Pleasant View Realty Page 1 of 6

REAL ESTATE CONDITION REPORT

DISCLAIMER

THIS CONDITION REPORT CONCERNS THE	REAL PROPERTY LOCATED AT W6749	Esker Ridge
	IN THE	Elkhart Lake
(CITY) (VILLAGE) (TOWN) OF	Rhine	, COUNTY OF
	STATE OF WISCONS	
THIS REPORT IS A DISCLOSURE OF THE	CONDITION OF THAT PROPERTY IN	COMPLIANCE WITH SECTION
709.02 OF THE WISCONSIN STATUTES AS O		
(YEAR). IT IS NOT A WARRANTY OF ANY KIN	ND BY THE OWNER OR ANY AGENTS R	EPRESENTING ANY PARTY IN
THIS TRANSACTION AND IS NOT A SUBSTI	TUTE FOR ANY INSPECTIONS OR WAR	RANTIES THAT THE PARTIES
MAY WISH TO OBTAIN.		

A buyer who does not receive a fully completed copy of this report within 10 days after the acceptance of the contract of sale or option contract for the above-described real property has the right to rescind that contract (Wis. Stat. s. 709.02). provided the owner is required to provide this report under Wisconsin Statutes chapter 709.

NOTICE TO PARTIES REGARDING ADVICE OR INSPECTIONS

Real estate licensees may not provide advice or opinions concerning whether or not an item is a defect for the purposes of this report or concerning the legal rights or obligations of parties to a transaction. The parties may wish to obtain professional advice or inspections of the property and to include appropriate provisions in a contract between them with respect to any advice, inspections, defects, or warranties.

A. OWNER'S INFORMATION

- A1. In this form, "aware" means the "owner(s)" have notice or knowledge.
- A2. In this form, "defect" means a condition that would have a significant adverse effect on the value of the property; that would significantly impair the health or safety of future occupants of the property; or that if not repaired, removed, or replaced would significantly shorten or adversely affect the expected normal life of the premises.
- A3. In this form, "owner" means the person or persons, entity, or organization that owns the above-described real property. An "owner" who transfers real estate containing one to four dwelling units, including a condominium unit and time-share property, by sale, exchange, or land contract is required to complete this report.

Exceptions: An "owner" who is a personal representative, trustee, conservator, or fiduciary appointed by or subject to supervision by a court, and who has never occupied the property transferred is not required to complete this report. An "owner" who transfers property that has not been inhabited or who transfers property in a manner that is exempt from the real estate transfer fee is not required to complete this report. (Wis. Stat, s. 709.01)

- A4. The owner represents that to the best of the owner's knowledge, the responses to the following questions have been accurately checked as "yes," "no," or "not applicable (N/A)" to the property being sold. If the owner responds to any question with "yes," the owner shall provide, in the additional information area of this form, an explanation of the reason why the response to the question is "yes."
- A5. If the transfer is of a condominium unit, the property to which this form applies is the condominium unit, the common elements of the condominium, and any limited common elements that may be used only by the owner of the condominium unit being transferred.
- A6. The owner discloses the following information with the knowledge that, even though this is not a warranty, prospective buyers may rely on this information in deciding whether and on what terms to purchase the property. The owner hereby authorizes the owner's agents and the agents of any prospective buyer to provide a copy of this report, and to disclose any information in the report, to any person in connection with any actual or anticipated sale of the property.

CAUTION: The lists of defects following each question below are examples only and are not the only defects that may properly be disclosed in response to each respective question.

Pleasant View Realty, N6050 S Pleasantview Rd Plymouth W1 53073

	B. STRUCTURAL AND MECHANICAL		Pag	e 2 of 6
Ð1	160 4 2008	YES	NO	N/A
B1.	Are you aware of defects in the roof? Roof defects may include items such as leakage or significant problems with gutters or eaves.		Z	Ш
B2.	Are you aware of defects in the electrical system?		Z	
	Electrical defects may include items such as defects in solar panels and systems, electrical			
	wiring not in compliance with applicable code, knob and tube wiring, 60 amp service, or aluminum-branch circuit wiring.			
B3.	Are you aware of defects in part of the plumbing system (including the water heater,			
	water softener, and swimming pool)?		¥2	L
	Other plumbing system defects may include items such as leaks or defects in pipes, toilets,			
B4.	interior or exterior faucets, bathtubs, showers, or any sprinkler system. Are you aware of defects in the heating and air conditioning system (including the air filters		P	
D4.	and humidifiers)?		∜ □	
	Heating and air conditioning defects may include items such as defects in the heating			
	ventilation and air conditioning (HVAC) equipment, supplemental heaters, ventilating fans or			
B5.	fixtures, or solar collectors. Are you aware of defects in a woodburning stove or fireplace or of other defects caused by	П		
Б.	a fire in a stove or fireplace or elsewhere on the property?			[]
	Such defects may include items such as defects in the chimney, fireplace flue, inserts, or			
	other installed fireplace equipment; or woodburning stoves not installed pursuant to			
DG	applicable code.			
B6.	Are you aware of defects related to smoke detectors or carbon monoxide detectors or a violation of applicable state or local smoke detector or carbon monoxide detector laws?		$\langle Z \rangle$	
	NOTE: State law requires operating smoke detectors on all levels of all residential			
	properties and operating carbon monoxide detectors on all levels of most residential			
D.7	properties (see Wis. Stat. ch. 101).			
B7.	Are you aware of defects in the basement or foundation (including cracks, seepage, and bulges)?		Z	
	Other basement defects may include items such as flooding, defects in drain tiling or sump			
	pumps, or movement, shifting, or deterioration in the foundation.			
B8.	Are you aware of defects in any structure on the property?		\angle	
	Structural defects with respect to the residence or other improvements may include items such as movement, shifting, or deterioration in walls; major cracks or flaws in interior or			
	exterior walls, partitions, or the foundation; wood rot; and significant problems with			
	driveways, sidewalks, patios, decks, fences, waterfront piers or walls, windows, doors,			
50	floors, ceilings, stairways, or insulation.			F1
B9.	Are you aware of defects in mechanical equipment included in the sale either as fixtures or personal property?		1	
	Mechanical equipment defects may include items such as defects in any appliance, central			
	vacuum, garage door opener, in-ground sprinkler, or in-ground pet containment system that			
	is included in the sale.		<u> </u>	,
B10.	· · ·			
	water conditioner system or water treatment system, or other items affixed to or closely associated with the property?			
	Such items may include reverse osmosis systems, iron filters, or other filters.			
B11.				
D40	sewers, or other ongoing water or moisture intrusions or conditions?			
B12.	Explanation of "yes" responses			·
	C. ENVIRONMENTAL			
	1 h o 1 1 a 2	YES	NO	N/A
C1.	and the state of t			
C2.	Are you aware of a defect caused by unsafe concentrations of, or unsafe conditions relating to, radon, radium in water supplies, high voltage electric (100 KV or greater) or steel natural			
	gas transmission lines located on but not directly serving the property, lead in paint, lead in			
	soil, or other potentially hazardous or toxic substances on the property? NOTE: Specific			

