- Indoor Environmental Testing and Consulting
- Industrial Hygiene Consulting
- OSHA Compliance
- Expert Witness
- Training

INDOOR AIR QUALITY/MOLD ASSESSMENT SOUTH BERWICK TOWN HALL 180 MAIN STREET, SOUTH BERWICK, MAINE

Prepared for

MR. TIMOTHY PELLERIN

Town Manager 180 Main Street South Berwick, Maine 03908

October 2023

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ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE

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INDOOR AIR QUALITY/MOLD ASSESSMENT SOUTH BERWICK TOWN HALL 180 MAIN STREET, SOUTH BERWICK, MAINE

1.0 EXECUTIVE SUMMARY

Sevee & Maher Engineers, Inc./Environmental Safety & Hygiene Associates (SME/ESHA) was retained by Mr. Timothy Pellerin, Town Manager, to conduct an Indoor Air Quality Assessment/Mold (IAQ) for the Town Hall situated at 180 Main Street in South Berwick, Maine.

This activity consisted of physically evaluating the interior spaces for current conditions and the collection of data relating to general IAQ parameters (CO/CO₂/Temp/RH), air sampling for mold spore activity, and the collection of surface mold wipes as needed.

This action was not intended to be a comprehensive assessment of the entire structure, either for the interior or exterior areas, and did not include any major intrusive or exploratory-type assessment actions for evaluating such areas as inside fixed wall/ceiling/floor cavity areas.

Physical assessment did not reveal indications of moisture issues for the first-floor former police areas in the form of peeling paints on masonry, or insects.

Several dead rodents were present in the first-floor sprinkler utility room.

The first-floor former police locker room has evidence of elevated moisture issues due to the insect activity and the deteriorated drywall ceiling in the shower unit.

Numerous suspended ceiling tiles have evidence of past water impact for all building levels, but most were simply water-stained with no observable mold growth with the exception of a ceiling tile in the third-floor auditorium area above the stage with visible mold growth of either *Cladosporium* or *Stachybotrys*. Direct sampling was not feasible as the ceiling height was extremely elevated. Significant ceiling tile staining in the former police area hallway appears to be due to the air handling unit above the ceiling which either condensates, or the drain pan line is clogged, resulting in overflow.

All carpeting on the second-floor areas were found to be worn and dirty. Particulate air sampling data indicates that this is resulting in elevated skin cells and miscellaneous fiber activity.

No significant water intrusion issues were observed for the first, second, and third floor areas except for some limited historical indication of water intrusion for some perimeter upper window areas. Cursory inspection of the exterior perimeter revealed numerous foundation cracks, some unsealed penetrations, and failing caulking for the window units, especially at the lintel areas.

Direct-read real-time IAQ data indicated interior moisture levels (RH) and temperature (⁰F) levels to be acceptable; carbon dioxide (CO²) levels were found to be static over two (2) rounds of sampling, no carbon monoxide levels were detected nor expected.

Based on this site assessment, the first through third floor areas do not appear to have adequate air scrubbing resulting in the detected elevated skin cells and miscellaneous fiber activity.

Of caution is the presence of four (4) portable air purifier units that have ion generation. Ion generation produces Ozone (O_3), a poisonous gas that is a severe upper respiratory irritant. These units, if used, should only be operated in the HEPA filter mode only.

2.0 GENERAL FINDINGS

The following summary of general findings outlines the conditions observed during the visual and testing event.

2.1 Visual Inspection

First-Floor

The former police areas were vacant at the time of this assessment.

This building level appears to be prone to seasonal summertime moisture influences via the introduction of outdoor humidity into the spaces. This occurs due to the mobility of water vapor from warm to cold, hence when the outdoor air is warmer than the indoor air temperature in the first-floor area, this water vapor is drawn into the space where it can either condense on surfaces when dew point is achieved or be absorbed by porous materials whereby surface mold growth can occur in the presence of organic matter.

Dead rodents are present in the sprinkler utility room and appear to be entering via unsealed perimeter penetration. Additionally, the indications of elevated moisture levels for this building level are also supported by the insect activity observed.

The portable A/C unit in the utility room (phone line servers) is full of *Cladosporium* mold growth (Wipe sample W-2). In fact, the units filter and coils have never been cleaned or serviced as evidenced by the factory shipping tape still securing the front cover at both sides.

The air handler unit in the hallway adjacent to the former dispatch office has some significant ceiling tile staining and appears to be due to the air handling unit above the ceiling either having condensation issues or the drain pan line is clogged resulting in overflow.

The former locker room has visual indications of historical moisture issues in the form of insect activity and the damaged drywall ceiling in the shower area.

Various lower drywall areas at the floor levels were assessed and no mold growth was observed behind the cove base trim, and the drywall overall was not in contact with the cement floors.

Second-Floor

Numerous suspended ceiling tiles have evidence of past water impact for all building levels, but most were simply water-stained with no observable mold growth.

Insect intrusion/infestation was observed at various perimeter areas.

All carpeting on the second-floor areas were found to be worn and dirty. Particulate air sampling data indicates that this is resulting in elevated skin cells and miscellaneous fiber activity.

Third-Floor

Numerous suspended ceiling tiles have evidence of past water impact, but most were simply waterstained with no observable mold growth, except for one ceiling tile near the stage with visible mold growth of either *Cladosporium* or *Stachybotrys*. Direct sampling was not feasible as the ceiling height was extremely elevated.

Insect intrusion/infestation was observed at various perimeter areas.

Some historical water intrusion was observed for some upper window areas with plaster.

Four (4) portable air purifier units were observed in the auditorium space that have ion generation capability. Ion generation produces Ozone (O_3) a poisonous gas that is a severe upper respiratory irritant. These units, if used, should only be operated in the HEPA filter mode only.

Exterior

The exterior shell of the building was observed to have numerous cracks in the lower foundation areas.

Numerous unsealed penetrations were also present at various areas around the perimeter of the structure. Many of these are insect and rodent pathways.

All lintel areas for the window units were observed to have shrunken and/or deteriorating caulking that are not only potential pathways for drain plane water intrusion, but also insect and rodent pathways.

2.2 Airborne Fungal Spore and Particulate Testing

Air samples were collected to determine indoor air quality relating to mold spores utilizing Allergenco-D[™] air sampling cassettes collected for a five-minute period at a flow rate of 15 liters per minute for a total volume of 75 liters per sample.

The Allergenco-D[™] air sampling-style cassette is a sampling device designed for the rapid collection and analysis of a wide range of airborne aerosols. These include fungal spores, pollen, insect parts, skin cell fragments, fibers, and inorganic particulates.

The Outdoor Control sample (ST-1) had a total mold spore level of 17,000 ct/m³ at the time of sampling and was comprised primarily of the common outdoor ubiquitous species *Ascospores* and *Basidiospores* with some low-level activity for *Aspergillus/Penicillium-like* and *Cladosporium* activity as well.

Indoor collected samples (ST-2 through ST-13) had total mold spore levels ranging from 320 to 4,600 ct/m³ and contained generally the same species *Ascospores, Aspergillus/Penicillium-like, Basidiospores,* and *Cladosporium* detected in the outdoor sample and at comparable levels. The exception being sample ST-4 collected in the first-floor former police area which had an elevated level of *Aspergillus/Penicillium-like* activity at 2,300 ct/m³ representing half of the total detected activity for the sample. This sample was in the same area that has the heavily damaged ceiling area due to the air handler unit.

Currently, there are no regulatory levels for mold spore activity, but most persons typically do not have any adverse reactions to general environmental mold spore levels <5,000 ct/m³.

