OLMSTED ENVIRONMENTAL SERVICES, INC
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Date: June 28, 2020

Report for: Christian Gray
97 Green St.
Apartment. G21
Brooklyn, NY 11222

Prepared by: Edward Olmsted, CIH, CSP

Subject: Mold Inspection
97 Green St. Apartment #G21 Brooklyn, NY 11222

Inspection Date: June 15, 2020

INTRODUCTION

Edward Olmsted, CIH, CSP conducted a mold inspection in unit # G21 at 97 Green Street in Brooklyn, NY. The survey was done on June 15th to evaluate the apartment for the presence of mold growth due to a catastrophic flood caused by a sprinkler head bursting on the floor above. The flood occurred on October 23rd, 2019 and the space sat for many days with standing water on the floor and soaked walls and ceilings. The survey included the following:

1. Visual inspection of G21;
2. Testing walls and floors for the presence of moisture;
3. Collecting surface samples for mold using tape lift methods;
4. Collecting wipe samples for mold culture analysis;
5. Collecting bulk samples for mold culture analysis; and
6. Collecting air samples for mold spores using spore traps.

BACKGROUND

Christian Gray reports that over the Columbus day weekend a sprinkler head failed on the floor above causing a catastrophic flood of unit G21. The water was standing on most floors and the floors, walls and ceilings were soaked for many days. A water restoration company was brought in but drying of surfaces had been delayed and moisture remained in materials for an extended period. It was reported that dehumidifiers and fans were installed to provide structural drying. The presence of moisture in wallboard, wood and insulation for an extended time is a significant risk factor for the growth of mold. The American Industrial Hygiene Association has indicated that most fungal spores can germinate when exposed to water for more than 24 to 48 hours or when exposed to prolonged periods of elevated relative humidity at normal room temperature. Vegetative growth and ultimately sporulating growth occurs anywhere from 1 week to a month of dampness, depending on

the material affected. Growth of molds in plaster, paint, sheetrock and insulation can lead to the amplification of airborne fungi and bacteria including higher levels of airborne spores and microbial fragments. Exposure to elevated levels of molds can cause health complaints of allergy, upper respiratory irritation, sinusitis, and eye irritation. Christian Gray has experienced allergy symptoms.

Unit G21 is a residential apartment with contains a personal sound studio, which has special construction designed for sound attenuation. The tenant advised me he leases space elsewhere to operate sound studios as a business. The construction of G21 includes multiple layers of wallboard and insulation on walls and ceilings as well as insulation inside walls, under some floors and above the ceiling. This type of construction attenuates sound but can trap water inside the layers of walls, ceilings and floors, including in the insulation, and can be nearly impossible to dry out with water mitigation and restoration efforts. There have been prior mold inspections of G21 resulting in differing opinions for the abatement of mold growth. ALC inspected the building for the landlord and identified visible mold growth on the lower portions of the sheetrock walls in the studio. ALC recommended removal of the lower portion of the sheetrock walls in the studio and living room area. They also recommended removal of the finish flooring in the studios. Christian Gray was concerned that the mold growth was hidden and far more extensive. He requested this survey to assess the presence of mold colonization and to provide an independent scope of work.

Unit G21 has a living room area, bedroom area, kitchen, sound studio area and bathroom. A diagram is attached that provides a layout of G21. The building is a two-story factory building that has masonry exterior walls and a concrete slab floor. There are raised wood floors in one studio and in the bathroom. The raised floor in the sound studio room is lined with plastic sheeting and bags of sand intended for sound attenuation. The kitchen and one room in the studio area have an engineered wood finish floors and another room in the studio area has a carpeted floor. There is a loft area accessible by a ladder above the studios and hallway. The 2nd floor above G21 has wood framing and decking with fiberglass mat insulation. This insulation has craft paper vapor retarder that would have limited drying of the wood deck above. A diagram of unit G21 is attached, which is not to scale and is meant for a general layout of the space.

SURVEY METHODS

Unit G21 was visually inspected for the presence of water damage and mold growth. Moisture readings were taken at suspect water leak areas. Tape lift samples were collected from suspect water-damaged materials for mold and analyzed by Ed Olmsted. The criteria used for evaluating the presence of mold colonization in buildings have been published by the American Conference of Governmental Industrial Hygienists and are summarized below. [1]

(1) the presence of visible fungal growth confirmed by source sampling;

[1] American Conference of Governmental Industrial Hygienists (ACGIH); Bioaerosols: Assessment and Control; p 19-12; © 1999

(2) the presence of moldy odors in occupied spaces;
(3) the persistent presence of water in indoor areas;
(4) the presence of accumulations of organic debris;
(5) interpretation of source or air sampling data in the absence of the above conditions.

The reliance on the presence of visible mold may fail to notice hidden mold growth or invisible levels of mold growth that are capable of producing airborne spores and other dust associated with allergy. Molds are microscopic organisms and mold growth is often invisible. The reliance on air sampling alone can also fail to detect mold growth in light of the potential for false negative results and the statistical error associated with air sampling. This survey relied on a combination of methods including source sampling (tape and bulk samples), air sampling, moisture measurements, and careful inspection of water-damaged materials. It should be noted that despite all best attempts to detect the presence of mold growth, it is often impossible to detect hidden mold growth without extensive and destructive methods such as removing sheetrock walls, ceilings and finish flooring, cabinets, wallpaper, and other building finishes. It also possible that there is mold growth in portions of this building that was not within the scope of this survey The following summarizes the interpretation of sample methods:

Moisture Levels

Moisture levels were measured using a Protimeter Surveymaster moisture meter, which was field tested using the 18 % field check device provided by the manufacturer. The presence of dampness was screened using the meter in scanning mode and where dampness was detected the area was further probed using the pin measurement, which measures in percent moisture. A level of moisture exceeding 20 % in wood is above normal and suggests active water intrusion. The Institute for Inspection Cleaning and Restoration Certification (IICRC) indicates that a moisture level above 17 % in wood or sheetrock is sufficient to support mold growth. Levels above 20 % are sufficient to germinate spores in some species of mold resulting in fungal growth. Water intrusion is the principal risk factor for mold and bacterial growth as well as infestation by mites and insects.