Page 2 of 6

	federal lead paint disclosure requirements must be complied with in the sale of most residential properties built before 1978.		Page	e 3 of 6
C3.	Are you aware of the presence of asbestos or asbestos-containing materials on the	YES	NO	N/A
C4.	property? Are you aware of the presence of or a defect caused by unsafe concentrations of, unsafe conditions relating to, or the storage of hazardous or toxic substances on neighboring		Ļ	
C5.	properties? Are you aware of current or previous termite, powder post beetle, or carpenter ant infestations or defects caused by animal, reptile, or insect infestations, including infestations		Z	
C6.	impacting trees? Are you aware of water quality issues caused by unsafe concentrations of or unsafe conditions relating to lead?			
C7.	Are you aware of the manufacture of methamphetamine or other hazardous or toxic substances on the property? Explanation of "yes" responses			
	D. WELLS, SEPTIC SYSTEMS, STORAGE TANKS	YES	NO	N/A
D1.	Are you aware of defects in a well on the property or in a well that serves the property, including unsafe well water?		1	
	Well defects may include items such as an unused well not properly closed in conformance with state regulations, a well that was not constructed pursuant to state standards or local code, or a well that requires modifications to bring it into compliance with current code specifications. Well water defects might include, but are not limited to, unsafe levels of bacteria (total Coliform and E. coli), nitrate, arsenic, or other substances affecting human consumption safety.			
D2. D3. D4.	Are you aware of a joint well serving the property? Are you aware of a defect related to a joint well serving the property? Are you aware that a septic system or other private sanitary disposal system serves the			
D5.	property? Are you aware of defects in the septic system or other private sanitary disposal system on the property or any out-of-service septic system that serves the property and that is not closed or abandoned according to applicable regulations? Septic system defects may include items such as backups in toilets or in the basement;			
D6.	exterior ponding, overflows, or backups; or defective or missing baffles. Are you aware of underground or aboveground fuel storage tanks on or previously located on the property? (If "yes," the owner, by law, may have to register the tanks with the Wisconsin Department of Agriculture, Trade and Consumer Protection at P.O. Box 8911, Madison, Wisconsin, 53708, whether the tanks are in use or not. Regulations of the Wisconsin Department of Agriculture, Trade and Consumer Protection may require the			
D7.	closure or removal of unused tanks.) Are you aware of defects in the underground or aboveground fuel storage tanks on or previously located on the property? Defects in underground or aboveground fuel storage tanks may include items such as abandoned tanks not closed in conformance with applicable local, state, and federal law;			
D8.	leaking; corrosion; or failure to meet operating standards. Are you aware of an "LP" tank on the property? (If "yes," specify in the additional			
D9. D10	information space whether the owner of the property either owns or leases the tank.) Are you aware of defects in an "LP" tank on the property? Explanation of "yes" responses		Z	

			Page	e 4 of 6
	E. AXES, SPECIAL ASSESSMENTS, PERMI. J, ETC.	YES	NO	N/A
E1.	Have you received notice of property tax increases, other than normal annual increases, or are you aware of a pending property reassessment?			
E2.	Are you aware that remodeling was done that may increase the property's assessed value?			П
E3.	Are you aware of pending special assessments?			
E4.	Are you aware that the property is located within a special purpose district, such as a drainage district, that has the authority to impose assessments against the real property located within the district?			
E5.	Are you aware of any proposed construction of a public project that may affect the use of the property?			
E6.	Are you aware of any remodeling, replacements, or repairs affecting the property's structure or mechanical systems that were done or additions to this property that were made during your period of ownership without the required permits?			
E7.	Are you aware of any land division involving the property for which a required state or local permit was not obtained?		Ø	
E8.	Explanation of "yes" responses			
			 	
