



850 Poplar Street.
Pittsburgh, PA 15220
Phone: 412-922-4000
intertek.com/building
psiusa.com

February 8, 2018

Blackhawk School District
500 Blackhawk Road
Beaver Falls, PA 15010-1498
Attention: Dr. Robert Postupac, Superintendent
postupacr@bsd.k12.pa.us

**Re: Post-Remediation Fungal Assessment
Blackhawk Intermediate School**
603 Shenango Road
Beaver Falls, PA 15010
PSI Project No. 08162882-2

Dear Dr. Postupac:

In accordance with your authorization, Professional Service Industries, Inc. (PSI), an Intertek company, has conducted a Post-Remediation Fungal Assessment following the mold remediation activities in the Library, Art Room, Classroom A302 and the Custodial Office at the Blackhawk Intermediate School. The post-remediation fungal assessments and sampling were conducted on January 17, 23, and 31, 2018.

Enclosed, please find an electronic copy of the post-remediation fungal assessment report. Thank you for choosing PSI as your consultant for this project. If you have any questions, or if we can be of additional service, please call us at (412) 922-4001 x 383.

Respectfully submitted,
Sincerely Yours,

PROFESSIONAL SERVICE INDUSTRIES, INC.

Michael Kopar
Certified Indoor Environmentalist

Greg Chambliss, RPIH, LEED-AP
Principal Consultant

p:\0816\2018\iaq\mold\08162882-2 blackhawk\08162882-2 blkhwk intermediate fungal assessment.doc



TABLE OF CONTENTS

1. EXECUTIVE SUMMARY	1
2. INTRODUCTION	3
2.1 AUTHORIZATION	3
2.2 SITE DESCRIPTION.....	3
2.3 PROJECT BACKGROUND.....	3
2.4 SCOPE.....	3
3. INVESTIGATION AND SAMPLING METHODOLOGIES.....	4
3.1 WALKTHROUGH METHODOLOGY.....	4
3.2 MICROBIOLOGICAL SAMPLING.....	4
4. FINDINGS, DATA ANALYSIS & INTERPRETATION	6
4.1 FUNGAL ASSESSMENT	6
4.2 MICROBIOLOGICALS.....	6
5. CONCLUSIONS AND RECOMMENDATIONS.....	8
6. WARRANTY	9

LIST OF ATTACHMENTS

MICROBIOLOGICAL SAMPLING RESULTS



1. EXECUTIVE SUMMARY

In accordance with your authorization, Professional Service Industries, Inc. (PSI), an Intertek company, has conducted post remediation fungal assessments with air and/or surface microbiological sampling in the Library, Art Room, Classroom A302 and the Custodial office on January 17, 23, and 31, 2018.

The purpose of the assessments was to observe and document the current conditions as related to moisture and mold in the impacted areas. The post-remediation assessments have identified no evidence of an interior fungal amplification or conditions conducive to mold growth, and no conditions likely to contribute to complaints of poor Indoor Air Quality. Following is a summary of the findings:

January 17, 2018 – Library, Art Room & Room A302

- Following removal of the floor tile and mastic adhesive, as well as the unit ventilators, by Meridian Environmental in the Library/Media Center, Art Room and Room A302, a post-remediation fungal assessment and sampling was requested by the Blackhawk School District. Total airborne bioaerosol levels were low, ranging between 53 spores/m³ and 400 spores/m³ in the work locations sampled (Library/Media Center, Art Room and Room A302). Samples collected in two (2) comparison areas (Room A211 and outside the ground floor elevators) were also low, ranging between 94 spores/m³ and 200 spores/m³. An outdoor comparison air sample was not collected due to freezing temperatures. No target molds (*Stachybotrys* sp., *Chaetomium* sp. or *Ulocladium* sp.) indicative of a wet environment were reported and no visible mold was observed. However, it was observed that there was an un-ducted outside air supply grate between the unit ventilators on the 2nd and 3rd floors. In addition, windows in Rooms A211 and A 212 were leaking, in which rotted window framing was observed. Additional remediation activities are scheduled in the Art Room.