Bulk and Tape Sample Analysis for Molds

Prestige analyzed the bulk samples by culture methods and two tape lift samples by direct microscopic exam. Ed Olmsted analyzed the tape lift samples by microscopic methods. Microscopic analysis of a bulk or tape lift sample detects the presence of spores, hyphae and fruiting bodies (conidiophores, sporangium, ascomata). This method confirms the presence of mold growth by identifying the reproductive, hyphael structures as well as spores. This method also identifies the molds to the genus level. The microscopic evaluation of a bulk and tape lift sample provides the best measure of the presence of mold growth and the culture analysis provides additional information on the species and genera present. There are no governmental regulatory requirements for evaluation of mold growth in materials, however the American Industrial Hygiene Association (AIHA) indicates that a finding of elevated levels of spores in combination with the microscopic identification of hyphae or other sporulating fungal structures is evidence of mold growth. Bulk samples when cultured in growth media are reported in colony forming units per gram of material

(CFU/g). The analysis includes identification of mold species for *Aspergillus* and other molds and identification to the genus level for *Penicillium* and *Cladosporium*. There are no governmental regulatory requirements for evaluation of mold growth in materials, however the American Industrial Hygiene Association (AIHA) indicates that a finding of elevated levels of spores in combination with the microscopic identification of hyphae or other sporulating fungal structures is evidence of mold growth.[1] Most building surfaces have mold spores settled on them. As such levels of spores below 10,000 CFU/g in a bulk sample cannot provide conclusive evidence of mold growth because it is possible for levels below 10,000 CFU per gram to be a result of settled spores on a surface that has not been cleaned for a significant period of time. Levels between 10,000 and 100,000 CFU/gram can be the result of heavy levels of settled spores but may also signify elevated spore levels caused by the growth of mold and production of spores on fruiting bodies. Levels over 100,000 are indicative of mold colonization and consistently reflect the presence of fruiting bodies and the growth of mold and production of spores and could not be the result of settling of spores. In addition to the numbers of spores on a surface, the species can be an indicator of mold colonization. A monoculture of spores is also an indicator of mold growth and certain species not normally present in settled dust are also an indicator of colonization. This includes the dominance of species of *Aspergillus, Ulocladium, Chaetomium, Paecilomyces* and *Stachybotrys.*

Wipe Sample Analysis for Molds

Prestige analyzed the wipe samples by culture methods and by direct microscopic exam. Microscopic analysis of a sample detects the presence of spores, hyphae and fruiting bodies (conidiophores, sporangium, ascomata). This method confirms the presence of mold growth by identifying the reproductive, hyphael structures as well as spores. This method also identifies the molds to the genus level. The microscopic evaluation of a bulk and tape lift sample provides the best measure of the presence of mold growth and the culture analysis provides additional information on the species and genera present. Wipe samples when cultured in growth media are reported in colony forming units per square inch of surface tested (CFU/in2). The analysis includes identification of mold species for *Aspergillus* and other molds and identification to the genus level for *Penicillium* and *Cladosporium*. Most building surfaces have mold spores settled on them. As such levels of spores below 1,000 CFU/in2 in a wipe sample cannot provide conclusive evidence of mold growth because it is possible for levels below 1,000 CFU per $inch^2$ to be a result of settled spores on a surface that has not been cleaned for a significant period of time. Levels between 1,000 and 10,000 CFU/in^2 can be the result of heavy levels of settled spores but may also signify elevated spore levels caused by the growth of mold and production of spores on fruiting bodies. Levels over 10,000 are indicative of mold colonization and consistently reflect the presence of fruiting bodies and the growth of mold and production of spores and could not be the result of settling of spores. A monoculture of spores is also an indicator of mold growth and certain species not normally present in settled dust are an indicator of colonization. This includes the dominance of species of *Aspergillus, Ulocladium, Chaetomium, Paecilomyces* and *Stachybotrys.*

RESULTS

This report is based on a visual inspection by Olmsted, analysis of tape lift samples by Olmsted and lab reports from Prestige Enviromicrobiology. The following summarizes the survey results:

1. According to Christian Gray the water poured into the kitchen area, living room area, studio and bathroom soaking the walls and floors. The flood occurred in October and most areas are not dry. Moisture readings did reveal most walls were dry, however moisture was found in two areas as follows:
    a. The lower four feet of the masonry wall against the exterior in the living room area. This is due to water intrusion through the masonry and is a chronic moisture problem.
    b. The underside of the raised floor in one room of the studio area is slightly damp. The joists are damp measuring 30 to 40%. The sand also measured damp at 40%. This was due to the flood. The sand absorbed the water and the plastic lining the flooring and bags of sand trapped the water. This area has been wet for over 8 months. It should be assumed water was trapped under all of the floors including the finish floors in the other two rooms of the studio area, the raised floor in the bathroom, and the layers of wood flooring in the kitchen.

2. Table 1 summarizes the results of tape lift samples analyzed by Ed Olmsted. Mold growth was found on the following surfaces and materials:
    a. Inside the wall cavity in the living room
    b. On the raised wood floor in the bathroom
    c. On the base of the wall where there is visible mold in the studio area room 1
    d. On the base of the wall where there is visible mold in the hall outside the studio area room 1.
    e. On the wood framing along the base of the wall in the wall cavity in the hallway.
    f. On the sheetrock behind the wood wainscoting. This is an indication that large amounts of mold growth is hidden behind walls.
    g. The underside of the wood floor deck and the joists above the ceiling.
3. Kitchen - The kitchen wood floor is a layer of plywood subfloor with engineered wood finish floor. This area was reported by Christian Gray to have been under water and had warped. A swab was collected under the finish floor from the bottom side of the finish floor and the top side of the plywood. The sample had 190,000 colony forming units per square inch (CFU/in2) and was dominated by *Penicillium* and *Trichoderma*. Toxin producing species include *Trichoderma harzianum* and *Trichoderma longibrachiatum*. These results indicate there is mold growth present in the kitchen wood flooring.
4. Bathroom - The raised wood floor in the bathroom has evidence of water damage to the wood in the hot water tank area adjacent to the bathtub. There is also mold growth on the wall between the bathroom and the kitchen. A tape lift from the raised

wood floor in the bathroom, number 97G-6, was analyzed by Ed Olmsted and Prestige. The sample had growth of *Scopulariopsis*. There is surely greater amounts of mold growth under the raised wood floor where water was trapped. The wall cavity between the bathtub and the kitchen has visible mold growth. A bulk sample from the bathroom wall in the area by the hot water tank, number 97G-4, was analyzed by culture methods and found to have 780,000 colony forming units per gram (CFU/g). The sample was dominated by *Aspergillus calidoustus* at 690,000 CFU/g. This is indicative of mold growth. The raised floor and bathtub should be demolished in the bathroom. The wall shared with the kitchen should be opened and the back of the kitchen cabinets and wall cavity should be cleaned with HEPA vacuuming and damp wiping with a strong biocide.