			···	
	F. LAND USE			
-		YES	NO	N/A
F1.	Are you aware of the property being part of or subject to a subdivision homeowners' association, or other homeowners' association?			
F2.	If the property is not a condominium unit, are you aware of common areas associated with the property that are co-owned with others?			Ш
F3.	Are you aware of any zoning code violations with respect to the property?		7	
F4.	Are you aware of the property or any portion of the property being located in a floodplain,		Z	
	wetland, or shoreland zoning area?			
F5.	Are you aware of nonconforming uses of the property?			
	A nonconforming use is a use of land, a dwelling, or a building that existed lawfully before the current zoning ordinance was enacted or amended, but that does not conform to the			
F6.	use restrictions in the current ordinance. Are you aware of conservation easements on the property?		7	П
10.	A conservation easement is a legal agreement in which a property owner conveys some of the rights associated with ownership of his or her property to an easement holder such	L	ک	
	as a governmental unit or a qualified nonprofit organization to protect the natural habitat			
	of fish, wildlife, or plants or a similar ecosystem, preserve areas for outdoor recreation or			
	education, or for similar purposes.	r c 1		<u></u>
F7.	Are you aware of restrictive covenants or deed restrictions on the property?	\square		
F8.	Other than public rights of ways, are you aware of nonowners having rights to use part of the property, including, but not limited to, private rights-of-way and easements other			LJ
	than recorded utility easements?			
F8a.	Are you aware of any private road agreements or shared driveway agreements relating to	\mathbb{Z}	.]	
Ε0	the property?		[7]	
F9.	Are you aware of the property being subject to a mitigation plan required under administrative rules of the Wisconsin Department of Natural Resources related to county			Ш
	shoreland zoning ordinances, which obligates the owner of the property to establish or			
	maintain certain measures related to shoreland conditions and which is enforceable by			
E40	the county?			
F10.	The use value assessment system values agricultural land based on the income that would be generated from its rental for agricultural use rather than its fair market value. When a			
	person converts agricultural land to a non agricultural use (e.g., residential or commercial			
	development), that person may owe a conversion charge. For more information visit			
	https://www.revenue.wi.gov/Pages/FAQS/slf-useassmt.aspx or (608) 266-2486.	(<u>-</u>	[71	<u>-</u>
	a. Are you aware of all or part of the property having been assessed as agricultural			
	land under Wis. Stat. s. 70.32 (2r) (use value assessment)? b. Are you aware of the property having been assessed a use-value assessment		Z	
	conversion charge relating to this property? (Wis. Stat. s. 74.485 (2))	L ;	151	<u> </u>

	λ		Page	5 of 6
	c. Are you aware of the payment of a use-value assessment conversion charge	YES	NO	N/A
F11.	having been deferred relating to this property? (Wis. Stat. s. 74.485 (4)) Is all or part of the property subject to or in violation of a farmland preservation agreement? Early termination of a farmland preservation agreement or removal of land from such an agreement can trigger payment of a conversion fee equal to 3 times the class 1 "use value" of the land.		1	
	Visit https://datcp.wi.gov/Pages/Programs_Services/FarmlandPreservation.aspx for more information.			
F12.	Is all or part of the property subject to, enrolled in, or in violation of the Forest Crop Law, Managed Forest Law, the Conservation Reserve Program, or a comparable program?			
F13.	Are you aware of a dam that is totally or partially located on the property or that an ownership in a dam that is not located on the property will be transferred with the property because it is owned collectively by members of a homeowners' association, lake district, or similar group? (If "yes," contact the Wisconsin Department of Natural Resources to find out if dam transfer requirements or agency orders apply.)			
F14.	Are you aware of boundary or lot line disputes, encroachments, or encumbrances (including a joint driveway) affecting the property? Encroachments often involve some type of physical object belonging to one person but partially located on or overlapping on land belonging to another; such as, without limitation, fences, houses, garages, driveways, gardens, and landscaping. Encumbrances include, without limitation, a right or claim of another to a portion of the property or to the use of the			
F15. F16.	property such as a joint driveway, liens, and licenses. Are you aware there is not legal access to the property? Are you aware of federal, state, or local regulations requiring repairs, alterations, or corrections of an existing condition? This may include items such as orders to correct building ends violations.			
F17.	building code violations. Are you aware of a pier attached to the property that is not in compliance with state or local			
F18. F19.	pier regulations? See http://dnr.wi.gov/topic/waterways for more information. Are you aware of a written agreement affecting riparian rights related to the property? Are you aware that the property abuts the bed of a navigable waterway that is owned by a hydroelectric operator?			
F00	Under Wis. Stat. s. 30.132, the owner of a property abutting the bed of a navigable waterway that is owned by a hydroelectric operator, as defined in s. 30.132 (1) (b), may be required to ask the permission of the hydroelectric operator to place a structure on the bed of the waterway.		[] 7	
F20.	Are you aware of one or more burial sites on the property? (For information regarding the presence, preservation, and potential disturbance of burial sites, contact the Wisconsin Historical Society at 800-342-7834 or www.wihist.org/burial-information).		IZJ	
F21.	Explanation of "yes" responses	hers.		
G1.	G. ADDITIONAL INFORMATION Have you filed any insurance claims relating to damage to this property or premises within	YES	NO	N/A
	the last five years?	[]		
G2.	Are you aware of a structure on the property that is designated as a historic building or that all or any part of the property is in a historic district?			
G2a.	Does the property currently have internet service? If so, who is your provider?			
G2b.	Does the property have an electric vehicle charging system and station or installed wiring for a future system or station?		Z	
025	Is the system or station affixed to the property? Does the property have accessibility features? If so, attach an Accessibility Features		7	
G2c.	Report (see https://www.wra.org/Disabilities/).	<u></u>		
G3.	Are you aware of any agreements that bind subsequent owners of the property, such as a lease agreement or an extension of credit from an electric cooperative?			
G3a.	Are you aware of any right of first refusal, recorded or not, on all or any portion of the property?			