January 23, 2018 – Art Room

- Following removal of the floor tile and mastic adhesive in the Art Room by Meridian Environmental, a post-remediation fungal assessment and sampling was requested by the Blackhawk School District. Total airborne bioaerosol levels were low, ranging between 93 spores/m³ in the Art Room (containment) and 510 spores/m³ in the custodial office. An outside comparison air sample was also collected, and outdoor levels were 4,400 spores/m³. No target molds (*Stachybotrys* sp., *Chaetomium* sp. or *Ulocladium* sp.) indicative of a wet environment were reported and no visible mold was observed in the Art Room. However, a mold-like odor was noted in the Custodial office and the floor tile was observed to be coming up from the substrate due to past water leaks. A surface swab sample collected from under the tile found moderate (3+) spores of *Cladosporium* and hyphal fragments, and numerous (4+) spores of *Pen/Asp*,



indicating surface fungal amplification. Removal of the water impacted flooring was recommended.

January 30, 2018 – Custodial Office

- Following removal of the floor tile and mastic adhesive in the Custodial office by Meridian Environmental, a post-remediation fungal assessment and sampling was requested by the Blackhawk School District. Airborne bioaerosol levels were low (80 spores/m³) in the location sampled (Custodial office). No target molds (Stachybotrys sp., Chaetomium sp. or Ulocladium sp.) indicative of a wet environment were reported. An outdoor comparison air sample was not collected due to below freezing temperatures. No visible mold or mold-like odors were noted.

Conclusions/Recommendations

- Finding and eliminating potential water sources, such as leaking windows, un-ducted outside air supply vents and water incursions is highly recommended to prevent the potential of future fungal amplification.



2. INTRODUCTION

In accordance with your e-mail authorization, Professional Service Industries, Inc., (PSI), an Intertek company, conducted post remediation fungal assessments and sampling in select locations at the Blackhawk Intermediate School. PSI's Michael Kopar, Certified Indoor Environmentalist (CIE), conducted the assessments on January 17, 23 and 31, 2018.

2.1 AUTHORIZATION

Verbal authorization to conduct the sampling and analysis was given by Ms. Jodi Borroni, Principal for the Intermediate School, on January 16, 2018. The project was conducted in general accordance with the agreement between PSI and the Blackhawk School District (Proposal 0816-207245) dated April 6, 2017.

2.2 SITE DESCRIPTION

The facility is an Intermediate School. There was reportedly a water leak associated with the unit ventilators in Room A302 (3rd floor), the Art Room (2nd floor), and the Library/Media Center (1st floor). Room A302 is located directly above the Art Room, which is directly above the Media Center. In addition, there was another unit ventilator leak in the Custodial office. In addition to the unit ventilators, the windows also reportedly leak in each location. Each room is serviced by an individual unit wall ventilator which provides both heat and air-conditioning and outside air.

2.3 PROJECT BACKGROUND

Following mold remediation activities conducted by Meridian Environmental, a post remediation assessment and sampling was requested in each of the impacted areas. PSI was contacted to conduct the post-remediation assessment and sampling in the Media Center, Art Room and Room A302 on January 17, 2018. Upon completion of remediation activities, additional assessments and sampling were conducted in the Art Room and then the Custodial office. The reported (and observed) water sources included leaking unit ventilators and leaking windows.

2.4 SCOPE

The scope of the investigation was to assess the areas of concern where recent mold remediation activities were conducted by Meridian Environmental. The assessment included an inspection for evidence of visible mold, excess moisture and unusual odors, and to collect ambient airborne bioaerosol and/or surface swab samples. The sampling was completed in general accordance with the requested and authorized scope of work.



3. INVESTIGATION AND SAMPLING METHODOLOGIES

PSI's Michael Kopar conducted the post-remediation fungal assessments on January 17, 23, and 31, 2018. Monitoring was conducted in order to document surface and airborne bioaerosol (mold) levels.

3.1 WALKTHROUGH METHODOLOGY

Prior to sampling, Mr. Kopar conducted a walk-through inspection of the subject areas visually observing the building materials for evidence of dampness, visible mold growth, unusual odors and other potential indoor air quality issues, and conducted interviews with building maintenance and other building occupants concerning perceived or known indoor air quality issues. Based on the walk-through observations, potential indoor air quality sampling locations and parameters were developed.

Surface moisture readings were collected using a battery powered direct reading Delmhorst BD-2100 digital resistance type moisture meter. Readings on the gypsum reference scale are to be taken as a qualitative indication of the moisture level. Readings in the low end of the scale indicate a drier normal moisture condition; readings in the upper end of the scale indicate a higher/elevated moisture level in the material. The scale is color coded with green, yellow, and red areas.