This testing event indicates that all indoor mold spore levels are less than 5,000 ct/m³.

No *Chaetomium, Fusarium, Memnoniella, Stachybotrys,* or *Trichoderma species* were detected for any of the first through third floor area air samples. These species are indicator organisms of long-term and ongoing moisture issues, and/or water intrusion problems. **This organism is of concern when large areas of active fungal growth reservoirs exist in wet building materials.** It has the capability, *but do not always,* produce mycotoxins and microbial volatile organic compounds (MVOCs) and their potential effects can seriously compromise a building and/or the health of occupants. These effects for human health can be worse for immune compromised persons (such as those with HIV, the elderly, terminally or seriously ill patients (cancer patients)), persons with pre-existing breathing conditions or asthma and the very young.

Airborne Fungal Spores – Recommended Levels (Worldwide Exposure Standards for Mold and Bacteria, 10th edition, 2017)

Airborne fungal spore concentrations between 1,000 and 10,000 counts per cubic meter of air (Ct./m³) may be acceptable to the average healthy person indoors, but extremely sensitive individuals may experience symptoms at concentrations below 4,225 Ct./m³. Spore counts from 4,225-7,779 Ct./m³ are moderate where many individuals sensitive to mold spores will experience symptoms; counts from 7,800-24,999 Ct./m³ are high where most individuals with any sensitivity to mold spores will experience symptoms and concentrations >25,000 Ct./m³ are very high where almost all individuals with any sensitivity will experience symptoms and extremely sensitive people could have severe symptoms.

The particulates detected for the samples collected indoors were primarily comprised of skin cell fragments, black opaque particles, and miscellaneous fibers with some random detection of fiberglass and insect parts.

Typical Bange of Activity Indoors
range from 7,500 - 10,000
range from 2,500 - 5,000
range from 1,000 - 2,000
range from 1,000 - 5,000
range from 50 - 75
<27
<27
<27

The types of particulates evaluated by air testing and typical levels are as follows:

The type of particulates and concentrations detected in the indoor environment (Samples ST-2 thru ST-13) were comprised of the following:

Particulate	Indoor Sample Concentration	Outdoor Control
Skin Cell Fragments	750 - 16,000 ct/m ³	0 ct/m ³
Black Opaque Particles	270 - 2,600 ct/m ³	530 ct/m ³
Miscellaneous Fibers	320 - 2,700 ct/m ³	110 ct/m ³
Pollen	0 ct/m ³	None Detected
Insect Parts	0 - 110 ct/m ³	None Detected
Fiberglass Fibers	0 - 53 ct/m ³	None Detected

The highest skin cell and miscellaneous fiber levels were detected for samples ST-6 through ST-9 for the second-floor areas with carpeting.

Refer to attached analytical data sheets (Appendix B) for reference as to the type and frequency of mold spore species and particulate types and levels detected during this sampling event.

Airborne fungal spore and particulate activity data can be found in Appendix B.

2.3 Direct-Read IAQ Parameter Measurements

Carbon Dioxide

When carbon dioxide (CO_2) levels increase indoors, people may experience discomfort, headaches, tiredness, and general lethargy. It is generally accepted that it is not a lack of oxygen, nor even the buildup of CO_2 itself causing the problem, but the sum of all indoor air contaminants that are trapped in the indoor environment at the same time due to lack of proper ventilation. Thus, the value of CO_2 as a surrogate indicator of the effectiveness of overall ventilation is recognized.

The ANSI/ASHRAE Standard 62.1-2022 does not set an upper limit for carbon dioxide (CO_2), but recommends that levels be maintained at no more than 700 parts per million (ppm) above outdoor levels. Typically, outdoor ambient air concentrations of CO_2 can range from 350 to 450 ppm depending on such variables as temperature inversions, vehicle traffic, or other combustion sources.

The CO₂ levels measured in the indoor areas ranged from 476 to 821 ppm for initial testing with an outdoor level of 437 ppm.

The CO₂ levels measured in the indoor areas ranged from 449 to 840 ppm for the second round of testing conducted approximately two hours later, with an outdoor level of 437 ppm.

Testing indicates no upward trend in CO₂ levels.

The direct-read real-time measurement table can be found in Appendix D.

Temperature & Relative Humidity

ANSI/ASHRAE Standard 55-2020, <u>Thermal Environmental Conditions for Human Occupancy</u>, recommends that temperatures during the winter months be maintained between 68°F to 75°F, and during the summer months between 73°F to 79°F. Relative humidity should range between 30 to 40 percent in winter months and 40 to 50 percent in summer months. On average, humidity levels of 30 to 60 percent are generally acceptable for all seasons, dependent on the actual interior temperature and type of clothing being worn by occupants.

Temperature measurements collected indoors during this assessment ranged from 64.3 to 73.4°F. The measured outdoor level ranged from 52.8 to 56.1°F during the same time periods.

Relative humidity measurements collected indoors during this assessment ranged from 41.5 to 53.7 percent. The measured outdoor level ranged from 59.0 to 76.6 percent during the same time period.

The direct-read real-time measurement table can be found in Appendix D.

Carbon Monoxide

Carbon monoxide (CO) sources are usually traced to the ingress of vehicle exhaust fumes or fumes leaking from poorly ventilated combustion sources, furnaces, boilers, etc. Carbon monoxide is a colorless, odorless gas and because contamination from CO gas is insidious, preventive measures should be taken to ensure that there is no ingress of CO gas into the indoor environment.

Indoor air quality criteria recommend carbon monoxide levels remain below 9.0 ppm throughout the workday. The Occupational Safety and Health Administration (OSHA) has established a Permissible Exposure Limit (PEL) of 50 ppm, the National Institute of Occupation Safety and Health (NIOSH) has a Recommended Exposure Limit (REL) of 35 ppm, and the American Conference of Governmental Industrial Hygienists (ACGIH) recommends a Threshold Limit Value (TLV) of 25 ppm.

Ambient indoor level measurements collected indicated no CO detected at values of greater than 0.0 ppm.

The direct-read real-time measurement table can be found in Appendix D.

3.0 SUMMARY OF FINDINGS

Lack of good air exchange for the spaces can pose a short-term and long-term health risk for occupants.

Dirty/worn carpeting can contribute to occupant upper respiratory responses, particularly when there is a lack of air exchange and/or mechanical ventilation return flow rates.

If rodents are going the be trapped inside the building, then it is important that such traps are frequently monitored and trapped rodents are discarded.

The abundance of observed insect activity within building areas indicates that sufficient ambient moisture levels are present and that pathways for their entering the building exist for the perimeter shell of the structure.

Water-stained ceiling tiles, though mostly an aesthetic issue, can create the conditions whereby occupants can become concerned about the overall air quality.

Four (4) portable air purifier units were observed in the auditorium space that have ion generation capability. Ion generation produces Ozone (O_3) a poisonous gas that is a severe upper respiratory irritant. These units, if used, should only be operated in the HEPA filter mode only.

Where temperature and humidity levels permit, natural ventilation through operable windows can be an effective and an energy-efficient way to provide outside air ventilation for cooling and thermal comfort when conditions allow (e.g., temperature, humidity, outdoor air pollution levels, precipitation). Windows that open and close can enhance occupants' sense of well-being and feeling of control over their environment.

However, uncontrolled ventilation by the introduction of outdoor air via operable windows can also allow outdoor air contaminants (dust, dirt particles, vehicle emissions, etc.) to enter the building and not be adequately filtered and/or permit the introduction of excess moisture into the building which can lead to surface mold growth occurrences.

However, sealed buildings with appropriately designed and operated HVAC and/or air exchange systems with proper filtering can often provide better indoor air quality than a building with operable windows only.