				_	_	e 6 of 6
G4.	Is the owner a foreign person, as defined in 26 USC 1445 (f)? (E.g. a nonresident al individual, foreign corporation, foreign partnership, foreign trust, or foreign estate.) Section 1445 of the Internal Revenue Code (26 USC 1445), also known as the Fore Investment In Real Property Tax Act or FIRPTA, provides that a transferee (buyer) of U.S. real property interest must be notified in writing and must withhold tax if the transfer (coller) is a foreign person, upless an exception under FIRPTA applies to the transfer	eign of a	YES	3	NO	N/A
G5.	(seller) is a foreign person, unless an exception under FIRPTA applies to the transfer. Are you aware of other defects affecting the property? Other defects might include items such as drainage easement or grading probler excessive sliding, settling, earth movements, or upheavals; or any other defect or mate condition.					
G6. G7. G8.	The owner has owned the property for 34 years. The owner has lived in the property for 34 years. Explanation of "yes" responses					
	ee: You may obtain information about the sex offender registry and persons registered wi Visconsin Department of Corrections at <u>http:www.doc.wi.gov</u> or by phone at 608-240-5830		e registi	y bj	y conta	acting
	OWNER'S CERTIFICATION					
purcl	E: Wisconsin Statute section 709.035 requires owners who, prior to acceptance of a purchase, obtain information that would change a response on this report to submit a compadment to the previously completed report to the prospective buyer within 10 days of accept	olete	amende			
date	owner certifies that the information in this report is true and correct to the best of the own on which the owner signs this report.			_		
Own	er Charlette Joseph D	ate . Date	10-1		102	4
Own						
Own						
	CERTIFICATION BY PERSON SUPPLYING INFORMATION					
•	rson other than the owner certifies that the person supplied information on which the own the information is true and correct to the best of the person's knowledge as of the date on				•	
Pers	on Items D	ate				
	on Items D					
Pers	on Items D	ate .				
	BUYER'S ACKNOWLEDGEMENT					
	prospective buyer acknowledges that technical knowledge such as that acquired by profeed to detect certain defects such as the presence of asbestos, building code violations, ar					ay be
I ack	nowledge receipt of a copy of this statement.					
Pros	pective buyer D	ate				
Pros	pective buyerD	ate				
Pros	pective buyer D	ate				
Pros	pective buyer D	ate				
Pros	pective buyer D	ate				

Information appearing in Italics is supplemental in nature and is not required pursuant to Section 709.03 of the Wisconsin Statutes.

Copyright © 2023 by Wisconsin REALTORS® Association; Drafted by: Debra Peterson Conrad

No representation is made as to the legal validity of any provision or the adequacy of any provision in any specific transaction.

Providing Indoor Air Quality Solutions



ATTouchment + 1

ZWS Environmental Services, Inc.

1111 N. Lynndale Drive, Suite 201B Appleton, Wisconsin 54914 Office: (920) 882-5248 PO Box 510925 Milwaukee, Wisconsin 53203 Office: (414) 226-1664

www.zwsinc.com

March 21, 2013

Prepared for: Clarence Goetsch



Re: Goetsch Residence W6749 Esker Ridge Elkhart Lake, WI 53020









Federal Tax Id #: 42-1625342

Goetsch Residence W6749 Esker Ridge Elkhart Lake, WI 53020

ZWS Project No. 0313-01907-2

FUNGAL AND MOISTURE ASSESSMENT



Prepared By:
ZWS Environmental Services, Inc.
1111 N. Lynndale Drive, Suite 201B
Appleton, WI 54914

William J. Zoeller

BS Microbiology and BioMedical Science (University of Wisconsin – La Crosse) Council-certified Indoor Environmental Consultant (ACAC) (Certificate #0703042) Water Damage Restoration Technician (IICRC) (ID #: 74580) Applied Microbial Remediation Technician (IICRC) (ID #: 74580)





Excess

Moisture

FUNGAL AND MOISTURE ASSESSMENT

ZWS Environmental Services, Inc. (ZWS) is an environmental testing and consulting firm whose principals have performed thousands of assessments throughout the Midwest. The principles of ZWS hold certifications issued by The Clean Trust, formerly The Institute of Inspection, Cleaning, and Restoration Certification (IICRC) and the American Council for Accredited Certification (ACAC), formerly the American Indoor Air Quality Council. ZWS is a long standing member of the Better Business Bureau (BBB) of Wisconsin, the Indoor Air Quality Association (IAQA), and ASTM International.

Thermal Imaging Inspection Background

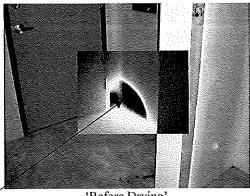
The thermal imaging camera used by ZWS measures infrared light (portion of the light spectrum that contains heat) at each individual pixel to form an image. The image is then analyzed to find areas of possible moisture and are confirmed to contain elevated moisture with moisture meters. As depicted in the following example pictures small or hidden areas affected by water losses are often difficult to find without the use of thermal imaging and can be missed leading to fungal growth.

Interpreting Thermal Imaging Pictures

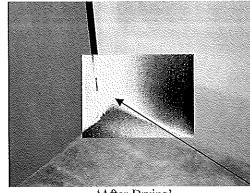
ZWS overlays thermal imaging pictures onto digital pictures to more clearly depict the area in question. If an area of the picture is blue, that section is cooler than the surrounding material. If an area of the picture is red, that section is warmer than the surrounding material.

Areas of elevated moisture are usually cooler than the surrounding dry material due to evaporative cooling. As water evaporates from the surface, the material is naturally cooled due to the phase change of water. Areas unaffected by a water loss are often uniform but all colors of the spectrum will still be depicted and are affected by the surrounding conditions such as outdoor cold air, warm lighting, etc.