5. Studio Area Room 3 – This room has a raised wood floor with sand under the floor. The sand and wood is covered with plastic sheeting. Both the wood and sand tested wet with a moisture meter. The wood floor should be removed in this room and the sand removed as well as all plastic sheeting. The joists should be cleaned and dried.
6. Living Room – A tape lift sample from inside the open wall cavity was analyzed by Ed Olmsted and tested positive for growth of mold. All of the sheetrock and insulation should be removed from this wall and the remaining sheetrock in the wall cavity should be cleaned and encapsulated. There is no visible mold growth in the living room. A wipe sample was collected from above the sheetrock around the columns to test the area above the sheetrock ceiling. The wood deck and insulation area above and were impacted by the flood. The wipe sample, number 97G-13, had massive levels of spores at over 5 million CFU per square inch. The sample was had *Aspergillus sydowii, Aspergillus versicolor, Penicillium,* and *Trichoderma longibrachiatum.* This is indicative of mold growth above the ceiling. Another wipe was collected from the top of the wall between the living room and adjacent studio. Thee was water damage but no visible mold. The sample had 740,000 CFU/in2 dominated by *Penicillium.* This is indicative of mold growth. These results indicate there is mold growth in the wall and ceiling cavities and at the upper parts of the walls and not just the base of the walls. The walls should be demolished in the living room and studios.
7. Hall - A sample was collected from the base of the wall in the hallway outside the bathroom. The sample, number 97G-3, had a total of 17,000 CFU/g and was dominated by *Aspergillus calidoustus, Penicillium,* and *Aspergillus versicolor. Paecilomyces variotii* was also detected, which is an indicator species. This sample result suggests mold growth in the wall.
8. Studio Area Room 1 – The top of the wall and the ceiling is water stained in the this room. A bulk sample from the top of the wall, number 97G-16, had 1.6 million colony forming units per gram when cultured and was dominated by *Penicillium.* This is indicative of mold growth in the top of the wall. This again indicates that the walls are mold colonized from top to bottom. A bulk sample was also collected from the press-wood ceiling in this room. The bulk sample, number 97G-18, had 61,000 CFU/g dominated by *Paecilomyces variotii.* This species frequently colonizes wood. This is indicative of mold growth. The ceilings should also be demolished.

9. Studio Area Room 2. – There is visible mold growth on the base of the walls inside this room and outside in the hall adjacent to this room. The wood wainscoting was removed from the shared wall in the hallway outside this studio. There is heavy visible mold growth on the sheetrock behind wainscoting extending up the wall. This is an indication that most of the mold growth is hidden inside walls and between layers of walls and insulation.
10. Wood Deck above loft – There is visible mold on the wood deck and joists above the insulation in the loft area above the hallway. The underside of the wood floor deck and the joists above the ceiling were tested. The sample, number 97G-18, was analyzed by Olmsted and Prestige and found to have mold growth.

DISCUSSION AND RECOMMENDATIONS

This survey indicated that there is mold growth in water damaged materials including the sheetrock, wood deck, press wood ceilings, upper areas of the sheetrock walls, wood deck above the ceilings and insulation, upper side of the sheetrock ceilings under the floors. The results indicate that there is colonization and much of it is not visible but hidden behind multiple layers of walls, under flooring and above ceilings and behind insulation. The studio area rooms are sound-proofed and have many layers of sheetrock, press wood, insulation and other materials. This type of construction caused water to become trapped in multiple layers causing hidden mold growth. The World Health Organization (WHO) has concluded "sufficient epidemiological evidence is available from studies conducted in different countries and under different climatic conditions to show that the occupants of damp or moldy buildings, both houses and public buildings, are at increased risk of respiratory symptoms, respiratory infections and exacerbation of asthma".[2] The WHO also reports that respiratory inflammation and allergy symptoms happen in people in damp and moldy buildings without immune system sensitization taking place, indicating health effects unrelated to allergy. There is also a relationship between home dampness and respiratory symptoms in adults[3]. A study published by the National Institute of Occupational Safety and Health (NIOSH) concluded that water-damaged buildings are associated with work-related respiratory disease including adult onset of asthma [4]. The condition of the apartment constitutes a health risk to anyone, but is of a particular hazard to persons with asthma or allergic sensitization to molds.

According to the most accepted criteria for assessing mold in buildings, the ACGIH (American Conference of Governmental Industrial Hygienists) Bioaerosols manual, microbial growth in occupied interiors, in HVAC systems, and on building materials and furnishings should not be allowed and such contamination should be removed and further

[2] World Health Organization; "WHO guidelines for indoor air quality: dampness and mold"; Page 93 © WHO 2009

[3] Brunekreef B.; Damp housing and adult respiratory symptoms. Department of Epidemiology and Public Health, University of Wageningen, The Netherlands. Allergy. 1992 Oct;47(5):498-502.

[4] Jean M. Cox-Ganser,1 Sandra K. White,1 Rebecca Jones,1 Ken Hilsbos,1 Eileen Storey,2 Paul L. Enright,1 Carol Y. Rao,1 and Kathleen Kreiss1; Respiratory Morbidity in Office Workers in a Water-Damaged Buildings; Environmental Health Perspectives Volume 113, Number 4, April 2005 Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health

contamination should be prevented".[5] The New York City Department of Health (NYCDOH) has developed guidelines for the abatement of mold contamination in buildings. These guidelines are available from the NYCDOH web site. The US Environmental Protection Agency (EPA) and the U.S. Department of Labor Occupational Safety and Health Administration (OSHA) also publish mold guidelines. The Institute publishes the most comprehensive guidelines for Inspection, Cleaning, and Restoration Certification (IICRC) in the standard S520. These guidelines all recommend that water damaged porous building materials be removed under controlled conditions.

The studios and bathroom should be completely demolished including the walls, floors and ceilings. Remove the bathroom raised floor and bath tub. Clean the back side of the kitchen cabinets from the bathroom side of the wall The ceilings must come down in the living room area. The kitchen floor must be removed. The insulation inside the walls and above ceilings must be removed. The work essentially requires a full gutting of the studio. The scope of work involving removal of floor finishes and the lower walls in the studios outlined by the owner's expert is insufficient.

The mold removal work should be done by a professional mold remediation contractor and workers with hazardous materials training. The work should be done following the New York City Department of Health guidelines and the Institute for Inspection Cleaning and Restoration Certification (IICRC) mold abatement guidelines in standard S520.