4.0 RECOMMENDATIONS

Management and maintenance of buildings is important to prevent conditions that could possibly compromise the overall indoor air quality and the health of occupants.

Based on the findings of this study and our professional experience, SME/ESHA offers the following measures to assure good indoor air quality:

• Worn/dirty carpeting needs to be removed. Replacement with carpeting is not recommended unless frequent HEPA vacuuming, and periodic shampooing/cleaning is performed. Hard flooring surfaces are much easier to clean and maintain and do not trap settled debris matter that then become re-entrained through foot traffic.

All levels of the building need to have a formal mechanical ventilation system installed that provides adequate fresh air introduction, provides good airborne particle collecting and filtering, and provides moisture control in the summer periods. A qualified heating/cooling/ventilation specialist knowledgeable in the design of ventilation systems should be consulted.

- A properly certified and licensed pest control entity should be contracted with to provide insect and rodent control actions at the site.
- All water-stained ceiling tiles and the mold compromised ceiling tile in the auditorium area need to be removed and replaced. Replacement not only aids in aesthetics for occupants, but helps identify when new leaks or water impact occurs so it can be properly addressed.
- All unsealed perimeter penetrations and foundation cracks need to be properly sealed.
- All shrinking/failing exterior caulking for windows and doors needs to be removed and replaced.

5.0 METHODOLOGY

The sampling conducted was performed in accordance with the <u>Environmental Criteria and Assessment</u> <u>Guidelines</u>, recommended by the United States Environmental Protection Agency (U.S.EPA) Environmental Criteria and Assessment Office, Office of Health and Environmental Assessment, U.S.EPA 600/8-91/202 (ECAO-R-0315); American Conference of Governmental Industrial Hygienists (ACGIH); and the National Institute of Occupational Safety and Health (NIOSH).

The testing and analytical protocols for this assessment were also based on information and methodologies prescribed by American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE), IICRC's S520 Standard and Reference Guide for Professional Mold Remediation, and the Worldwide Standards for Exposures to Bacteria and Mold, and our professional experience.

6.0 LIMITING CONDITIONS

The observations, conclusions, and recommendations described in this inspection report were made under the conditions stated herein and were arrived at in accordance with generally accepted standards related to indoor air quality inspections and good industrial hygiene practice. The conclusions presented in the report were based solely upon the services described herein, and not on scientific tasks or procedures beyond the scope of described services.

Hidden or changed conditions, activities that may have occurred after the time of the inspection, and possible inaccuracies of information supplied to SME/ESHA by others might have a material bearing on the findings, conclusions, and recommendations. SME/ESHA reserves the right to amend its opinion(s) if additional information becomes available, but SME/ESHA assumes no obligation to do so.

No warranty or guarantee, expressed or implied, is made regarding the findings, conclusions, or recommendations contained in this report. The limitations presented above supersede the requirements or provisions of all other contracts or scopes of work, implied or otherwise, except as expressly stated or acknowledged herein. SME/ESHA is not responsible for the actions of other parties involved in this project.

It is expressly agreed that SME/ESHA will have no liability to any party for reliance upon any of the findings or recommendations contained in this report. To the extent that this provision is found unenforceable by any court, any liability SME/ESHA may have arising out of its agreement with the contracting party is expressly agreed to be limited to the amount paid to SME/ESHA.

APPENDIX A

CERTIFICATIONS AND LICENSES







American Council for Accredited Certification

hereby certifies that

John M. Boilard

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

CMC

Council-certified Microbial Consultant

This certificate expires on May 31, 2024

Charles Thiles

1605028

Charles F. Wiles, Executive Director

Certificate Number

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

APPENDIX B

AIRBORNE MOLD ANALYTICAL SUMMARY TABLE AND LABORATORY DATA





TABLE 1 AIRBORNE MOLD SPORE ANALYTICAL SUMMARY

CLIENT:

Town of South Berwick 180 Main Street South Berwick, ME 03908

PROJECT NUMBER:

231415.00

TESTING LOCATION:

Town of South Berwick 180 Main Street South Berwick, ME 03908

SAMPLING DATE:

October 16, 2023

LAB ID:

102303979-991

SAMPLE ID:	ST-1	ST-2	ST-3	ST-4
SAMPLE LOCATION:	Outdoor (control sample)	First Floor Elevator Lobby	First Floor Meeting Room (Former Public Works)	First Floor Corridor Dispatch/Locker Room
TOTAL MOLD SPORES Count/m3:	17,000	2,100	2,900	4,600
MOLD GENERA IDENTIFIED:	Count/m3	Count/m3	Count/m3	Count/m3
Ascospores	12,000	850	1,400	530
Aspergillus/Penicillium-like	750	210	-	2,300
Basidiospores	3,800	960	1,200	1,300
Cladosporium	160	110	270	320
Epicoccum	-	-	-	-
Myxomycetes/Smuts/Periconia	-	-	-	53
Unknown Spores	-	-	-	-
PARTICULATES IDENTIFIED:	Count/m3	Count/m3	Count/m3	Count/m3
Skin Cell Fragments	-	2,100	1,100	7,600
Black Opaque Particles	530	910	1,200	1,500
Misc. Fibers	110	850	370	1,800
Fiberglass Fibers	-	-	-	-
Insect Parts	-	-	-	-



SAMPLE ID:	ST-5	ST-6	ST-7	ST-8
SAMPLE LOCATION:	First Floor Former Patrol Office	Second Floor Assistant Town Manager / HR/ Finance	Second Floor Town Clerk Offices	Second Floor Code & Assessing Offices
TOTAL MOLD SPORES Count/m3:	3,500	2,000	1,500	1,100
MOLD GENERA IDENTIFIED:	Count/m3	Count/m3	Count/m3	Count/m3
Ascospores	1,100	800	590	530
Aspergillus/Penicillium-like	430	160	53	270
Basidiospores	1,800	1,000	910	110
Cladosporium	210	-	-	-
Epicoccum	-	-	-	53
Myxomycetes/Smuts/Periconia	-	-	-	160
Unknown Spores	-	53	-	-
PARTICULATES IDENTIFIED:	Count/m3	Count/m3	Count/m3	Count/m3
Skin Cell Fragments	3,000	16,000	13,000	12,000
Black Opaque Particles	1,200	2,100	1,400	2,600
Misc. Fibers	480	1,400	1,700	2,500
Fiberglass Fibers	-	-	53	-
Insect Parts	-	-	-	-

SAMPLE ID:	ST-9	ST-10	ST-11	ST-12
SAMPLE LOCATION:	Second Floor Town Manager Office	Third Floor Economic & Community Development Office	Third Floor Meeting Room #2	Third Floor Auditorium
TOTAL MOLD SPORES Count/m3:	690	320	320	1,300
MOLD GENERA IDENTIFIED:	Count/m3	Count/m3	Count/m3	Count/m3
Ascospores	110	270	160	750
Aspergillus/Penicillium-like	-	-	-	53
Basidiospores	270	53	160	320
Cladosporium	-	-	-	110
Epicoccum	-	-	-	-
Myxomycetes/Smuts/Periconia	320	-	-	53
Unknown Spores	-	-	-	-
PARTICULATES IDENTIFIED:	Count/m3	Count/m3	Count/m3	Count/m3
Skin Cell Fragments	11,000	1,300	1,700	750
Black Opaque Particles	6,100	270	270	370
Misc. Fibers	2,700	480	640	320
Fiberglass Fibers	-	-	-	-
Insect Parts	110	-	-	-