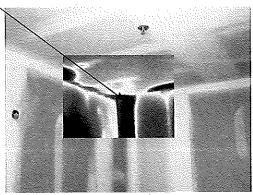


'Before Drying'

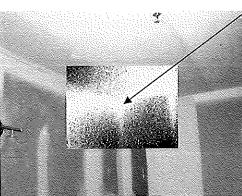


'After Drying'

Normal Conditions



'Before Drying'



'After Drying'

To determine what constitutes elevated moisture, it is common to first find a 'dry standard.' A dry standard is found by taking moisture readings on unaffected material. For example, unaffected drywall usually has moisture content between 8% and 14% (8 to 14 points), thus the dry standard for drywall would be 14. Any drywall with a moisture content greater than 14% would be considered to contain elevated moisture.

Thermal imaging can also be useful for protecting against future moisture problems by finding condensation points. During a moisture assessment, the dew point temperature is taken; any surface under the dew point temperature will be a condensation point. Condensation leads to elevated moisture, which could potentially lead to structural deterioration and fungal growth.

Project Background

The Goetsch Residence located at W6749 Esker Ridge in Elkhart Lake Wisconsin ('SITE') is a two story ranch style home with a walk out basement. A water loss occurred within the basement from a broken supply copper fitting to the water softener. While the homeowner was cleaning up the water it was observed that the dehumidifier exhaust tube was outside of the slab drain adding to the moisture issue. The water affected the mechanical room where the loss occurred, adjoining bathroom, southeast room, and the hallway. Visible mold growth was observed on the drywall by the homeowner and a restoration contractor was hired to remediate the loss. Remediation was reportedly performed by cleaning the mold off the drywall. The homeowner replaced the bathroom vanity and vinyl flooring. Since this time the homeowner has begun to cough along with nasal issues and contacted ZWS Environmental Services, Inc. to inspect for mold growth.

Pre Inspection Hypothesis

Drywall cleaning is not recommended per the IICRC S520 Standard and Reference Guide for Professional Mold Remediation due to many factors such as aerosolization during cleaning and the inability to clean within wall cavities and between objects such as framing. Fungal growth is likely behind the framing, below the flooring, within hidden wall cavities, on door jambs, etc.

Inspection

ZWS Environmental Services, Inc. performed a fungal and moisture assessment in accordance with the ASTM International D7338-10 Standard Guide for Assessment of Fungal Growth in Buildings at SITE on March 8, 2013. The goal of the assessments was to determine if fungal growth was present during the inspection surrounding the mechanical room, if proper conditions exist for fungal growth (i.e. excess moisture) in the areas affected by the loss, and to provide a scope of work for remediation in accordance with the IICRC S520 if abnormal fungal contamination exists or a letter stating the property current conditions.

Fungi will not grow without a source of moisture; therefore, ZWS begins each inspection with a moisture assessment. As part of the moisture assessment, relative humidity (RH) readings were taken throughout the building (see FIG 1.0). All RH readings should be maintained within the 'Comfort Range' (30-50%)₁. RH within this acceptable range will generally not cause or sustain fungal growth.

FIG 1.0 Thermo Hygrometer Readings₂

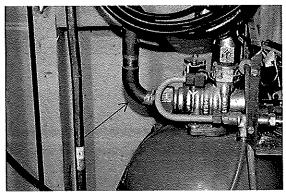
Location	Temperature (°F)	Relative Humidity (%)	Specific Humidity (GPP)
Outside	27	67	14
Basement Southwest	64	37	33
Basement Southeast	65	36	32
First Floor Living Room	68	33	34

^{1&#}x27;Comfort Range' (30-50%), as defined by the American Society of Heating, Refrigerating and Air-Conditioning Engineers 2Thermo hygrometer readings taken with an Extech® Digital SuperHeat Psychrometer (Model: RH490)

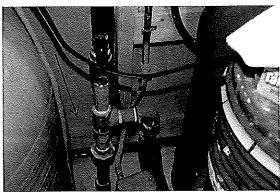
During the moisture assessment, ZWS utilized the following equipment to locate areas of elevated surface moisture.

- IR In-Sight[®] (Model T) thermal imaging camera
- Delmhorst® (Model: BD 2100) moisture meter
- Tramex[®] Moisture Encounter moisture meter

The thermal imaging and moisture assessment of the basement observed normal conditions throughout the areas reportedly affected by the loss which were the mechanical room, hallway, southeast room, and bathroom within the basement. The drywall contained less than 11% moisture, wood framing 6-7% moisture, and the carpet flooring 6%. The basement mechanical room is unfinished exposing the drywall paper backing from the hallway, southeast room, and bathroom. The visual assessment of the drywall and framing noted a light white unknown substance and on the drywall paper sporadically. Further microscopic examination observed the white substance to be debris and not fungal related.







White Debris

Surface tape lifts were also collected from the carpet backing and carpet pad backing affected by the loss. The carpet backing observed normal conditions while the carpet padding light levels of *Aspergillus/Penicillium* type spores/growth.

Laboratory Methodology

To assess airborne levels of fungal spores, Air-O-Cell® Cassettes are commonly used. Air-O-Cell® Cassettes are a form of non-culturable sampling that quantifies the number of fungal spores (viable and non-viable) in the air. The samples are taken by pulling a calibrated amount of air (15.0 liters/minute) through the cassette. In the cassette, air passes over a microscope slide, causing the particulates (fungal spores, dust, etc.) to stick. The slide is then examined by an American Industrial Hygiene Association (AIHA) accredited laboratory to determine the genera of fungal spores present.

All air samples are taken with a Gast[®] Pump (Model: R-G557X) equipped with a rotameter. Before sampling begins, the pump is calibrated with a Bios DryCal[®] Defender Primary Flow Meter (Model: 520) to the appropriate flow rate. Samples are taken at an approximate height or four (4) feet.

All indoor air samples are compared to an outdoor reference to determine if elevated spore counts are present. As a general rule of thumb, the genus of fungi collected from indoor air should match outdoor air and be present at equal or lower levels. In some cases, outdoor air may not be a reliable baseline reading. This occurs when fungi are at extremely low levels (e.g. snow cover, rain, frost, etc.). In these cases, an 'area of non-concern' or EMLAB's Extended Outdoor Comparison will be used.