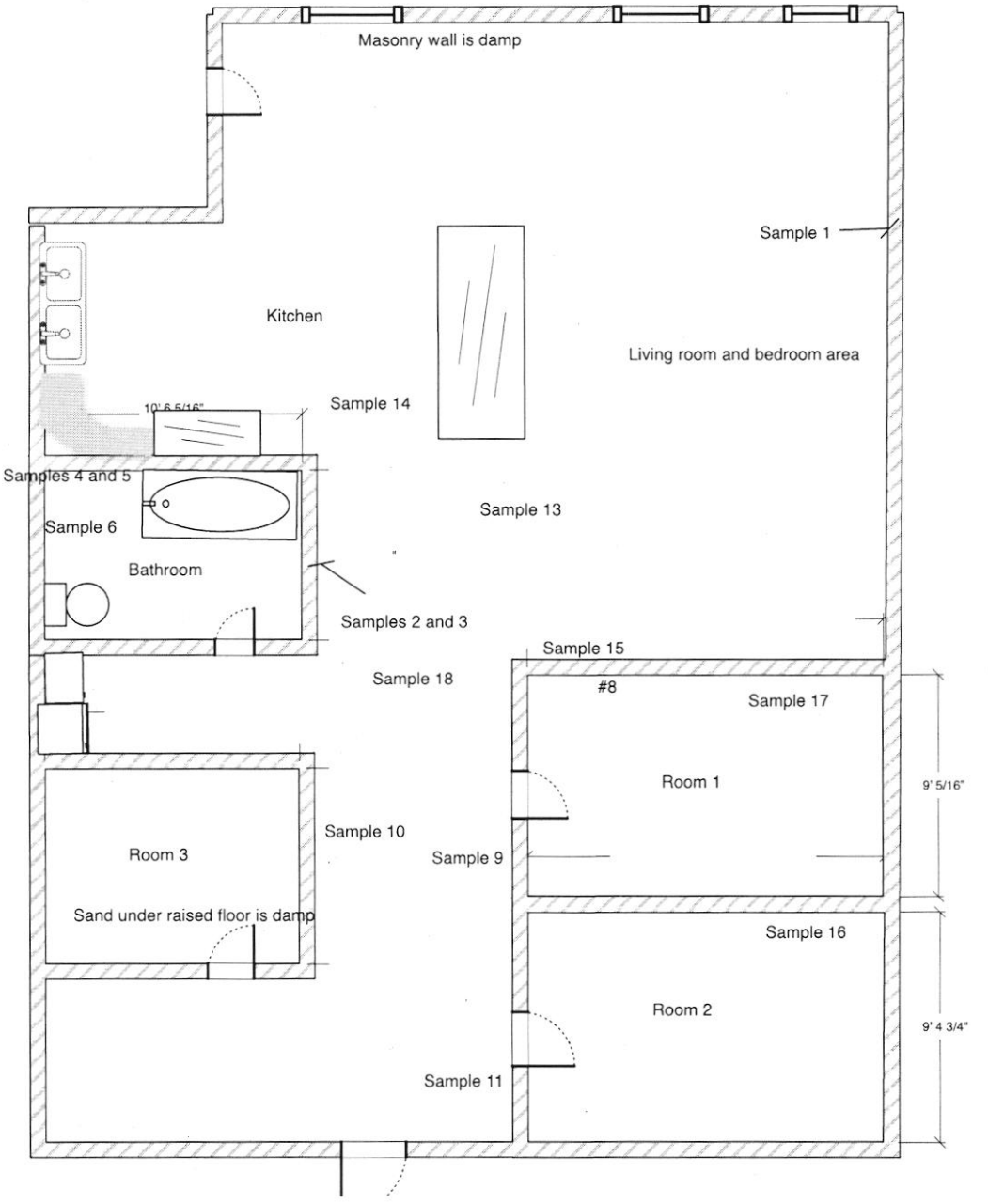
[5] ACGIH American Conference of Industrial Hygienists Bioaerosols Assessment and Control; page 14-6 ©1999)

Table 1
Tape Lift Sample Results

LOCATION	RESULT
97G-1 in the living room area inside the wall cavity	Spores, hyphae and conidiophores of *Altenaria* indicating mold growth
97G-2 inside the wall cavity in the living room area along the wall shared with the bathroom.	No fungal structures
97G-5 base of the wall between the bathroom and kitchen	No fungal structures
97G-6 raised wood floor in the bathroom at the hot water tank area.	Spores, hyphae and conidiophores of *Aspergillus* and
97G-8 studio area visible mold at the base of the wall	Ascospores, asci and ascomata of *Chaetomium*
97G-9 hallway outside the studio base of the wall	Spores, hyphae and conidiophores of *Ulocladium* indicating mold growth
97G-10 framing – sill plate and stud inside the wall cavity in the hallway outside the studio	Spores, hyphae and conidiophores of *Penicillium* indicating mold growth
97G-11 sheetrock behind the wood wainscoting in the hallway outside the studio	Spores, hyphae and conidiophores of *Aspergillus* indicating mold growth
97G-12 base of the wall inside the studio where there is visible mold	Spores, hyphae and conidiophores of *Penicillium* indicating mold growth
97G-17 water stained ceiling in the studio	No fungal structures
97G-19 wood deck above the insulation in the loft above the studio	Spores, hyphae and conidiophores of *Penicillium* indicating mold growth

97 Green Street, G21, Brooklyn, NY

Microbial Survey



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242 Terrace Boulevard, Suite B-1, Voorhees, New Jersey 08043 Tel: 856-767-8300 www.Prestige-EM.com
Page 1 of 1

1. The samples in this report were received in good, acceptable conditions. Prestige EnviroMicrobiology has not performed sample collection for the sample items listed in this report. Results relate only to the items tested.
2. Fungal density rating 1-5 (1 being the lowest and 5 the highest) indicates density of fungal growth structures observed. No fungal density is provided for loose spores, hyphal fragments and other structures. (<1) is used to indicate a light fungal density. NA=not applicable. ND=not detected.
3. Growth coverage, if provided, is based on estimation of the entire bulk sample surface on all sides.
4. Fungal contamination is noted when an analyst, at times during sample analysis, can differentiate the unusual compositions (types or numbers) of fungal spores or structures from background fungal compositions.
5. For more information on the results and their interpretation, please visit our website www.prestige-em.com.

Analyst: Ching-Yi Tsai, Ph.D.

Technical Manager: _____
Chin S Yang, Ph.D.