SAMPLE ID:	ST-13
SAMPLE LOCATION:	Third Floor Lunchroom / Storage Hallway
TOTAL MOLD SPORES Count/m3:	1,400
MOLD GENERA IDENTIFIED:	Count/m3
Ascospores	640
Aspergillus/Penicillium-like	110
Basidiospores	530
Cladosporium	110
Epicoccum	-
Myxomycetes/Smuts/Periconia	-
PARTICULATES IDENTIFIED:	Count/m3
Skin Cell Fragments	2,700
Black Opaque Particles	690
Misc. Fibers	1,000
Fiberglass Fibers	-
Insect Parts	-





South Location: 120 Main St. Westbrook, ME 04092
 Phone:
 855-731-9161

 Fax:
 207-873-7022

 Email:
 info@nelabservices.com



Answers for a
Healthier Environment

Client:	SME/ESH	Date Sampled:	10/16/2023	NEL Project ID:	102303979-991	
Address:	PO Box 85A	Date Received:	10/16/2023	Project Number:	231415	
	Cumberland, ME 04021	Date Reported:	10/24/2023	Project Name:	Town Hall - So. Berwick	

Analysis Report - Spore Trap Direct Exam

Sample Description	ST-1 Outd	oor Control	ST-2 1st Flr	- Elev. Lobby	ST-3 1st Flr -	Meeting Room
Lab ID Number	102303979		102303980		102303981	
Volume Sampled (Liters)	75			75	75	
Background Debris*	:	2		2		2
	Raw Ct.	Ct./m3	Raw Ct.	Ct./m3	Raw Ct.	Ct./m3
Total Mold Spores & Fragments	318	17,000	40	2,100	54	2,900
Alternaria						
Ascospores	230	12,000	16	850	26	1,400
Aspergillus/Penicillium-like	14	750	4	210		
Basidiospores	71	3,800	18	960	23	1,200
Bipolaris Group						
Chaetomium						
Chlamydospores						
Cladosporium	3	160	2	110	5	270
Curvularia						
Epicoccum						
Fusarium						
Hyphal Fragments						
Myxomycetes/Smuts/Periconia						
Other Spores						
Pithomyces						
Poria/Meruliporia						
Rusts						
Stachybotrys						
Trichoderma						
Ulocladium						
Unknown Spores						
Zygomycetes						
Particulates	Raw Ct.	Ct./m3	Raw Ct.	Ct./m3	Raw Ct.	Ct./m3
Skin Cell Fragments	-	-	39	2,100	20	1,100
Black Opaque Particles	10	530	17	910	23	1,200
Misc. Fibers	2	110	16	850	7	370
Fiberglass Fibers	-	-	-	-	-	-
Pollen	-	-	-	-	-	-
Insect Parts	-	-	-	-	-	-

* Debris Rating Scale: 0 = no debris visible; 5 = very high debris abundance. Background debris levels of 4 and above indicate poor visibility which can result in under-counting of small spores such as those from members of the Aspergillus/Penicillium-like group.

The analytical sensitivity is calculated by dividing (Ct./m3) by the (Raw ct.). The limit of detection is calculated by multiplying the analytical sensitivity by the volume of air collected and dividing that number by 1000.

Values may not appear to be additive due to rounding of numbers. Spore/m3 values are rounded to 2 significant figures. Unless otherwise noted sample results are not corrected based on field or laboratory blank results.



South Location: 120 Main St. Westbrook, ME 04092
 Phone:
 855-731-9161

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 Email:
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Answers for a

Healthier Environment



Client:	SME/ESH	Date Sampled:	10/16/2023	NEL Project ID:	102303979-991	
Address:	PO Box 85A Cumberland, ME 04021	Date Received: Date Reported:	10/16/2023 10/24/2023	Project Number: Project Name:	231415 Town Hall - So. Berwick	

Analysis Report - Spore Trap Direct Exam

Sample Description	ion ST-4 1st FIr - Corridor ST-5 1st FIr - Former Patrol Ofc		ST-6 2nd F Town-N	⁻ loor - Asst ⁄lgr-HR		
Lab ID Number	1023	03982	1023	03983	10230	03984
Volume Sampled (Liters)	7	5	7	'5	7	5
Background Debris*	:	3		3	:	3
	Raw Ct.	Ct./m3	Raw Ct.	Ct./m3	Raw Ct.	Ct./m3
Total Mold Spores & Fragments	86	4,600	66 3,50		38	2,000
Alternaria						
Ascospores	10	530	20	1,100	15	800
Aspergillus/Penicillium-like	44	2,300	8	430	3	160
Basidiospores	25	1,300	34	1,800	19	1,000
Bipolaris Group						
Chaetomium						
Chlamydospores						
Cladosporium	6	320	4	210		
Curvularia						
Epicoccum						
Fusarium						
Hyphal Fragments						
Myxomycetes/Smuts/Periconia	1	53				
Other Spores						
Pithomyces						
Poria/Meruliporia						
Rusts						
Stachybotrys						
Trichoderma						
Ulocladium						
Unknown Spores					1	53
Zygomycetes						
Particulates	Raw Ct.	Ct./m3	Raw Ct.	Ct./m3	Raw Ct.	Ct./m3
Skin Cell Fragments	142	7,600	57	3,000	303	16,000
Black Opaque Particles	28	1,500	22	1,200	40	2,100
Misc. Fibers	34	1,800	9	480	27	1,400
Fiberglass Fibers	-	-	-	-	-	-
Pollen	-	-	-	-	-	-
Insect Parts	-	-	-	-	-	-

* Debris Rating Scale: 0 = no debris visible; 5 = very high debris abundance. Background debris levels of 4 and above indicate poor visibility which can result in under-counting of small spores such as those from members of the Aspergillus/Penicillium-like group.

The analytical sensitivity is calculated by dividing (Ct./m3) by the (Raw ct.). The limit of detection is calculated by multiplying the analytical sensitivity by the volume of air collected and dividing that number by 1000.

Values may not appear to be additive due to rounding of numbers. Spore/m3 values are rounded to 2 significant figures. Unless otherwise noted sample results are not corrected based on field or laboratory blank results.



South Location: 120 Main St. Westbrook, ME 04092
 Phone:
 855-731-9161

 Fax:
 207-873-7022

 Email:
 info@nelabservices.com



Answers for a Healthier Environment

Client:	SME/ESH	Date Sampled:	10/16/2023	NEL Project ID:	102303979-991	
Address:	PO Box 85A Cumberland, ME 04021	Date Received: Date Reported:	10/16/2023 10/24/2023	Project Number: Project Name:	231415 Town Hall - So. Berwick	

Analysis Report - Spore Trap Direct Exam

Sample Description	Sample Description ST-7 2nd Floor - Town Clerk		ST-8 2nd Flo Asse	or - Code And essing	ST-9 2nd Floor - Town Mgr Ofc			
Lab ID Number	10230	03985	1023	102303986		102303987		
Volume Sampled (Liters)	7	75		75	75			
Background Debris*	:	3		4		4		
			Bow Ct Ct /m2					
	Raw Ct.	Ct./m3	Raw Ct.	Ct./m3	Raw Ct.	Ct./m3		
Total Mold Spores & Fragments	29	1,500	21	1,100	13	690		
Alternaria								
Ascospores	11	590	10	530	2	110		
Aspergillus/Penicillium-like	1	53	5	270				
Basidiospores	17	910	2	110	5	270		
Bipolaris Group								
Chaetomium								
Chlamydospores								
Cladosporium								
Curvularia								
Epicoccum			1	53				
Fusarium								
Hyphal Fragments								
Myxomycetes/Smuts/Periconia			3	160	6	320		
Other Spores								
Pithomyces								
Poria/Meruliporia								
Rusts								
Stachybotrys								
Trichoderma								
Ulocladium								
Unknown Spores								
Zygomycetes								
Particulates	Raw Ct.	Ct./m3	Raw Ct.	Ct./m3	Raw Ct.	Ct./m3		
Skin Cell Fragments	237	13,000	227	12,000	198	11,000		
Black Opaque Particles	26	1,400	48	2,600	114	6,100		
Misc. Fibers	31	1,700	47	2,500	50	2,700		
Fiberglass Fibers	1	53	-	-	-	-		
Pollen	-	-	-	-	-	-		
Insect Parts	-	-	-	-	2	110		

* Debris Rating Scale: 0 = no debris visible; 5 = very high debris abundance. Background debris levels of 4 and above indicate poor visibility which can result in under-counting of small spores such as those from members of the Aspergillus/Penicillium-like group.