3.2 MICROBIOLOGICAL SAMPLING

Airborne Bioaerosols

Airborne bioaerosol samples were collected on January 17, 23, and 31, 2018 inside the individual containment areas, as well as comparison locations. In all, a total of nine (9) interior locations, both inside and outside the work areas, were sampled. A comparison control sample was also collected from outside the building on January 23, 2018, when temperatures were above freezing. Samples were collected using Air-O-Cell™ disposable spore trap air sampling cassettes. The cassettes are attached to a sampling pump calibrated at 15 liters of air per minute (15 LPM), with sampling intervals of five minutes. The samples were analyzed by PSI's Pittsburgh, PA AIHA EMLAP accredited microbiological laboratory. The analyses estimate the total concentration of airborne aerosols including mold/yeast spores. In addition to the determination of the total concentration of microorganisms, the most predominant types of mold spores were identified to the genus level. The disposable spore trap cassettes are designed for the rapid collection and analysis of a wide range of airborne aerosols including viable and non-viable spores, but do not differentiate between viable and non-viable mold spores. The analytical results are provided in the Appendix.

Surface Mold Sampling

One (1) surface mold swab sample was collected from the back of a water damaged floor tile in the custodial office on January 23, 2018. The sample was collected using a laboratory supplied sterile swab containing a growth solution. The sample was analyzed via direct microscopic exam and were also cultured at the PSI Pittsburgh



AIHA EMLAP accredited microbiological lab. They were evaluated for total fungal spores via direct microscopic exam where the most prevalent mold types were identified to the genus level. The laboratory rates the relative concentrations from 1+ (occasional) to 4+ (numerous) spores seen.



4. FINDINGS, DATA ANALYSIS & INTERPRETATION

Analysis and interpretation of the data generated during the field investigation and laboratory testing is presented in the following sections. Where appropriate, the results are compared with regulatory limits, if available, or industry standard guidelines for the chemicals, compounds, and physical measures identified in this Sampling. Summaries of the analytical results are provided in the appendices.

4.1 FUNGAL ASSESSMENT

PSI conducted post-remediation fungal assessments in the containment areas at the Intermediate School on January 17, 23 and 31, 2018. Surface moisture monitoring indicated the walls to be normal moisture levels in each containment area. No unusual odors, visible mold, excess dust or evidence of water incursion were noted inside the containments, however, there was a slight musty odor in the custodial office during the January 23rd assessment. Based on the odor and surface swab results from the floor tile, the floor tile and mastic were removed, and a post-remediation assessment was conducted in the Custodial office on January 31, 2018. It should also be noted that water damaged (and rotted) windows were observed in Rooms A211 and A 212, and an un-ducted outside air supply grate was observed between the unit ventilators on the 2nd and 3rd floors in the Art Room.

4.2 MICROBIOLOGICALS

AIRBORNE BIOAEROSOLS

Total airborne bioaerosol levels were low in the work locations sampled (Library/Media Center, Art Room, Room A302 and the Custodial Office). Samples collected in two (2) comparison areas (Room A211 and outside the ground floor elevators) were also low. An outdoor sample was collected on January 23, 2018, but not on January 17 or 31, 2018, due to freezing temperatures. No target molds (*Stachybotrys* sp., *Chaetomium* sp. or *Ulocladium* sp.) indicative of a wet environment were reported and no visible mold was observed. Currently, no threshold limit value (TLV) or other official standards exist for levels of microbials in an air sample. The mold concentrations measured are considered to be in the low, or “normal” range, for an occupied facility. The table below summarizes the results of the sampling:



Sample Location	Total spores/M ³	Mold types/Comments
January 17, 2018		
Media Center/Library	400	No target molds or evidence of surface moisture
Art Room	210	No target molds or evidence of surface moisture
Room A302	53	No target molds or evidence of surface moisture
Room A211/212	300	No target molds or evidence of surface moisture
Ground floor area outside elevator	94	No target molds or evidence of surface moisture
January 23, 2018		
Art Room	93	No target molds or evidence of surface moisture
Custodial Office	510	No target molds or evidence of surface moisture
Outside	4,400	
January 31, 2018		
Custodial Office	80	No target molds or evidence of surface moisture

SURFACE MICROBIOLOGICALS

One (1) surface sample found there to be numerous (4+) Penicillium/Aspergillus and moderate (3+) spores of Cladosporium and Hyphal fragments on the sample collected from floor tile and mastic in the Custodial Office. Occasional (1+) to few (2+) spores are not atypical. A musty odor was noted.