Surface samples (swab or tape lift) are used to identify visible fungal growth. A swab sample can either be transferred to a microscope slide for microscopic examination, or to a Petri plate for speciation. Tape lift samples are examined directly with a microscope to identify the genera of fungi present. Speciation can not be determined from a tape lift sample.

Fungal growth occurs when a commercial or residential building has a source of excess moisture, either from an indoor or outdoor source. Fungal spores can be found in the air of every environment, but it takes a source of moisture for fungi to grow. To ensure proper remediation, all sources of excess moisture must be corrected. Finding sources of moisture is not the

responsibility of ZWS. If the remediator can not find all sources of moisture, a structural engineer or a water intrusion specialist should be consulted.

Three (3) Air-O-Cell® Cassettes were collected for analysis. The samples were sent overnight express to Environmental Microbiology Laboratory Inc. (EMLAB) in Elmhurst, Illinois.

Interpretation of Laboratory Results

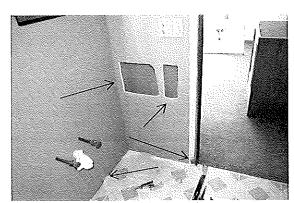
According to the laboratory results, the Goetsch Residence had elevated levels of allergenic fungal spores in the ambient air of the basement southeastern room. Elevated levels of *Penicillium/Aspergillus sp.* were discovered in the southeastern room at levels up to forty five times the amount present in the surrounding rooms and first floor. These species are very common outdoors within this geographical region and very common indoors from multiple moisture sources such as water damage to condensation. *Chaetomium sp.* was also present within the southeastern bedroom at levels forty nine times those in the surrounding areas and first floor. This fungal genera is generally not discovered outdoors within the ambient air due to the sticky nature of the spore but transferred indoors stuck to the bodies of water loving inspects. This fungal genus is common in heavily water damaged cellulose materials that have remained saturated for an extended period of time. Further assessment was recommended as a destructive investigation is recommended to find the source of the hidden fungal growth.

For complete results, see SPORE TRAP REPORT provided by EMLAB.

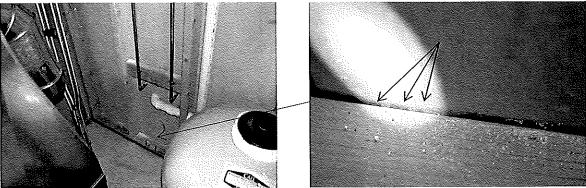
A follow up destructive investigation was conducted on March 21, 2013. The baseboards were removed from the southeastern room and hallway adjoining the mechanical room. The drywall was observed installed to the concrete floor below the carpet level. Normal conditions were observed behind the baseboards on the baseboards, drywall, and carpet. The bathroom door casing was removed and the jamb and drywall assessed and again normal conditions were observed. The bathroom vanity was then removed and inspection holes cut into the closed space between the bathroom and the southeastern room and normal conditions were observed within the wall cavity. An inspection hole was then cut at base level behind the sole plate of the mechanical room and fungal growth was observed on the paper backing. Further assessment of the drywall behind the sole plate observed additional fungal growth and microscopically confirmed to be *Chaetomium sp.*



Removal of Baseboard in Southeast Room



Inspection Holes in Bathroom



Fungal Growth on Drywall in Mechanical Room Adjoining Bathroom

Hypothesis, Discussion, and Conclusions

Sufficiently cleaning fungal growth from a surface can create many limitations when the growth has originated from a wicking event such as a water loss rather than a humidity event where the fungal growth is often limited to growth on the dust or dirt on a painted surface. One of these limitations, and one of the many reasons this type of cleaning is not conducted or recommended, is surface cleaning can not be conducted within wall cavities and in crevices such as between the drywall and framing without removal of the drywall. Removal of the affected drywall and carpet are recommended in the following section utilizing the IICRC S520 Standard and Reference Guide for Professional Remediation.

REMEDIATION RECOMMENDATIONS

Personal Protective Equipment (PPE)

ZWS recommends that full PPE be used by all workers during the remediation process when inside of containment. Full PPE consists of protective suits (Tyvek or equivalent), rubber gloves, hood to cover hair, and respirators. ZWS highly recommends Powered Air-Purifying Respirators (PAPR) or full-face NIOSH P-100 respirators with HEPA/OV cartridges during the remediation process.

Containment & Air Filtration Devices (AFD)

Critical barriers are set up to achieve containment and ensure negative pressure in a contaminated area. Containment consists of installing a 6 mil, fire-retardant plastic, medium slip, critical barriers to segregate the contaminated area from unaffected areas. Critical barriers should be installed across the mechanical room and hallway on the western side and in the entry to the northeastern room. If an exit to the outside is in the contaminated area, it is not necessary to build a decontamination area. If no exit to the outside exists, a decontamination area must be built adjacent to the contaminated area. The decontamination area is the only means of entering and exiting the contaminated area. Both the entrance and exit consist of 3 flaps of 6 mil plastic. The first flap should be cut on the left for entrance, the second flap should open on the right side, and the third flap should open on the left side. In this manner, 2 flaps of 6 mil plastic are always closed.

Air movers should not be used within containment during remediation to reduce aerosolization of fungal spores.

A log of persons entering and exiting is beneficial for record keeping purposes. It is recommended that a data pressure logger be used to monitor pressure within the containment area.

The property owner should be advised that if they enter the area they are responsible for any cross contamination of their own residence, vehicle, and/or any region outside of the contaminated area.

Windows, switch plates, electric outlets, drains, and air vents (supply and return) within the containment area must be sealed with critical barriers consisting of 6 mil plastic.