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Answers for a

Healthier Environment



Client:	SME/ESH	Date Sampled:	10/16/2023	NEL Project ID:	102303979-991	
Address:	PO Box 85A Cumberland, ME 04021	Date Received: Date Reported:	10/16/2023 10/24/2023	Project Number: Project Name:	231415 Town Hall - So. Berwick	

Analysis Report - Spore Trap Direct Exam

Sample Description	on ST-10 3rd Floor - Economic Dev.		ST-11 3rd Floor	- Meeting Room 2	ST-12 3rd Floor - Auditorium		
Lab ID Number	10230	03988	1023	03989	102303990		
Volume Sampled (Liters)	7	75		75	75		
Background Debris*		2		2		2	
	Raw Ct.	Ct./m3	Raw Ct.	Ct./m3	Raw Ct.	Ct./m3	
Total Mold Spores & Fragments	6	6 320		320	24	1,300	
Alternaria							
Ascospores	5	270	3	160	14	750	
Aspergillus/Penicillium-like					1	53	
Basidiospores	1	53	3	160	6	320	
Bipolaris Group							
Chaetomium							
Chlamydospores							
Cladosporium					2	110	
Curvularia							
Epicoccum							
Fusarium							
Hyphal Fragments							
Myxomycetes/Smuts/Periconia					1	53	
Other Spores							
Pithomyces							
Poria/Meruliporia							
Rusts							
Stachybotrys							
Trichoderma							
Ulocladium							
Unknown Spores							
Zygomycetes							
Particulates	Raw Ct.	Ct./m3	Raw Ct.	Ct./m3	Raw Ct.	Ct./m3	
Skin Cell Fragments	24	1,300	31	1,700	14	750	
Black Opaque Particles	5	270	5	270	7	370	
Misc. Fibers	9	480	12	640	6	320	
Fiberglass Fibers	-	-	-	-	-	-	
Pollen	-	-	-	-	-	-	
Insect Parts	-	-	-	-	-	-	

* Debris Rating Scale: 0 = no debris visible; 5 = very high debris abundance. Background debris levels of 4 and above indicate poor visibility which can result in under-counting of small spores such as those from members of the Aspergillus/Penicillium-like group.

The analytical sensitivity is calculated by dividing (Ct./m3) by the (Raw ct.). The limit of detection is calculated by multiplying the analytical sensitivity by the volume of air collected and dividing that number by 1000.

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Answers for a Healthier Environment

Client:	SME/ESH	Date Sampled:	10/16/2023	NEL Project ID:	102303979-991
Address:	PO Box 85A	Date Received:	10/16/2023	Project Number:	231415
	Cumberland, ME 04021	Date Reported:	10/24/2023	Project Name:	Town Hall - So. Berwick

Analysis Report - Spore Trap Direct Exam

Sample Description	ST-13 3rd Flo	oor - Corridor		
Lab ID Number	10230	03991		
Volume Sampled (Liters)	75			
Background Debris*		3		
	Raw Ct.	Ct./m3		
Total Mold Spores & Fragments	26	1,400		
Alternaria				
Ascospores	12	640		
Aspergillus/Penicillium-like	2	110		
Basidiospores	10	530		
Bipolaris Group				
Chaetomium				
Chlamydospores				
Cladosporium	2	110		
Curvularia				
Epicoccum				
Fusarium				
Hyphal Fragments				
Myxomycetes/Smuts/Periconia				
Other Spores				
Pithomyces				
Poria/Meruliporia				
Rusts				
Stachybotrys				
Trichoderma				
Ulocladium				
Unknown Spores				
Zygomycetes				
Particulates	Raw Ct.	Ct./m3		
Skin Cell Fragments	50	2,700		
Black Opaque Particles	13	690		
Misc. Fibers	19	1,000		
Fiberglass Fibers	-	-		
Pollen	-	-		
Insect Parts	-	-		

* Debris Rating Scale: 0 = no debris visible; 5 = very high debris abundance. Background debris levels of 4 and above indicate poor visibility which can result in under-counting of small spores such as those from members of the Aspergillus/Penicillium-like group.

The analytical sensitivity is calculated by dividing (Ct./m3) by the (Raw ct.). The limit of detection is calculated by multiplying the analytical sensitivity by the volume of air collected and dividing that number by 1000.

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Answers for a Healthier Environment

SME/ESH **Client:** 102303979-991 10/16/2023 **NEL Project ID:** Date Sampled: Date Received: 10/16/2023 Project Number: 231415 Address: PO Box 85A Town Hall - So. Berwick 10/24/2023 Date Reported: Project Name: Cumberland, ME 04021

Sample & Project Comments

No comments were recorded for this project.

Report Authorized By:

Erin Bouttenot, Technical Manager, Indoor Air Quality

NEL Method #: 4.3.24 & 4.3.25

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Chain Of Custody Indoor Air Quality Analysis

Ship Samples To:

120 Main Street, Unit B Westbrook, ME 04092 Phone: 800-244-8378 Email: info@nelabservices.com Website: www.nelabservices.com



	Contac	t Informat	ion Sample Type Codes		Turn			Peque	ster A	nalvsis	*	
Company:	SME/ESH			AC = Air Culture Plate	Around			neque	SIEG A	Tarysis		
Address:	PO Box 85.	A		BM = Bulk Materials	Standard	Non-Culture		ure	Culture			
City, State Zip:	Cumberlar	nd, ME 0402	21	D = Dust	X		SS	4			rsa)	
Contact:	Mark Cote	man J44	N BOILARD	RCS = RCS Air Strip			rticle	men			IEA,	
Phone:	207-854-2711		S = Surface Swab	Next Day	Only	& Pa	sess		_	ia (N		
Email:	Refer to account preferences		ST = Spore Trap (AOC)		igni	ingi	/e As	EA)	(TSA	Icteri		
	Projec	t Informati	on	T = Tape Lift		5 - FL	5 - FL	tativ	ri (M	eria	& Be	
Project #:	23141	5		W = Water	RUSH	alysis	alysi	Quali	Fung	Bact	ungi	
Project Name:	TOWNY	141c - 55	BANNICK	WP = Wipe		o Ana	o Ana	 E	dia	dia	dia F	
Sampled By:	SOA	<u>) J</u>	BLAS BOILARD	O = Other		Trap	Trap	Exai	e Me	e Me	Me	
Lab ID #	Collection	Sample	Sample Nur	nber / Description	Volume /	oore	oore	irect	Plate	Plat	Plate	
	Date	Туре	• •		Area		St				~	
102303979	10-16-23	ST	ST-1 autoan	CONTRAL	75							
980			-2 Mart	28U. Lossy								
981			-3 ISPRR	MEETING Room								
982			4 ISACR CO	midon								
983			-5 ISTANE	FORMER PATRIC OFFC								
984			-6 2nd Floor	- ASSTOW/Man/HA								
985			-7 gind, sus	on Town Chank								
986		ļ	-O 2nd Rig	A COLE & ASSESSING	-							
987			-9 2hd From	- TOWN MAR. SEC			4					
988			-10 3rd Fin	R ECONOMIC DEL.			V,					
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991		SS	55-13 3rd Fin	on, Currison	75							
102303992	<u> </u>	WP	US-1 ISFELL, B	ATTUL DIFFUSER								
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*Non-Culture Method TAT: Rush TAT reported day of receipt, Next Day TAT 1 buiness day after receipt, Standard TAT 2-3 business days after receipt. *Culture Method TAT: Only Standard TAT available and is reported 7-10 business days after receipt.