Sample Location	Mold types/Comments
Custodial office floor tile & mastic	3+ Hyphal Fragments 3+ Cladosporium sp. 4+ Penicillium/Aspergillus



5. CONCLUSIONS AND RECOMMENDATIONS

PSI has conducted post-remediation fungal assessments in general accordance with the authorized scope of work. Based on the results of this sampling, the following conclusions have been developed:

CONCLUSIONS

This assessment has identified no evidence of an interior airborne fungal amplification or conditions conducive to mold growth, and no conditions likely to contribute to complaints of poor Indoor Air Quality in the areas of concern. Following is a summary of the findings:

- Following removal of the floor tile and mastic adhesive, as well as the unit ventilators, by Meridian Environmental in the Library/Media Center, Art Room, Room A302 and the Custodial Office, a post-remediation fungal assessment and sampling was requested by the Blackhawk School District. Total airborne bioaerosol levels were low with no target molds (*Stachybotrys* sp., *Chaetomium* sp. or *Ulocladium* sp.) indicative of a wet environment detected.
- After the floor tile in the Custodial office was removed, additional mold was not observed. However, it was observed that there was an un-ducted outside air supply grate between the unit ventilators on the 2nd and 3rd floors. In addition, windows in Rooms A211 and A 212 were leaking, in which rotted window framing was observed.

RECOMMENDATIONS

- Finding and eliminating potential water sources, such as leaking windows, un-ducted outside air supply vents and water incursions is highly recommended to reduce the potential of future fungal amplification.



6. WARRANTY

INDOOR AIR QUALITY SAMPLING

PSI warrants that the findings contained herein have been prepared with the level of care and skill ordinarily exercised by professionals practicing in the community. The scope of work addressed readily accessible and exposed interior building areas. Observation or sampling of inaccessible areas such as behind walls was performed. PSI's investigation did not address determining the source of moisture intrusion into the structure.

The Client acknowledges that mold is ubiquitous to the environment with mold amplification occurring when building materials are impacted by moisture. The Client further acknowledges that site conditions are outside of PSI's control, and that mold amplification will likely occur, or continue to occur, in the presence of moisture. As such, PSI cannot and shall not be held responsible for the occurrence or reoccurrence of mold amplification. No other warranties are implied or expressed.

USE BY THIRD PARTIES

This report was prepared pursuant to the contract PSI has with the Blackhawk School District. That contractual relationship included an exchange of information about the subject site that was unique and between PSI and its client and serves as the basis upon which this report was prepared. Because of the importance of the communication between PSI and its client, reliance or any use of this report by anyone other than the Blackhawk School District, for whom it was prepared, is prohibited and therefore not foreseeable to PSI.

Reliance or use by any such third party without explicit authorization in the report does not make said third party a third party beneficiary to PSI's contract with the Blackhawk School District. Any such unauthorized reliance on or use of this report, including any of its information or conclusions, will be at third party's risk. For the same reasons, no warranties or representations, expressed or implied in this report, are made to any such third party.

UNIDENTIFIABLE CONDITIONS

This Post-Remediation Fungal Assessment Report has been developed to provide the client with information regarding apparent conditions relating to the subject property. Although PSI believes that the findings and conclusions provided in this report are reasonable, the sampling is necessarily limited to the conditions observed and to the information available at the time of the work. Due to the nature of the work, there is a possibility that there may exist conditions which could not be identified within the scope of the sampling or which were not apparent at the time of our site work. The Sampling is also limited to information available from the client at the time it was conducted. It is also possible that the testing methods employed at the time of the report may later be



superseded by other methods. PSI does not accept responsibility for changes in the state of the art. No other warranties are implied or expressed.





American Council for Accredited Certification

hereby certifies that

Michael N. Kopar

has met all the specific standards and qualifications of the re-certification process,
including continued professional development, and is hereby re-certified as a

CIE

**Council-certified
Indoor Environmentalist**

This certificate expires on June 30, 2018.