Report approved: _____
Theresa Lehman, MPH, Lab Director

Prestige # / Client sample ID / Location	Sample dimension	Fungal ID	Fungal structures observed	Fungal density	Notes
200618-06-059 97G-19 Wood deck above insulation in loft area	3/4" x 1 1/4"	*Aspergillus Penicillium*	spores, conidiophores, hyphae spores, conidiophores, hyphae	<1 5	Fungal growth; insects and their fecal matter observed.
200618-06-060 97G-6 Raised wood floor HW heater room	3/4" x 1"	*Scopulariopsis*	spores, conidiophores, hyphae	5	Fungal growth; mites, insects and their fecal matter observed.

Microscopic Method (P003): Analysis of Tape-Lift Samples for Fungi by Optical Microscopy

Prestige report number: 200618-06

Date analysis completed: June 22, 2020

Samples submitted by: Edward Olmsted, CIH

Submittal date: 6-16-2020

Sample date: 6-15-2020

Client Project/Name: 97 Green

Client: Olmsted Environmental Services Inc., 1992 Route 9, Garrison, NY 10524

Analytical Test Report

Prestige EnviroMicrobiology, Inc.

Microbial Survey

97 Green Street, G21, Brooklyn, NY

Microbial Survey

Prestige EnviroMicrobiology, Inc. Tel: 856-767-8300 Fax: 856-767-8305 Prestige Proj.#: 200618-06
242 Terrace Boulevard., Suite B-1, Voorhees, New Jersey 08043

Chain-of-Custody and Analysis Request Form

Client name: OLMSTED ENVIRONMENTAL SERVICES Tel: 845 424 4077 Client proj.#: 97 Green

Address 1992 ROUTE 9 GARRISON NY 10524 Fax: 845 424 3482 P.O.#: _____

E-mail: OLMSTED.MAC@MAC.COM Date sampled: June 15, 2020

Sample ID	Location or source	Sample type	Air vol (L)/ Area (inch^2)	Water: potable or non-potable	Analysis requests code or description	Turnaround time	Notes or special instructions
97G-13	Above sheetrock ceiling leak area	wipe	1		P009	Standard	
97G-14	Under Kitchen floor	Wipe	1		P009	Standard	
97G-15	Top of wall at the ceiling by beam	Wipe	1		P009	Standard	
97G-4	Wall between HW tank and kitchen	Bulk			P009	Standard	
97G-3	Base of wall outside bathroom	Bulk			P009	Standard	
97G16	Ceiling and top of wall – studio	Bulk			P009	Standard	
97G-18	Wood ceiling studio	Bulk			P009	Standard	
97G-19	Wood deck above insulation in loft area	Tape			P003	Standard	
97G-6	Raised wood floor HW heater room	Tape			P003	Standard	

Contact name: Edward Olmsted Submitted by: (sign & print) Ed Olmsted Date submitted: June 16, 2020

Received by: (sign & print) J. Yang Julie Yang Date & time received: 6/16/20 10:10 AM Delivered by: Fedex, UPS, USPO, in person

(For lab use only) Processed by: _____ Sample type: _____ Date: _____

97 Green Street, G21, Brooklyn, NY

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Prestige EnviroMicrobiology, Inc.

Analytical Test Report

Client: Olmsted Environmental Services Inc., 1992 Route 9, Garrison, NY 10524

Client Project/Name: 97 Green

Sample date: 6-15-2020

Submittal date: 6-16-2020

Date samples received: 6-18-2020

Inoculation date: 6-18-2020 (Bulk & Wipe)

Samples submitted by: Edward Olmsted, CIH

Date analysis completed: June 25, 2020

Prestige Report number: 200618-06

Culture Method (P009): Culture Analysis of Wipe Samples for Fungi

Prestige # Client sample ID Location	Area ($inch^2$)	Medium used	Dilution factor	Fungal Identification	Colony counts	Conc. (CFU/ $inch^2$)	Percentage
200618-06-052 97G-13 Above sheetrock ceiling leak area	1	MEA	10,000x	Fungi overloaded *Aspergillus sydowii* *Aspergillus versicolor* *Penicillium* spp. *Trichoderma longibrachiatum* yeasts	>500	>5,000,000 Total >5,000,000	NA
200618-06-053 97G-14 Under Kitchen floor	1	MEA	10,000x	*Penicillium* spp. *Trichoderma harzianum* *Trichoderma longibrachiatum* yeasts	6 2 3 8	60,000 20,000 30,000 80,000 Total 190,000	32% 11% 16% 42%
200618-06-054 97G-15 Top of wall at the ceiling by beam	1	MEA	10,000x	*Aspergillus calidoustus* *Aspergillus versicolor* *Cephaliophora tropica* *Chaetomium globosum* *Mucor racemosus* *Paecilomyces variotii* *Penicillium* spp. *Phoma* sp. *Rhodotorula mucilaginosa*	7 3 1 1 1 2 36 1 22	70,000 30,000 10,000 10,000 10,000 20,000 360,000 10,000 220,000 Total 740,000	9% 4% 1% 1% 1% 3% 49% 1% 30%

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97 Green Street, G21, Brooklyn, NY

Microbial Survey

Prestige EnviroMicrobiology, Inc.

Culture Method (P009): Culture Analysis of Bulk Samples for Fungi

Prestige # / Client sample ID / Location	Wt. (g)	Medium used	Dilution factor	Fungal Identification	Colony counts	Conc. (CFU/g)	Percentage
200618-06-055 97G-4 Wall between HW tank and kitchen	0.0653	MEA	1,000x	*Aspergillus calidousus* *Aureobasidium pullulans* *Trichoderma longibrachiatum*	45 3 3	690,000 46,000 46,000 Total 780,000	88% 6% 6%
200618-06-056 97G-3 Base of wall outside bathroom	0.2054	MEA	100x	*Aspergillus calidousus* *Aspergillus niger* *Aspergillus versicolor* *Paecilomyces variotii* *Penicillium* spp. *Trichoderma longibrachiatum*	12 1 6 3 10 2	5,800 490 2,900 1,500 4,900 970 Total 17,000	35% 3% 18% 9% 29% 6%
200618-06-057 97G-16 Ceiling and top of wall – studio	0.1966	MEA	10,000x	*Penicillium* spp.	31	1,600,000 Total 1,600,000	100%
200618-06-058 97G-18 Wood ceiling studio	0.1711	MEA	100x	*Paecilomyces variotii* *Penicillium* spp.	86 19	50,000 11,000 Total 61,000	82% 18%

Report approved: Theresa Lehman, MPH, Lab Director

Technical Manager: Chin S Yang, Ph.D.