	Samples Relinquished:		Samples Accepted:	Acceptance Criteria		
Date/Time:	10-1623 1505	Date/Time:-		Samples are deemed acceptable (unbroken		
Name:	X/2	Name:		and labeled) unless otherwise noted below.		
	Samples Relinquished:		Samples Accepted:	Comments		
Date/Time:		Date/Time:	10.16.23 1519	Lab 10:102303979-991		
Name:		Name:	MG	102303992 - 993		

Rev. 2021-02-10

APPENDIX C

SURFACE MOLD SAMPLING SUMMARY TABLE AND LABORATORY DATA





TABLE 2 MOLD SPORE ACTIVITY ON SURFACES ANALYTICAL SUMMARY

CLIENT:

231415.00

Town of South Berwick 180 Main Street South Berwick, ME 03908

PROJECT NUMBER:

TESTING LOCATION:

Town of South Berwick

South Berwick, ME 03908

SAMPLING DATE:

October 16, 2023

LAB ID:

102303992-993

180 Main Street

SAMPLE ID:	LOCATION/DESCRIPTION	BACKGROUND DEBRIS *	GENERA IDENTIFIED	MOLD GROWTH **
W-1	First Floor Former Patrol Offices Supply Vent Diffuser	3	None Detected	-
W-2	First Floor Utility Room Window A/C Unit	2	Cladosporium	3

QUALITIVE SCALE:

1 = Lowest (very low abundance)

5= Highest (very high abundance)

- ** Mold growing at rating of 4 and above result in poor visibility which can result in under reporting of smaller mold growing under and/or within the heavily growing mold.
- * Background debris particles debris include organic and inorganic debris from a variety of sources, and generally, occur as a result of settling from an airborne state.





South Location: 120 Main St. Westbrook, ME 04092
 Phone:
 855-731-9161

 Fax:
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 Email:
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Answers for a
Healthier Environment

Client:	SME/ESH		40/46/2022		400000000000	
		Date Sampled:	10/16/2023	NEL Project ID:	102303992-993	
Address: PO Box 85A		Date Received:	10/16/2023	Project Number:	231415	
	PO Box 85A	Date Reported:	10/24/2023	Project Name	Town Hall - So Berwick	
	Cumberland, ME 04021	Bate Reported.	10/24/2020	rioject Name.		

Analysis Report - Direct Microscopic Exam

Lab ID Number	Sample Type	Description	Background Debris*	Mold Growth **	Comments
102303992	WIPE	W-1 1st Flr - Patrol Diffuser	3	Not Detected	
102303993	WIPE	W-2 1st Flr - Utility AC Unit	2	3 Cladosporium	

Qualitative Scale: 1 = lowest (very low abundance); 5 = highest (very high abundance)

* Background debris particles debris include organic and inorganic debris from a variety of sources, and generally occur as a result of settling from an airborne state.

** Mold growing at rating of 4 and above result in poor visibility which can result in under reporting of smaller mold growing under and/or within the heavily growing mold.



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Answers for a Healthier Environment

SME/ESH **Client:** 102303992-993 10/16/2023 **NEL Project ID:** Date Sampled: Date Received: 10/16/2023 Project Number: 231415 Address: PO Box 85A Town Hall - So. Berwick 10/24/2023 Date Reported: Project Name: Cumberland, ME 04021

Sample & Project Comments

No comments were recorded for this project.

Report Authorized By:

Erin Bouttenot, Technical Manager, Indoor Air Quality

NEL Method #: 4.3.24 & 4.3.25

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Chain Of Custody Indoor Air Quality Analysis

Ship Samples To:

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Contact Information		Sample Type Codes	Turn	Requested Analysis*								
Company:	SME/ESH			AC = Air Culture Plate	Around			neque	SIEG M	Tarysis		
Address:	PO Box 85.	A		BM = Bulk Materials	Standard	Na	n-Cult	ure		Cul	ture	
City, State Zip:	Cumberlar	nd, ME 0402	21	D = Dust	X		SS	4			TSA)	
Contact:	Mark Cote	man J44	N BOILARD	RCS = RCS Air Strip			rticle	men			IEA, -	
Phone:	207-854-2	711		S = Surface Swab	Next Day	Only	& Pa	sess			ia (N	
Email:	Refer to ac	count prefe	erences	ST = Spore Trap (AOC)		igni	ingi	/e As	EA) (TSA)			
	Projec	t Informati	on	T = Tape Lift		- F	5 - FL	tativ	i (M	i (ME eria (& Ba		
Project #:	23141	5		W = Water	RUSH	alysis	alysi	Quali	Fung	Bact	ungi	
Project Name:	TOWNY	141c - 55	BANNICK	WP = Wipe) Ani) Ana	- u	edia	dia	dia F	
Sampled By:	SO/A	<u>) J</u>	BLAS BOULARD	O = Other		Trap	Trap	Exal	M M M	e Me	Ϋ́Θ.	
Lab ID #	Collection	Sample	Sample Nur	nber / Description	Volume /	oore	oore	irect	Plate	Plat	Plate	
	Date	Туре	• •		Area		2 ^t				2	
102303979	10-16-23	ST	ST-1 autoan	CONTRAL	75							
980			-2 Mart	28U. Lossy								
981			-3 ISPRR	MEETING Room								
982			4 ISACR CO	4 ISPER Consider								
983			-5 ISTANE	-5 15 FUR FORMER PATRIC OFC								
984			-6 2nd Floor	-6 2nd Freen ASSTTOWN/MCN/HN								
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991		SS	55-13 3rd Fin	on, Currison	75							
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*Non-Culture Method TAT: Rush TAT reported day of receipt, Next Day TAT 1 buiness day after receipt, Standard TAT 2-3 business days after receipt. *Culture Method TAT: Only Standard TAT available and is reported 7-10 business days after receipt.