It is recommended that AFDs create a minimum pressure differential of \geq 5 Pascal (Pa) (0.02 inches w.g.) and for that pressure to be maintained for all negatively pressurized contained areas for the duration of the work. (Section 10.3.1 – IICRC S520)

Calculating Adequate Negative Pressure

The formula for calculating adequate negative pressure is: CV (containment volume) = $L \times W \times H$ (length x width x height). CFM (cubic feet per minute) $\times 60 = CFH$ (cubic feet per hour). TAV (total air volume per hour) = ACH (air changes per hour, 4 minimum) $\times CV$. TAV/CFH = Number of negative air machines required. Note that a typical 2000 CFM machine should be calculated at 1,600 CFM with new filters. Note also that an additional 10% should be added as a safety factor, if winds shift toward the negative pressurized area.

Structural Remediation

The use of treatments, such as encapsulates, sealants, ozone, or ultraviolet (UV) light as a substitute for removal and detailed cleaning is generally not recommended.

Once containment barriers are in place and negative pressure is established, structural remediation may begin. All removed building materials must be bagged within containment, moved into decontamination area, the bag cleaned, and double bagged prior to removal.

- Remove the drywall a minimum of two inches from the floor throughout the bathroom, southeastern room adjoining the mechanical room, and hallway adjoining the mechanical room to the entry.
- · Remove the carpet and pad from the southeastern room and hallway
- HEPA vacuum any fungal growth present on the wood framing, lightly abrade, and re HEPA vacuum
- Clean all contents and surfaces from the southeastern room in accordance with the contents section later within this
 document.
- Lightly cleaning or air wanding can be conducted on the contents within the mechanical room
- Clean the HVAC system

It is highly recommended that cleaning inside a containment area be conducted starting from clean and working towards dirty areas from top towards bottom and towards the AFD, starting at the decontamination area. (Section 10.9 – IICRC S520)

HVAC System(s)

- HVAC remediation should be conducted in accordance with the National Air Duct Cleaners Association (NADCA)
 ACR 2002 Assessment, Cleaning, and Restoration of HVAC Systems. This standard recommends delaying
 remediation of the HVAC system until all other building remediation is complete, in order to avoid recontaminating
 the system. If the HVAC system must be cleaned before building remediation is complete, it is highly recommended
 that HVAC components be isolated from the contaminated environment.
- Turn off the blower motor, and sealed all vents (supply and return) with 6 mil plastic. Clean all sheet metal ductwork runs, and all components of the unit (blower motor, coils, etc.). Properly cleaning Flex-duct can be difficult, so removal and replacement may be necessary (use professional discretion). After cleaning is complete, double bag the old filter, and replace it with a new one. Reseal all vents, and leave the furnace off until the end of the remediation project.
- The use of portable heat may be necessary during colder months to prevent pipes from freezing.
- The use of an antimicrobial product in a HVAC system must never be substituted for complete removal of viable mold or fungal bodies. If an antimicrobial product is used along with removal, that product must be specifically registered by the EPA and other applicable regulatory agency for use in HVAC systems. (Section 11.2 IICRC S520)

Content Remediation

It is recommended that contents be separated into porous, semi-porous, and non porous groups. It is further recommended that sorted contents be inventoried and inspected to determine if items are to be restored or disposed. (Section 12 – IICRC S520)

- <u>Porous</u>: Porous materials are items that are primarily organic, readily absorb moisture, and are highly susceptible to microbial growth. Porous contents with Condition 2 contamination are usually restorable, while porous contents with Condition 3 contamination are usually <u>not</u> restorable. (Section 12.4 IICRC S520) Use professional discretion.
- <u>Semi-Porous</u>: Semi-porous materials are items that are primarily organic, absorb moisture slowly, and are susceptible to microbial growth. Semi-porous contents with Condition 2 or Condition 3 contamination are usually restorable. (Section 12.5 IICRC S520) Use professional discretion.
- Non-Porous: Non-Porous contents are organic items that have been altered to not absorb moisture easily. Non-porous contents include organic items altered in a manner as to be non-absorbent to moisture, as well as synthetic materials and inorganic items which do not readily absorb moisture, and which do not support microbial growth. Non-porous contents with Condition 2 or Condition 3 contamination are usually restorable. (Section 12.6 IICRC S520) Use professional discretion.

Contaminated or potentially contaminated contents must be appropriately packaged to prevent the spread of contaminant into unaffected areas. The contents should be packaged in 6 mil polyethylene disposable bags. It is highly recommended that the bags are HEPA vacuumed, damp-wiped with an appropriate cleaning agent, or double bagged prior to removal from the contaminated area or decontamination room.

(Sections 12.1.1 & 12.9 – IICRC S520)

It is recommended that unrestorable items be removed from the work area before remediation begins. (Section 12.8 – IICRC S520)

Cleaning of contents can be performed either on-site or in-plant. It is highly recommended that Condition 2 or Condition 3 contents be cleaned either outdoors or in a multi-stage cleaning chamber system. Cleaning methods should be based on material composition and porosity. Expectable methods include, but are not limited to:

- · Air-Based Cleaning: HEPA vacuuming and air washing
- Liquid-Based Method: high pressure washing and steam cleaning
- Abrasive Method: abrasive media blasting, sanding, and brushing/scraping
 - Abrasive media blasting can extremely increase the amount of airborne contaminants. Usually, it is best utilized outdoors or in controlled, high-volume, laminar airflow cleaning chambers (Section 12.2.3 HCRC S520)

Finally, HEPA vacuuming of all surfaces in the remediation area should be performed to remove settled dust and spores. (Section 10.9 – IICRC S520)

Property Post Remediation Verification (PRV)

AFDs and containment must remain in place and running until the PRV assessment is performed by ZWS. At that time, ZWS will supply a 'Satisfaction of PRV.' In order to achieve satisfaction, indoor air samples must be statistically similar to an outside reference. If an outside reference cannot be taken (i.e. snow cover, rain, frost, etc.) an 'area of non-concern' or EMLAB's Extended Outdoor Comparison will be used. Satisfaction of PRV is only valid at the time of assessment, because mold is naturally occurring.