Analyst: Ching-Yi Tsai, Ph.D.

1. The samples in this report were received in good, acceptable conditions. Prestige EnviroMicrobiology has not performed sample collection for the sample items listed in this report. Results relate only to the items tested.
2. Percentage is for each group in total population.
3. Concentrations and percentages are rounded. Total percentage may not add up to 100% due to rounding.
4. Abbreviations where applicable: CMA = cornmeal agar, DG18 = Dichloran 18% glycerol agar, MEA = 2% malt extract agar, PCA = plate count agar, TSA = tryptic soy agar, ND = not detected, NA = not applicable.
5. All culture samples are incubated at 25± 1°C unless otherwise indicated.
6. Field blank, if submitted with the project, has not been used to adjust data.
7. The detection limit of this analysis is one fungal colony, one bacterial colony or one fungal structure. The analytical sensitivities vary from analysis to analysis or by air volume. For calculation of your analytical sensitivities, please visit our webpage http://prestige-em.com/index-tech.htm or contact us by calling 856-767-8300 or by email info@Prestige-em.com.

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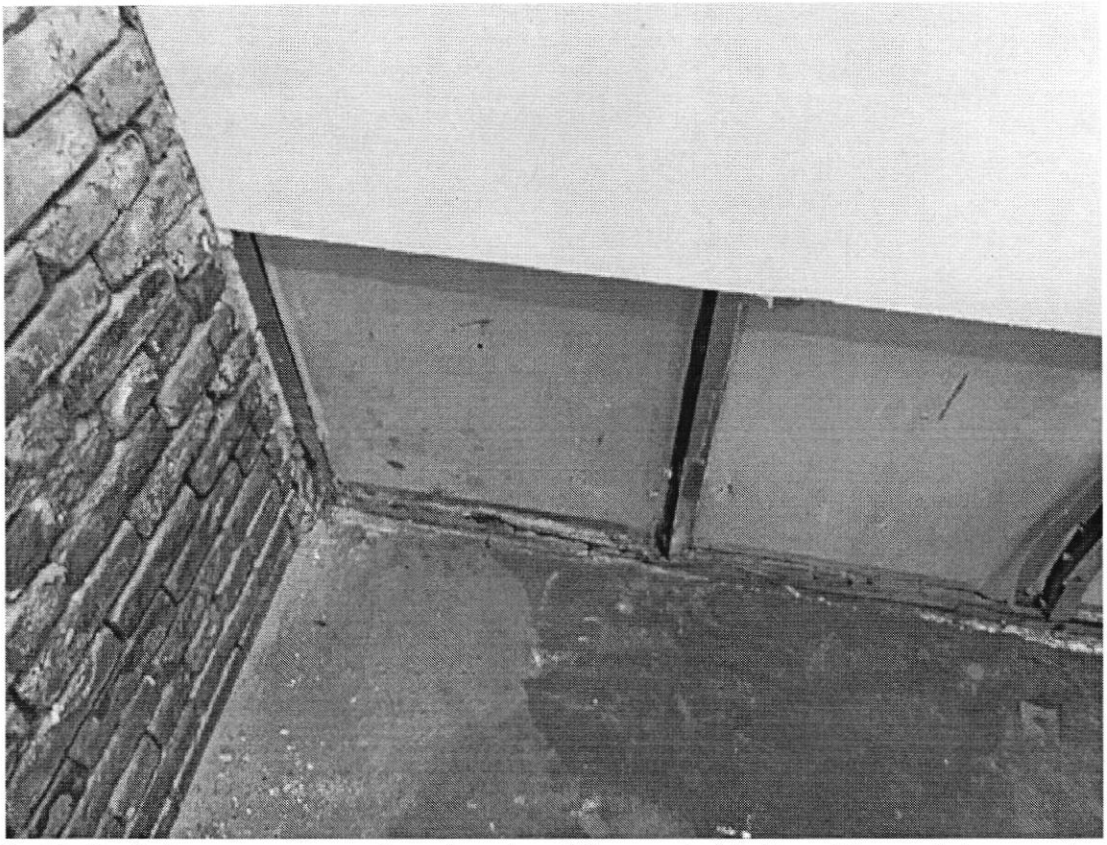
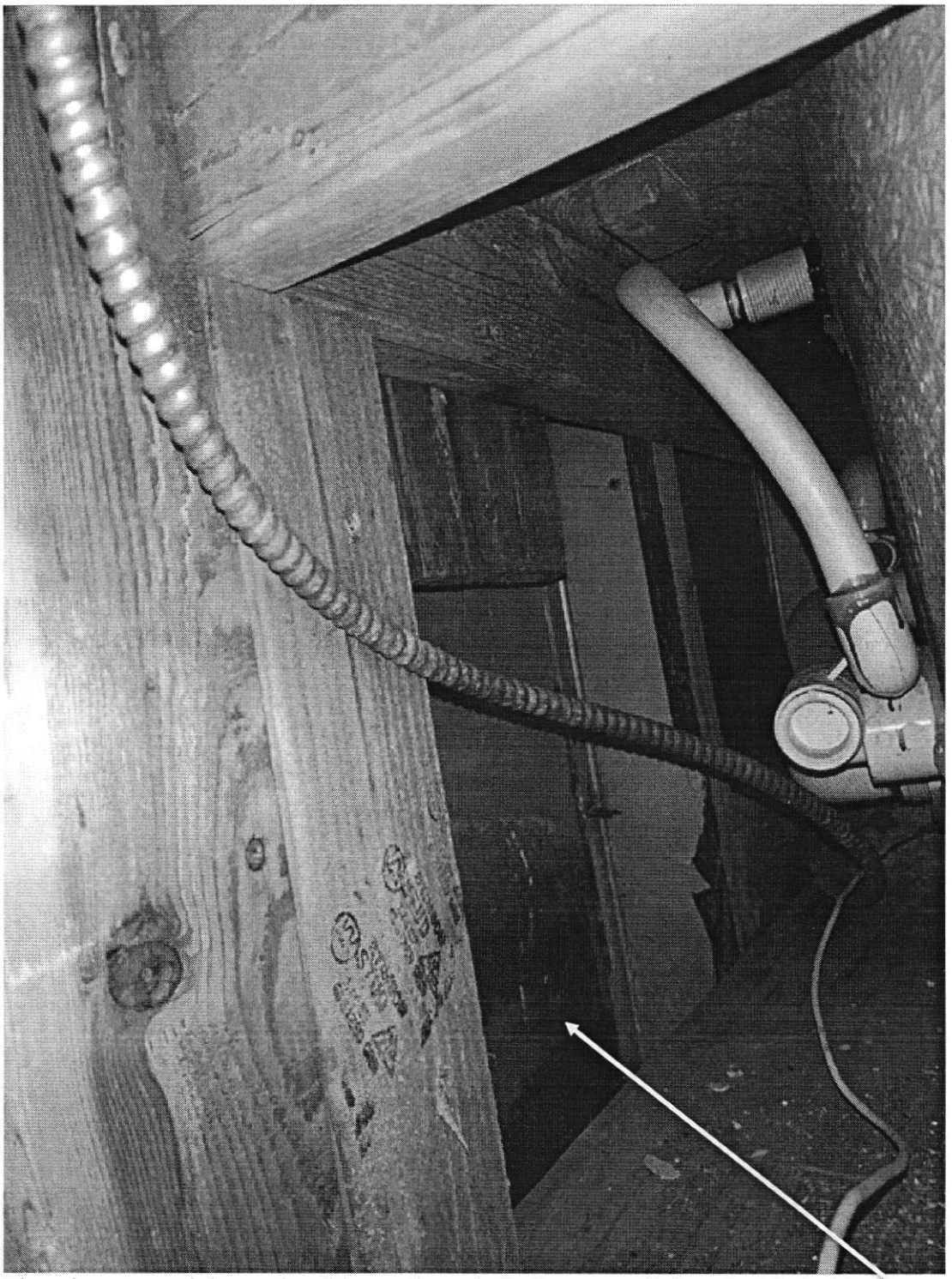