	Samples Relinquished:		Samples Accepted:	Acceptance Criteria		
Date/Time:	10-1623 1505	Date/Time:-		Samples are deemed acceptable (unbroken		
Name:	X/2	Name:		and labeled) unless otherwise noted below.		
	Samples Relinquished:		Samples Accepted:	Comments		
Date/Time:		Date/Time:	10.16.23 1519	Lab 10:102303979-991		
Name:		Name:	MG	102303992 - 993		

Rev. 2021-02-10

APPENDIX D

DIRECT-READ REAL-TIME MEASUREMENT TABLES





INDOOR AIR QUALITY – DIRECT READ DATA

CLIENT:

Town of South Berwick 180 Main Street South Berwick, ME 03908 TESTING LOCATION: Town of South Berwick 180 Main Street South Berwick, ME 03908 SAMPLING DATE:

October 16, 2022

PROJECT NUMBER:

231415.00

	LOCATION	Number of Occupants	Time	Temperature (°F)	RH (%)	CO (ppm)	CO₂ (ppm)
•	Outdoors	-	08:58	52.8	76.6	0	437
A	(First Floor – East Side)	-	11:05	56.1	59.0	0	437
в	First Floor	1	09:21	71.7	45.9	0	554
В	Lobby Entry / Elevator Hallway	4	11:04	71.4	44.5	0	554
6	Corridor Rear (North)	2	09:24	69.9	44.5	0	511
Ľ	Former Police Area	1	11:07	64.3	53.7	0	463
р	First Floor	1	09:26	69.3	48.2	0	492
U	Meeting Room	1	11:09	67.0	52.9	0	467
F	First Floor	1	09:28	70.0	48.5	0	548
	Custodial Room	1	11:12	69.5	48.1	0	474
F	First Floor Custodial Office / Mechanical Room	1	09:29	71.7	47.3	0	540
		1	11:14	73.4	45.0	0	558
G	First Floor Sprinkler / Mechanical Room	1	09:37	68.8	48.1	0	546
J		1	11:15	71.8	43.3	0	480
н	First Floor	1	09:39	68.5	47.5	0	487
••	Former Dispatch	1	11:16	70.9	43.3	0	473
	First Floor Former Administrative Assistant Office	1	09:40	68.2	47.6	0	480
•		1	11:18	70.4	45.1	0	482
	First Floor	1	09:41	67.9	50.1	0	548
,	Former Police Chief Office	1	11:19	68.8	46.5	0	490
к	First Floor	1	09:47	67.6	49.2	0	513
	File Room	1	11:20	68.4	44.7	0	469
	First Floor	1	09:58	68.7	48.0	0	540
L	Former Patrol Offices	1	11:21	68.0	45.5	0	492



= ≥700 ppm above outdoor level



	LOCATION	Number of Occupants	Time	Temperature (°F)	RH (%)	CO (ppm)	CO₂ (ppm)
	First Floor	1	10:00	67.6	48.8	0	534
IVI	Former Interview Room	1	11:22	67.6	46.4	0	455
NI	First Floor	1	10:01	67.5	49.9	0	565
IN	Former Lt. Sargeant Office	1	11:23	67.5	47.6	0	474
0	First Floor	1	10:01	67.4	49.9	0	553
0	Sr. Patrol Office	1	11:24	67.2	48.0	0	449
D	First Floor	1	10:03	67.9	49.8	0	546
F	Former Locker Room	1	11:25	67.4	48.2	CO (ppm) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	460
0	Stairwell A Between First and Second Floor	1	10:05	69.6	48.3	0	535
y	(Southwest)	1	11.30	69.6	48.3	0	540
P	Second Floor	1	10:09	71.8	46.5	0	549
ĸ	Elevator Hallway	1	11:31	70.4	47.5	0	666
c	Second Floor	1	10:10	72.0	43.5	0	484
3	General Assistance Office	1	11:32	70.5	45.9	0	516
-	Second Floor	1	10:13	73.1	45.1	0	700
1	Town Clerk Offices	2	11:34	71.7	46.4	0	612
	Second Floor	1	10:16	73.3	44.8	0	690
0	Vault – Town Clerk Offices	1	11:34	72.0	46.3	0	610
v	Second Floor	3	10:17	73.2	43.6	0	633
v	Kitchen Area	3	11:35	72.6	45.1	0	644
	Second Floor	2	10:19	72.9	43.3	0	600
••	Assessing Office	3	11:36	72.7	44.8	CO (ppm) 0 0	674
x	Second Floor	4	10:20	73.2	45.0	0	744
^	Assistant Town Manager / HR/ Finance Office	5	11:37	72.8	44.7	0	726
v	Second Floor	1	10:22	72.7	44.9	0	757
	Code and Assessing Office Reception Area	1	11:39	72.6	44.7	0	801
7	Second Floor	5	10:23	72.5	45.8	0	821
2	Code and Assessing Offices	4	11:39	72.5	45.6	0	840
۵۵	Second Floor	1	10:26	71.7	42.1	0	500
~~	Main Entry Hallway	1	11:42	71.7	42.3	0	504
BB	Second Floor	2	10:28	71.9	45.3	0	723
00	Town Manager Reception	2	11:43	72.1	44.9	0	704
	Second Floor	3	10:29	72.0	45.0	0	727
u	Town Manager's Office	2	11:44	72.2	45.1	0	770



= ≥700 ppm above outdoor level



LOCATION		Number of Occupants	Time	Temperature (°F)	RH (%)	CO (ppm)	CO ₂ (ppm)
5	Second Floor	2	10:32	72.5	45.5	0	813
00	Hallway – North End	1	11:44	72.4	44.4	0	660
	Second Floor	1	10:33	71.4	41.5	0	556
CC	Stairwell - Northwest	1	11:45	70.3	41.9	0	526
	Third Floor	2	10:38	70.2	44.5	0	590
FF	Hallway – North End	1	11:46	69.5	44.5	0	575
66	Third Floor	2	10:40	70.4	43.8	0	528
66	Economic Community Development Office	1	11:47	69.8	44.7	0	561
нн	Third Floor	1	10:41	70.1	43.3	0	520
	Meeting Room #2	1	11:48	69.7	44.8	0	581
	Third Floor	1	10:45	70.9	44.7	0	500
	Auditorium	1	11:53	69.8	45.9	0	517
	Third Floor	2	10:56	72.3	41.7	0	476
11	Stage	1	11:54	70.3	45.6	0	512
VV	Third Floor	1	10:57	72.1	41.8	0	481
	Lunchroom	1	11:55	70.6	45.3	0	523
	Third Floor	2	10:59	71.9	42.4	0	484
LL	Election Storage Room	1	11:57	70.8	44.4	0	507



= ≥700 ppm above outdoor level



APPENDIX E

PHOTOGRAPH LOG





PHOTOGRAPH LOG

Town Hall 180 Main Street, South Berwick, Maine



Air sample ST-1, outdoor control.



Air sample ST-2 collected in first floor entry/elevator area.

PHOTOGRAPH LOG

Town Hall 180 Main Street, South Berwick, Maine



Air sample ST-3 collected in first floor meeting room (former Public Works).



Air sample ST-4 collected in first floor hallway near former Police Dispatch/Locker Room area.


Air sample ST-5 collected on first floor in former Police Patrol Office.



Air sample ST-6 collected on second floor in Asst. Town Mgr./HR/Finance Offices.

Town Hall 180 Main Street, South Berwick, Maine



Air sample ST-7 collected on second floor in Assessing Offices.



Air sample ST-8 collected on second floor in Code & Assessing Offices.

231415 Photo Log South Berwick Town Hall October 16, 2023 Page 4 of 48



Air sample ST-9 collected on second floor in Town Manager Office area.



Air sample ST-10 collected on third floor in Economic & Community Development Office.



Air sample ST-11 collected on third floor in Meeting Room #2.



Air sample ST-12 collected on third floor in Auditorium.

Town Hall 180 Main Street, South Berwick, Maine



Air sample ST-13 collected on third floor in hallway adjacent to Lunchroom/Election Storage.



Water intrusion point for improperly sealed door threshold at first floor entry to elevator lobby area.



Water damaged lower wall plaster due to improperly sealed door threshold at first floor entry to elevator lobby area.



Water damaged lower wall plaster due to improperly sealed door threshold at first floor entry to elevator lobby area.

Town Hall 180 Main Street, South Berwick, Maine



Water damaged lower wall plaster due to improperly sealed door threshold at first floor entry to elevator lobby area.



Water intrusion point for improperly sealed door threshold at first floor entry to elevator lobby area.