Charles F. Wiles, Executive Director

00861

Certificate Number

This certificate remains the property of the American Council for Accredited Certification.

MICROBIOLOGICAL SAMPLING RESULTS



SPORE TRAP REPORT

PSI, Inc.
850 Poplar Street
Pittsburgh, PA 15220

Attn: Mike Kopar

DATE

Reported: 1/17/18
Analyzed: 1/17/18
Received: 1/17/18
Sampled: 1/17/18

Work Order: 1801338

Project Number: 08162882-2
Project Name: Blackhawk Int. School

Analyst: JM

AIHA-LAP, LLC. Lab #100373

TEST METHOD: PSI-WI-620-815

LAB NUMBER:	001A			002A			003A		
Client ID:	2559 1849			2559 1939			2559 1855		
Location:	Media Ctr/Library (Containment)			Art Room (Containment)			Room A302 (Containment)		
Comments:									
Detection Limit(spores/m ³):	13			13			13		
Hyphal Fragments	3	40		2	27		2	27	
Pollen				1	13		1	13	
Sample Description:	Air-O-Cell			Air-O-Cell			Air-O-Cell		
	raw ct.	spores/m ³	%	raw ct.	spores/m ³	%	raw ct.	spores/m ³	%
Cladosporium sp.	9	120	30.00	5	67	31.25	1	13	25.00
Ascospores	2	27	6.67	2	27	12.50			
Basidiospores				1	13	6.25			
Smuts/Myxomycetes	2	27	6.67	1	13	6.25			
Peronospora/Oidium sp.									
Pen./Asp. Group	16	210	53.33	6	80	37.50	2	27	50.00
Alternaria sp.									
Drechslera/Bipolaris									
Spegazzinia sp.									
Tetraploa sp.									
Curvularia sp.									
Stachybotrys sp.									
Unknown/Brown*	1	13	3.33	1	13	6.25	1	13	25.00
Torula sp.									
Ulocladium sp.									
Chaetomium sp.									
Pithomyces sp.									
Epicoccum sp.									
Polythrincium sp.									
Pestalotia sp.									
Cercospora sp.									
Rusts									
Nigrospora sp.									
Background debris (1-5)**	3			3			3		
Sample Volume (liters)	75			75			75		
TOTAL ‡	30	400	100	16	210	100	4	53	100

Total % may not equal 100 due to rounding.



SPORE TRAP REPORT

PSI, Inc.
850 Poplar Street
Pittsburgh, PA 15220

DATE
Reported: 1/17/18
Analyzed: 1/17/18
Received: 1/17/18
Sampled: 1/17/18

Work Order: 1801338
Project Number: 08162882-2
Project Name: Blackhawk Int. School

Analyst: JM

Attn: Mike Kopar

AIHA-LAP, LLC. Lab #100373

TEST METHOD: PSI-WI-620-815

LAB NUMBER:	004A			005A		
Client ID:	2559 1867			2559 1882		
Location:	Room A211/212			Ground Fl -Outside Elevator		
Comments:						
Detection Limit(spores/m ³):	13			13		
Hyphal Fragments	2	27		1	13	
Pollen	1	13				
Sample Description:	Air-O-Cell			Air-O-Cell		
	raw ct.	spores/m ³	%	raw ct.	spores/m ³	%
Cladosporium sp.	1	13	6.67	2	27	28.57
Ascospores						
Basidiospores						
Smuts/Myxomycetes	1	13	6.67	2	27	28.57
Peronospora/Oidium sp.						
Pen./Asp. Group	12	160	80.00	2	27	28.57
Alternaria sp.						
Drechslera/Bipolaris	1	13	6.67			
Spegazzinia sp.						
Tetraploa sp.						
Curvularia sp.						
Stachybotrys sp.						
Unknown/Brown*				1	13	14.29
Torula sp.						
Ulocladium sp.						
Chaetomium sp.						
Pithomyces sp.						
Epicoccum sp.						
Polythrincium sp.						
Pestalotia sp.						
Cercospora sp.						
Rusts						
Nigrospora sp.						
Background debris (1-5)**	3			3		
Sample Volume (liters)	75			75		
TOTAL †	15	200	100	7	94	100

Total % may not equal 100 due to rounding.