Inside the living room area wall cavity – tape lifts revealed light mold growth is present

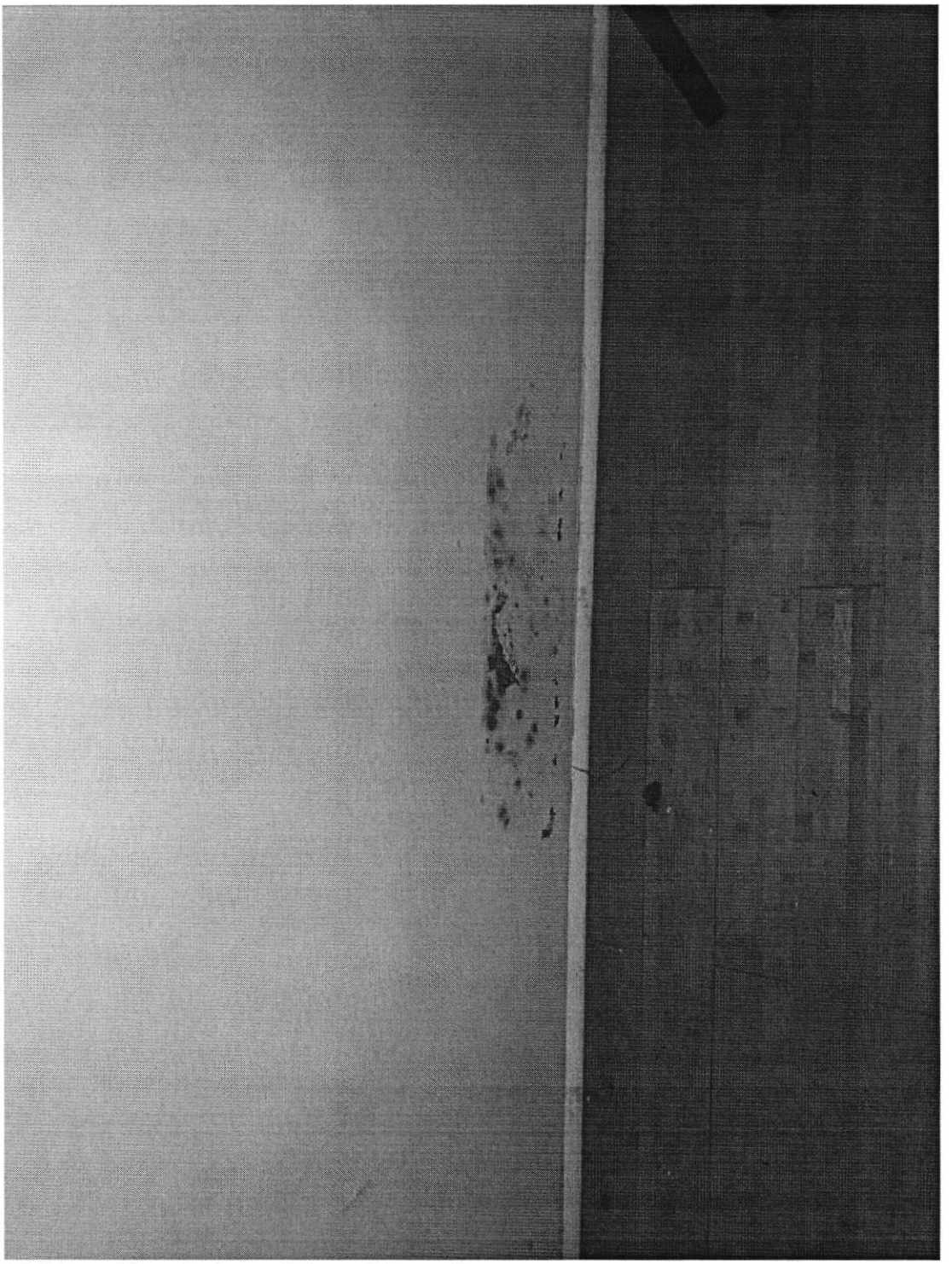
Kitchen area – there is mold growth under the wood flooring

The hot water tank next to the bathtub – there is mold growth on the raised wood floor and on the wall shared with the kitchen

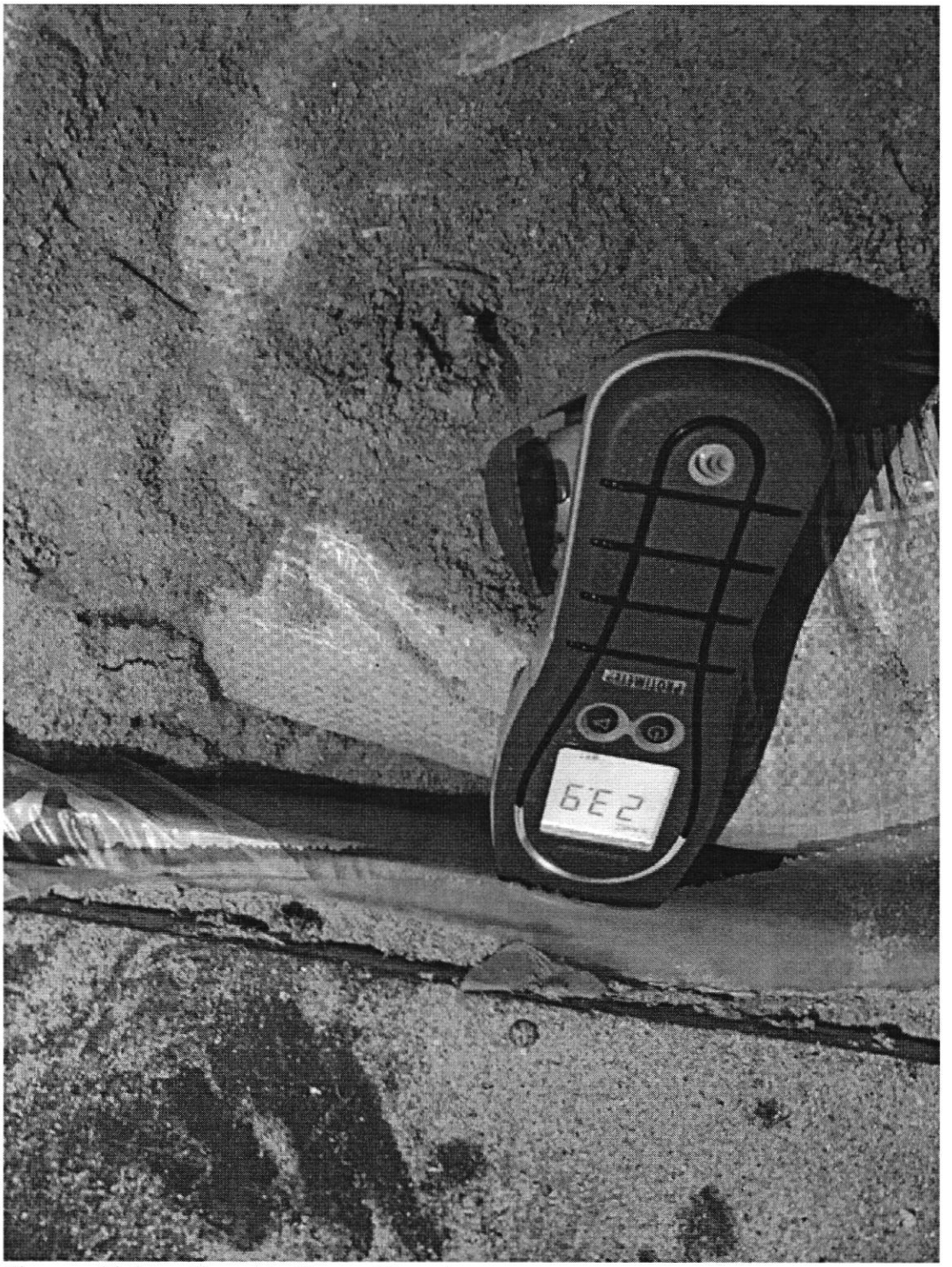


There is water staining and mold growth on the bathroom wall shared with the kitchen

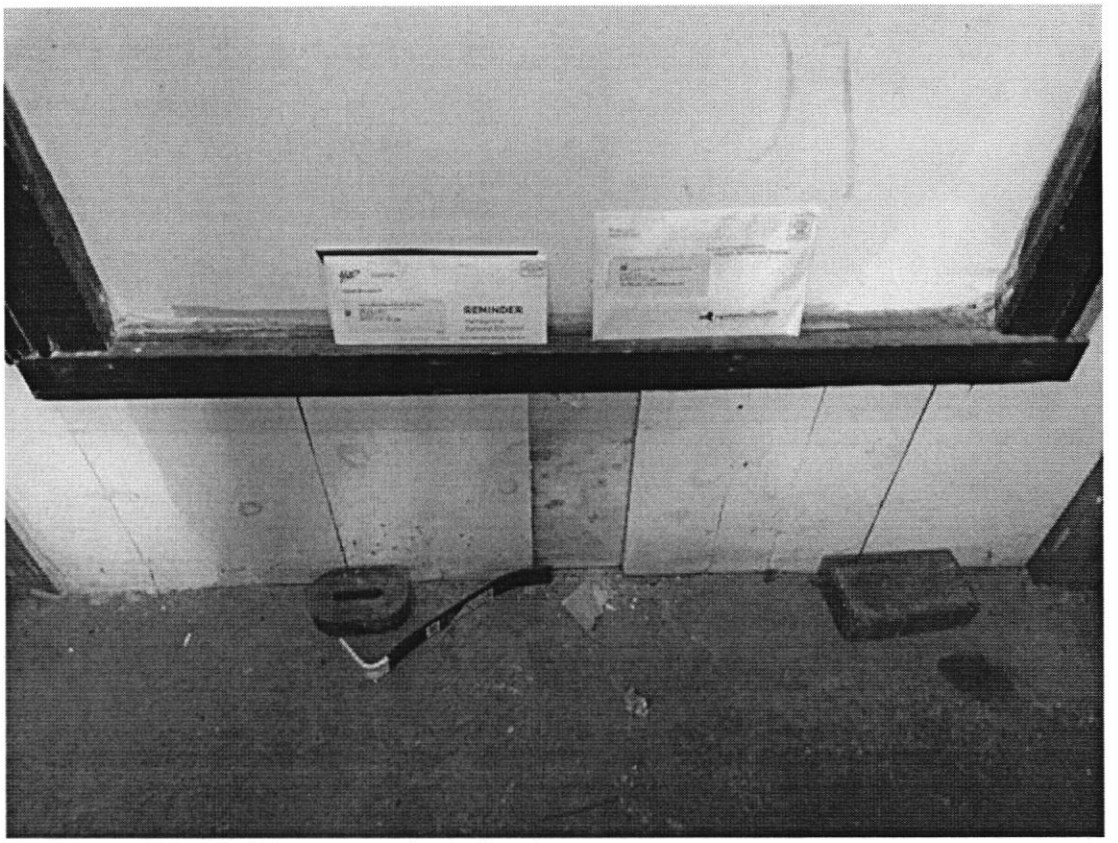
The sand is wet under the raised floor



Visible mold on the base of the wall in studio area



The wood joists adjacent to the sand is wet



Visible mold behind the removed wood wainscot

Mold growth on insulation and wood joists on the underside of the floor above