Insect infestation in first floor former Police locker room.



Improperly sealed penetrations in first floor former Police locker room.



Water damage ceiling in shower unit in first floor former Police locker room.



No mold growth issues observed for lower drywall on first floor.



No mold growth issues observed for lower drywall on first floor.



No mold growth issues observed for lower drywall on first floor.



No mold growth issues observed for lower drywall on first floor.



Rodent carcass in first floor sprinkler room.



Rodent carcasses in first floor sprinkler room.



Moisture damaged ceiling tiles due to air handler unit in ceiling on first floor outside former Police Dispatch Office.



Dirty supply diffuser and ductwork on first floor in former Police Patrol Office.



Dirty supply diffuser and ductwork on first floor in Utility Room near former Police Patrol Office.



Dirty/mold compromised portable window A/C unit on first floor in Utility Room near former Police Patrol Office.



Dirty/mold compromised portable window A/C unit on first floor in Utility Room near former Police Patrol Office.



Dirty/mold compromised portable window A/C unit on first floor in Utility Room near former Police Patrol Office.



Dirty supply diffuser and ductwork on first floor in former Police Interview Room.



Dirty supply diffuser and ductwork on first floor in former Police Lieutenant & Sergeant Office.



Dirty supply diffuser and ductwork on first floor in former Police Storage Room.

Town Hall 180 Main Street, South Berwick, Maine



Dirty supply diffuser and ductwork on first floor in former Police Locker Room.



Dirty supply diffuser and ductwork on first floor in former Police Dispatch Office.



Dirty return diffuser and ductwork on first floor in former Police Dispatch Office.



Wipe sample W-1 collected from supply diffuser on first floor in former Police Patrol Office.



Insect activity on first floor.



Wipe sample W-2 collected from air discharge plenum for portable window A/C unit on first floor in Utility Room near former Police Patrol Office.



Moisture influences in first floor area causing peeling paint conditions.



Moisture influences in first floor area causing peeling paint conditions.



Moisture influences in first floor area causing peeling paint conditions.



Moisture influences in first floor area causing peeling paint conditions.



Worn/dirty carpeting on second floor in General Assistance Office.



Water damaged ceiling tile on second floor in General Assistance Office.



Worn/dirty carpeting on second floor in Town Clerk Offices.



Worn/dirty carpeting on second floor in Town Clerk Offices.

Town Hall 180 Main Street, South Berwick, Maine



Dirty return diffuser and ductwork on second floor in Town Clerk Offices.



Water-stained ceiling tiles dirty return diffuser and ductwork on second floor in Town Clerk Offices.



Water-stained ceiling tile on second floor in Town Clerk Offices.



Water-stained ceiling tile on second floor in Assessing Offices.



Dirty return diffuser and ductwork on second floor in Assessing Offices.



Worn/dirty carpeting on second floor in Asst. Town Mgr./HR/Finance Offices.

Town Hall 180 Main Street, South Berwick, Maine



Worn/dirty carpeting on second floor in Asst. Town Mgr./HR/Finance Offices.



Water-stained ceiling tile on second floor in Asst. Town Mgr./HR/Finance Offices.

Town Hall 180 Main Street, South Berwick, Maine



Water-stained ceiling tiles on second floor in Asst. Town Mgr./HR/Finance Offices.



Worn/dirty carpeting on second floor in Codes/Planner Offices.

Town Hall 180 Main Street, South Berwick, Maine



Worn/dirty carpeting on second floor in Codes/Planner Offices.



Water-stained ceiling tile on second floor in Codes/Planner Offices.

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Water-stained ceiling tile on second floor in Codes/Planner Offices.



Water-stained ceiling tile on second floor in Codes/Planner Offices.



Water-stained ceiling tile on second floor in Codes/Planner Offices.



Dirty return diffuser and ductwork on second floor in Codes/Planner Offices.



Water-stained ceiling tile on second floor in Codes/Planner Offices.



Worn/dirty carpeting on second floor in Twon Manager Offices.



Worn/dirty carpeting on second floor in Twon Manager Offices.



Water-stained ceiling tiles on second floor in Twon Manager Offices.



Worn/dirty carpeting on second floor in Twon Manager Offices.



Dirty return diffuser and ductwork on second floor in Town Manager Offices.



Water-stained ceiling tiles on second floor in Twon Manager Offices.



Water-stained ceiling tiles on second floor in Twon Manager Offices.

<u>PHOTOGRAPH LOG</u> Town Hall

180 Main Street, South Berwick, Maine



Air purifier (black) on third floor with ionizing setting - Ozone producing.



Air purifier (black) on third floor with ionizing setting - Ozone producing.
Town Hall 180 Main Street, South Berwick, Maine



Air purifier (black) on third floor with ionizing setting - Ozone producing.



Air purifier (black) on third floor with ionizing setting - Ozone producing.

Town Hall 180 Main Street, South Berwick, Maine



Air purifier on third floor with ionizing setting - Ozone producing.



Air purifier on third floor with ionizing setting - Ozone producing.

Town Hall 180 Main Street, South Berwick, Maine



Water-stained ceiling tile on third floor in Auditorium/Stage area. Possible Cladosporium or Stachybotrys mold growth – inaccessible for direct sampling.



Insect infestation on third floor in election storage room.

Town Hall 180 Main Street, South Berwick, Maine



Water intrusion impact for window header on third floor in election storage room.



Thermostat on third floor with filter issue message.

PHOTOGRAPH LOG Town Hall 180 Main Street, South Berwick, Maine



Water damaged ceiling tile on third floor in janitors' storage room.



Water intrusion point for window area.

PHOTOGRAPH LOG Town Hall 180 Main Street, South Berwick, Maine



Possible lead-based paint for uncladded window trim.



Possible lead-based paint for uncladded window trim.

<u>PHOTOGRAPH LOG</u> Town Hall 180 Main Street, South Berwick, Maine



Shrinking/cracking window caulking for header area is rainwater intrusion point.



Shrinking/cracking window caulking for header area is rainwater intrusion point.

<u>PHOTOGRAPH LOG</u> Town Hall

180 Main Street, South Berwick, Maine



Unsealed perimeter penetrations.



Shrinking/cracking window caulking for header area is rainwater intrusion point.

Town Hall 180 Main Street, South Berwick, Maine



Shrinking/cracking window caulking for header area is rainwater intrusion point.



Shrinking/cracking window caulking for header area is rainwater intrusion point.

Town Hall 180 Main Street, South Berwick, Maine



Possible lead-based paint for uncladded wood trim.

APPENDIX F

DRAWINGS









KEY:



AIRBORNE MOLD SPORE SAMPLE LOCATIONS

ESHA JOB #

231415

SAMPLING DATE:





DRAWING NOT TO SCALE

AIRBORNE MOLD SPORE SAMPLE LOCATIONS

ESHA JOB #

231415

SAMPLING DATE:

INDOOR AIR QUALITY/DIRECT-READ REAL-TIME MEASUREMENTS UTH BERWICK TOWN HALL

180 MAIN STREET, SOUTH BERWICK, MAINE





FIRST FLOOR



DRAWING NOT TO SCALE

DIRECT READ DATA SAMPLE LOCATION (Temp/RH/CO/CO₂)

ESHA JOB #

231415

SAMPLING DATE:



DIRECT READ DATA SAMPLE LOCATION (Temp/RH/CO/CO₂)

ESHA JOB #

231415

SAMPLING DATE:





DRAWING NOT TO SCALE

DIRECT READ DATA SAMPLE LOCATION (Temp/RH/CO/CO₂)

ESHA JOB #

231415

SAMPLING DATE: