52	338	470
Oidium-like	13.51	26	26	37	302	190
Pithomyces-like	13.51	26	26	26	154	1700
<i>Epicoccum</i>	12.16	26	26	52	984	170
<i>Botrytis</i>	12.16	26	26	33	146	370
<i>Cercospora</i>	10.81	26	26	43	314	140
<i>Polythrincium</i>	8.11	26	26	26	140	96
<i>Arthrnuim</i>	6.76	26	26	33	85	130
Bipolaris/Drechslera/ Exserohilum/Helminthosporium	6.76	26	26	26	120	96
<i>Stemphylium</i>	4.05	26	26	26	88	48
<i>Curvularia</i>	2.70	26	26	29	46	33
<i>Torula</i>	1.35	26	26	26	32	26
<i>Fusicladium</i>	1.35	65	65	65	26	65

Based on detection limit of 26 spores per cubic metre of air. The Pinchin Ambient Mould Index (PAMI) ©, is a measure of "typical" outdoor mould air quality and can assist in the interpretation of indoor mould air samples. PAMI is derived from over 30,000 outdoor mould spore trap air samples analysed in the Pinchin Environmental Microbiology Laboratory over the period shown above. This data is analysed on a monthly basis for 18 regions across Canada, based on a minimum of 30 samples per region per month. © PINCHIN LTD.



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CUSTOMER: Chris Davison
COMPANY: Pinchin Ltd.
ADDRESS: 42 Dorey Avenue
Dartmouth, NS B3B 0B1

PROJECT NAME:
TYPE OF SAMPLES: AllergencoD
NO. OF SAMPLES: 2
DATE COLLECTED: August 29, 2024
DATE RECEIVED: August 30, 2024
DATE ANALYSED: September 10, 2024
DATE REPORTED: September 10, 2024

PROJECT NO: 342698
LAB REFERENCE NO: m322156
ANALYST: Partinder Puri, B.Sc.
Environmental Microbiologist
REVIEWER: Rafic Dulymamode, PhD
Laboratory Manager

CONDITION OF SAMPLES ON RECEIPT: Acceptable

Method of Analysis: Analysis of Air Samples for Fungal Spores (SOP: DME-SPT, Rev. 15, 16 May 2023)

This SOP is based on the method described in the AIHA's "Field Guide for the Determination of Biological Contaminants in the Environmental Samples" and also partially on the ASTM method D7391-20.

Results are not corrected for blanks. Estimation of the measurement of uncertainty is available upon request.

Comments/Observations (if any):

Notes:

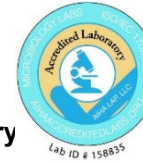
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DATE ANALYSED:

September 10, 2024

ANALYST: Partinder Puri, B.Sc.

PROJECT NO: 342698
LAB REFERENCE NO: m322156

Customer Sample No:	6002669			6003512																	
Lab Sample ID:	m322156-1			m322156-2																	
Description	Emerson Suite 108			Emerson Gene Peck Room																	
Total Air Volume (L)	150			150																	
% of Sample Counted	25.5			25.5																	
Fungal spores identified	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³	raw ct.	%	ct./m ³
Alternaria/Ulocladium-like																					
Ascospores, non-specified	19	8	500	7	5	180															
Aspergillus/Penicillium-like	25	10	650	4	3	110															
Basidiospores, non-specified	184	75	4800	122	85	3200															
Bipolaris/Drechslera/ Exserohilum/Helminthosporium																					
<i>Botrytis</i>																					
Chaetomium-like																					
<i>Cladosporium</i>	15	6	390	9	6	240															
<i>Coprinus</i>				1	1	26															
<i>Epicoccum</i>																					
Fusarium-like																					
<i>Ganoderma</i>				1	1	26															
Myxomycetes/Periconia/Rusts/Smuts	1	0	26																		
Non-specified spores	1	0	26																		
Oidium-like	1	0	26																		
Pithomyces-like																					
<i>Polythrincium</i>																					
<i>Stachybotrys</i>																					
Pollens																					
Fungal fragments																					
Non-fungal material	2			1																	
Spores/sample	246			144																	
TOTAL SPORES/M³	6400			3800																	
A.S. (SPORES/M³)	26			26																	

Note: 1. Samples analysed at 600X magnification. 2. A.S. = Analytical Sensitivity
3. Total spores/m³ and counts/m³ reported to two significant figures where applicable