SPORE TRAP REPORT

PSI, Inc.
850 Poplar Street
Pittsburgh, PA 15220

DATE
Reported: 1/17/18
Analyzed: 1/17/18
Received: 1/17/18
Sampled: 1/17/18

Work Order: 1801338
Project Number: 08162882-2
Project Name: Blackhawk Int. School
Analyst: JM

Specific Sample Comments:

General Report Comments:

* Unknown/brown are spores without a distinctive morphology on spore traps and non-viable surface samples.

** Background debris is the amount of particulate matter present on the slide and is graded from 1-5 with 1 being very little, while a debris rating of 5 is unreadable.

The higher the rating the more likelihood spores may be underestimated.

A rating of 4 should be interpreted as minimal counts and may actually be higher than reported.

‡ Total spores/m³ has been rounded to two significant figures to reflect analytical precision.

The reporting limit is one spore/item adjusted for volume.

Results relate only to items tested. Results are not corrected for blank data.

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Samples will be disposed of within thirty (30) days unless notified in writing by the client.

Results based on volume measurement provided by the client.

Disclaimer: The laboratory is not responsible for interpretation of test results or for methods used during sampling.

All samples were in acceptable condition unless noted.

Respectfully submitted, PSI, Inc.



Cathy McNamee, Approved Signatory

CHAIN OF CUSTODY - MOLD

1901338

Project Information

Project Name: Blackhawk Int. *Atlanta*

Project No: OS162932-2

Job Number: 1-17-18

Sample Date:



III Laboratory
850 Poplar Street
Pittsburgh, PA 15220
412-922-1001 ext. 228/313

Send Results To:

Company: *M. Kopps*

Address:

Telephone:

Email:

Send Invoice To:

Company: *OC-816*

Address:

Telephone:

Email:

Requested Turn Around Time

Same Day 1-2 Days (24-48 hr) 3-5 Day

Requested Date:

Laboratory Use Only

If Samples In Acceptable Condition: Y N

Comments:

Shipping Charges Apply:

Environmental Conditions

Light	Fog	Rain	Wind	Snow	Clear
Moderate				<input checked="" type="checkbox"/>	
Heavy					
Notes:					

Temperature: Inside *70* Outside *18*

Relative Humidity: Inside *70* Outside *18*

Sample Analysis

Direct Exam	IE
Fungal Culture & Genus ID (from spores)	FC/S
Fungal Culture & Genus ID (from spores)	FC/S sp
Bacteria w/Genus ID (3 most predominant)	B-3
Savage Screen	SS
Legionella Culture	LC
Other (list)	CO

Sample ID	Location Description	Room	Room No.	Temp	Humidity	Notes
<i>25591929</i>	<i>Media ctr / lobby (contaminant)</i>	<i>NT KN</i>	<i>(contaminant)</i>	<i>75C</i>	<i>DE</i>	
<i>25591939</i>	<i>Room A302 (contaminant)</i>					
<i>25591935</i>	<i>Room A302 (contaminant)</i>					
<i>25591927</i>	<i>Room A211/212</i>					
<i>25591932</i>	<i>Room Fl - 0208 & 0209</i>					

Sample Type	Code
air	A
swab	S
tape lift	TL
soil/dust	SD
floor	F
water	W
Other (list)	CO

Relinquished by: *Michael Kopps* Date/Time: *1/11/18 11:00 AM*

Received by: *SM Make* Date/Time: *1/12/18*

Special Instructions / Comments:

SPORE TRAP REPORT

PSI, Inc.
850 Poplar Street
Pittsburgh, PA 15220

DATE
Reported: 1/23/18
Analyzed: 1/23/18
Received: 1/23/18
Sampled: 1/23/18

Work Order: 1801431
Project Number: 08162882-2
Project Name: Blackhawk Int. School

Attn: Mike Kopar

Analyst: JM

Specific Sample Comments:

General Report Comments:

* Unknown/brown are spores without a distinctive morphology on spore traps and non-viable surface samples.

** Background debris is the amount of particulate matter present on the slide and is graded from 1-5 with 1 being very little, while a debris rating of 5 is unreadable.

The higher the rating the more likelihood spores may be underestimated.

A rating of 4 should be interpreted as minimal counts and may actually be higher than reported.

‡ Total spores/m³ has been rounded to two significant figures to reflect analytical precision.

The reporting limit is one spore/item adjusted for volume.

Results relate only to items tested. Results are not corrected for blank data.

This report may not be reproduced except in full, without written approval of PSI, Inc.

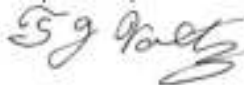
Samples will be disposed of within thirty (30) days unless notified in writing by the client.

Results based on volume measurement provided by the client.

Disclaimer: The laboratory is not responsible for interpretation of test results or for methods used during sampling.

All samples were in acceptable condition unless noted.

Respectfully submitted, PSI, Inc.



Tim Voltz, Approved Signatory

1801431

CHAIN OF CUSTODY - MOLD

1801432

Project Information

Project Name: Blackhawk Terminal

Project No: OSL 2882-2

QID Number: _____

Sample Date: 1-23-18



III Laboratory
 850 Poplar Street
 Pittsburgh, PA 15220
 412-922-1001 ext. 228/313

Send Results To:

Company: _____

Attn: M. Koper

Address: _____

Telephone: _____

Email: _____

Send Invoice To:

Company: _____

Attn: _____

Address: _____

Telephone: _____

Email: _____

Requested Turn Around Time

Sample Use: 1-2 Day (24-48 hr) 3-5 Day

Expected Date: _____

Laboratory Use Only

All Samples in Acceptable Condition: Y N

Comments: _____

Shipping Charges Apply: Y N

Environmental Conditions

Light	Fog	Rain	Wind	Snow	Clear
Moderate					<input checked="" type="checkbox"/>
Heavy					
Notes:					

Temperature: Inside _____ Outside _____

Relative Humidity: Inside _____ Outside _____

Sample Analysis

Collect Exam: _____

Fungal Culture & Genus ID (non-spectro)

Fungal Culture & Genus ID (top 3 spectra)

Bacteria w/Genus ID (3 most predominant)

Sewage Screen

Legionella Culture

Other (list): _____

TC	TC
TE	TE
FC	FC
SP	SP
B-1	B-1
SS	SS
LC	LC
OH	OH

Sample ID	Location Description	Surface Type	Material	Notes
2559 200x	Asf Lm	Asf	75	De
2559 200Y	Custodial Room			
2559 1945	o.p. R			
2559 1945	Floor tile Mark - Custodial	Tile		

Sample Type	Code
Swab	A
Lape Lm	T
Wall/Dust	B
Plate	F
Water	W
Other (list)	O

Relinquished by: Michael Koper Date/Time: 1/23/18

Received by: SM Walker Date/Time: 1-23-2018

Special Instructions / Comments: _____

DIRECT MICROSCOPIC EXAMINATION REPORT

PSI, Inc.
850 Poplar Street
Pittsburgh, PA 15220

DATE
Reported: 1/23/18
Analyzed: 1/23/18
Received: 1/23/18
Sampled: 1/23/18
Revised: 1/24/18

Work Order: 1801432
Project Number: 08162882-2
Project Name: Blackhawk Int. School
Analyst: JM

Attn: Mike Kopar

Revised to Fix Typo in Location Description - TJV

Specific Sample Comments:

General Report Comments:

* Unknown/brown are spores without a distinctive morphology on spore traps and non-viable surface samples.

Quantification of fungal spores are graded 1+ through 4+ with:

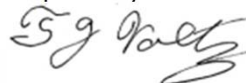
- 1+ = Occasional spores seen
- 2+ = Few spores seen
- 3+ = Moderate spores seen
- 4+ = Numerous spores seen

Results relate only to items tested.

This report may not be reproduced except in full, without written approval of PSI, Inc.
Samples will be disposed of within thirty (30) days unless notified in writing by the client.

Disclaimer: The laboratory is not responsible for interpretation of test results or for methods used during sampling.
All samples were in acceptable condition unless noted.

Respectfully submitted, PSI, Inc.



Tim Voltz, Approved Signatory



SPORE TRAP REPORT

PSI, Inc.
850 Poplar Street
Pittsburgh, PA 15220

Attn: Mike Kopar

DATE

Reported: 1/31/18
Analyzed: 1/31/18
Received: 1/31/18
Sampled: 1/31/18

Work Order: 1801617
Project Number: 08162882-2
Project Name: Blackhawk Int. School

Analyst: TV

AIHA-LAP, LLC. Lab #100373

TEST METHOD: PSI-WI-620-815

LAB NUMBER:	001A		
Client ID:	25592008		
Location:	Custodial Room		
Comments:			
Detection Limit(spores/m ³):	13		
Hyphal Fragments	1	13	
Pollen			
Sample Description:	Air-O-Cell		
	raw ct.	spores/m ³	%
Cladosporium sp.	5	67	83.33
Ascospores			
Basidiospores			
Smuts/Myxomycetes	1	13	16.67
Peronospora/Oidium sp.			
Pen./Asp. Group			
Alternaria sp.			
Drechslera/Bipolaris			
Spegazzinia sp.			
Tetraploa sp.			
Curvularia sp.			
Stachybotrys sp.			
Unknown/Brown*			
Torula sp.			
Ulocladium sp.			
Chaetomium sp.			
Pithomyces sp.			
Epicoccum sp.			
Polythrincium sp.			
Pestalotia sp.			
Cercospora sp.			
Rusts			
Nigrospora sp.			
Background debris (1-5)**	3		
Sample Volume (liters)	75		
TOTAL ‡	6	80	100

Total % may not equal 100 due to rounding.

SPORE TRAP REPORT

PSI, Inc.
850 Poplar Street
Pittsburgh, PA 15220

DATE
Reported: 1/31/18
Analyzed: 1/31/18
Received: 1/31/18
Sampled: 1/31/18

Work Order: 1801617
Project Number: 08162882-2
Project Name: Blackhawk Int. School
Analyst: TV

Specific Sample Comments:

General Report Comments:

* Unknown/brown are spores without a distinctive morphology on spore traps and non-viable surface samples.

** Background debris is the amount of particulate matter present on the slide and is graded from 1-5 with 1 being very little, while a debris rating of 5 is unreadable.

The higher the rating the more likelihood spores may be underestimated.

A rating of 4 should be interpreted as minimal counts and may actually be higher than reported.

‡ Total spores/m³ has been rounded to two significant figures to reflect analytical precision.

The reporting limit is one spore/item adjusted for volume.

Results relate only to items tested. Results are not corrected for blank data.

This report may not be reproduced except in full, without written approval of PSI, Inc.

Samples will be disposed of within thirty (30) days unless notified in writing by the client.

Results based on volume measurement provided by the client.

Disclaimer: The laboratory is not responsible for interpretation of test results or for methods used during sampling.

All samples were in acceptable condition unless noted.

Respectfully submitted, PSI, Inc.



Jack Maake, Approved Signatory

1801617

CHAIN OF CUSTODY - MOLD



IH Laboratory
850 Poplar Street
Pittsburgh, PA 15220
412-922-4001 ext. 228/313

Project Information	
Project Name:	Blackhawk Int. School
Project No:	08162882-2
PO Number:	
Sample Date:	1-31-18

Send Results To:	
Company:	PSI
Attn:	Mike Kopar
Address:	850 Poplar Street, Pittsburgh PA 15220
Telephone:	412-922-4000
Email:	mike.kopar@psiusa.com

Send Invoice To:	
Company:	
Attn:	
Address:	
Telephone:	
Email:	

Requested Turn Around Time			
Same Day	1-2 Day (24-48 hr)	3-5 Day	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Requested Date:			

Environmental Conditions						
	Fog	Rain	Wind	Snow	Clear	Temperature:
Light	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Inside Outside
Moderate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	70s / 10
Heavy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Relative Humidity
Notes:						Inside Outside
						/

Sample Analysis	Code
Direct Exam	DE
Fungal Culture & Genus ID (non-speciation)	FC/G
Fungal Culture & Genus ID Speciation (top 3 species)	FC/G sp.
Bacteria w/Genus ID (3 most predominant)	BAC
Sewage Screen	SS
Legionella Culture	LC
Other (list)	Oth

Laboratory Use Only		
All Samples In Acceptable Condition:	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N
Comments:		
Shipping Charges Apply:	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Sample ID	Location Description	Sample Type Code	Total Volume/ Area	Sample Analysis Code	Notes:
2539 2018	Customat. Rm	AIR	75L	DE	

Sample Type	Code
Air	A
Swab	S
Tape Lift	TL
Bulk/Dust	BD
Plate	P
Water	W
Other (list)	O

Relinquished by:	Date/Time	Received by:	Date/Time
Michael Kopar	1/31/18		1/31/18 0800

Special Instructions / Comments:	
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