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Chain of Custody Form

m322156

REPORT RESULTS TO	Contact: Chris Davison		Dept: IEQ		
	Company: Pinchin Ltd		Tel: (902)-717-2502	Fax:	
	Mailing Address: 42 Dorey Ave		Email: cdavison@pinchin.com		
	City: Dartmouth	Prov: NS	Postal Code: B3B 0B1	Customer Job / P.O. #: NA	
Special Instructions: Please cc: SLMcIntyre@pinchin.com				Project: 342698	
Report Language	English <input checked="" type="checkbox"/>	French <input type="checkbox"/>	No. Samples Submitted: 2	Invoice To: Accounts Payable	

ANALYSIS TYPES			
1. <input checked="" type="checkbox"/> Total Fungal Particulate (Spore Count and Identification)	5. <input type="checkbox"/> Bacteria (Quantification / Gram Staining)		
2. <input type="checkbox"/> Direct Microscope Examination (Fungal)	6. <input type="checkbox"/> Heterotrophic Plate Counts (HPC)		
3. <input type="checkbox"/> Direct Microscope Examination (Particulate):	a: Quantitative <input type="checkbox"/>	7. <input type="checkbox"/> E. coli / Total Coliforms	
	b: Qualitative <input type="checkbox"/>		
4. <input type="checkbox"/> Fungal Qualification & Identification (Anderson / RCS)	8. <input type="checkbox"/> Legionella	a: Culture <input type="checkbox"/>	b: QPCR <input type="checkbox"/>

Sample #	Description	Analysis Requested (e.g. 3a)	Date Sampled	Vol (L) or Area (cm ²)	TAT		FOR LAB USE ONLY LAB #
					REG.	RUSH	
6002669	Emerson Suite 108	1	Aug 29/24	150	X		<i>m322156-1</i>
6003512	Emerson Gene Peck Room	1	Aug 29/24	150	X		<i>2</i>

CHAIN OF CUSTODY	Collected by: Chris Davison			
	Relinquished by: Chris Davison	Date/Time: Aug 29/24	Received by: <i>MS</i>	Date/Time: 8/30/24 3:34pm
	Method of Shipment: Courier	<i>1600</i>	Sample Condition Upon Receipt: Acceptable <input checked="" type="checkbox"/> Other (explain) <input type="checkbox"/>	

Authorized by: *CD* Chris Davison Date: Aug 29/24

Customer Signature MUST Accompany Request. Customer accepts Pinchin Ltd. Standard Terms and Conditions for laboratory Services (See Over)

Distribution: White = Laboratory, Yellow = Customer Copy

Pinchin Ambient Mould Index (PAMI) ©

Region:	Maritimes
Month:	August
# Samples:	74
Period:	2016 – 2022

Mould/Groups Recorded	Frequency of detects (%)	Min (spores/m ³)	5 th percentile (spores/m ³)	50 th percentile (spores/m ³)	95 th percentile (spores/m ³)	Max (spores/m ³)
Basidiospores non-specified	100.00	160	513	6900	9115	51000
Ascospores non-specified	100.00	26	150	1450	31700	18000
Cladosporium	98.65	52	122	1000	8375	140000
<i>Ganoderma</i>	95.95	26	50	290	7340	2700
Aspergillus/Penicillium-like	71.62	26	26	190	1400	13000
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<i>Cercospora</i>	10.81	26	26	43	314	140
<i>Polythrincium</i>	8.11	26	26	26	140	96
<i>Arthrnuim</i>	6.76	26	26	33	85	130
Bipolaris/Drechslera/ Exserohilum/Helminthosporium	6.76	26	26	26	120	96
<i>Stemphylium</i>	4.05	26	26	26	88	48
<i>Curvularia</i>	2.70	26	26	29	46	33
<i>Torula</i>	1.35	26	26	26	32	26
<i>Fusicladium</i>	1.35	65	65	65	26	65

Based on detection limit of 26 spores per cubic metre of air. The Pinchin Ambient Mould Index (PAMI) ©, is a measure of "typical" outdoor mould air quality and can assist in the interpretation of indoor mould air samples. PAMI is derived from over 30,000 outdoor mould spore trap air samples analysed in the Pinchin Environmental Microbiology Laboratory over the period shown above. This data is analysed on a monthly basis for 18 regions across Canada, based on a minimum of 30 samples per region per month. © PINCHIN LTD.