Removal of Equipment

Equipment must be wiped down with water and detergent, and immediately dried. Particular attention should be given to the wheels. Seal the AFD's intake and exhaust with 6 mil plastic prior to removal from containment. Filters should be changed off site.

Professional Judgment of Remediators

This protocol is designed for use by a qualified mold remediator to assist in safe removal of fungal contaminants. In all cases, professional judgment of the remediator can override (on the side of caution) the recommendations made in this report. ZWS assumes that the remediator is capable of such things as calculating the number of dehumidifiers necessary, calculating the number of AFDs required, and capable of setting up proper containment (if necessary).

It is important for the remediator to understand that fungi will continue to grow after our tests are taken and this protocol written. If fungi have spread outside of the identified area, the remediator must use professional discretion concerning this region. If additional testing is needed, it is the remediator's responsibility to contact ZWS.

Containment should not be taken down, or AFDs turned off, until post remediation testing is performed, and ZWS grants a 'PRV Satisfaction.'

The remediator must be able to identify and correct the source of excess moisture. This should be done prior to the fungal remediation. If the moisture source is not corrected the fungal problem may persist. If the remediator can not identify the source, a structural engineer or moisture intrusion specialist should be consulted to rectify the problem. When ongoing moisture cannot be resolved, we advise that the remediator contact the customer and explain that continued moisture will limit the effectiveness of the remediation, possibly cause structural deterioration, and require long-term management. (Section 11.10 – IICRC S520)

Mold (and other allergens) are naturally occurring; consequently, consulting services for proper removal are only valid at the time of the service. Also, ZWS may have relied on information from the client, contractor, etc. for the preparation of this protocol. ZWS can not be held responsible for misinformation or omissions of information from the client, contractor, etc. Therefore, damages (indirect or consequential) resulting from the misinformation or omission is not the responsibility of ZWS.

ZWS inspections are limited due to the fact that they are non destructive and testing is often non invasive. As a result, there can be no guarantees that hidden fungal growth does not exist within the building. Furthermore, ZWS is not liable for any undiscovered hazardous materials or any undiscovered structural problems.

ZWS recommends that any questions pertaining to possible health effects of mold be answered by a physician.

1111 North Lynndale Drive Suite 201B Appleton, Wisconsin 54914 Office: (920) 882-5248 PO Box 510925 Milwaukee, WI 53203 Office: (414) 226-1664 Providing Indoor Air Quality Solutions



ATTOChment

ZWS Environmental Services, Inc.

1111 N. Lynndale Drive, Suite 201B Appleton, Wisconsin 54914 Office: (920) 882-5248 PO Box 510925 Milwaukee, Wisconsin 53203 Office: (414) 226-1664

www.zwsinc.com

April 17, 2013

Prepared for: Clarence Goetsch



Re: Goetsch Residence W6749 Esker Ridge Elkhart Lake, WI 53020









Federal Tax Id #: 42-1625342

Goetsch Residence W6749 Esker Ridge Elkhart Lake, WI 53020

ZWS Project No. 0313-01907-2

POST REMEDIATION FUNGAL AND MOISTURE VERIFICATION (PRV) ASSESSMENT



Prepared By: ZWS Environmental Services, Inc. 1111 N. Lynndale Drive, Suite 201B Appleton, WI 54914

Will. 1 Jull

William J. Zoeller

BS Microbiology and BioMedical Science (University of Wisconsin – La Crosse)
Council-certified Indoor Environmental Consultant (ACAC) (Certificate #0703042)
Water Damage Restoration Technician (IICRC) (ID #: 74580)
Applied Microbial Remediation Technician (IICRC) (ID #: 74580)





FUNGAL AND MOISTURE PRV ASSESSMENT

ZWS Environmental Services, Inc. (ZWS) is an environmental testing and consulting firm whose principals have performed thousands of assessments throughout the Midwest. The principles of ZWS hold certifications issued by The Clean Trust, formerly The Institute of Inspection, Cleaning, and Restoration Certification (IICRC) and the American Council for Accredited Certification (ACAC), formerly the American Indoor Air Quality Council. ZWS is a long standing member of the Better Business Bureau (BBB) of Wisconsin, the Indoor Air Quality Association (IAQA), and ASTM International.

Project Background

The Goetsch Residence located at W6749 Esker Ridge in Elkhart Lake Wisconsin ('SITE') is a two story ranch style home with a walk out basement. A water loss occurred within the basement from a broken supply copper fitting to the water softener. While the homeowner was cleaning up the water it was observed that the dehumidifier exhaust tube was outside of the slab drain adding to the moisture issue. The water affected the mechanical room where the loss occurred, adjoining bathroom, southeast room, and the hallway. Visible mold growth was observed on the drywall by the homeowner and a restoration contractor was hired to remediate the loss. Remediation was reportedly performed by cleaning the mold off the drywall. The homeowner replaced the bathroom vanity and vinyl flooring. Since this time the homeowner has begun to cough along with nasal issues and contacted ZWS Environmental Services, Inc. to inspect for mold growth. Multiple inspections by ZWS Environmental Services, Inc. discovered the presence of *Chaetomium sp.* on the drywall behind the wood framing of the bathroom, mechanical room, and southeastern room. Aspergillus sp. was also discovered on the carpet pad. Remediation was recommended by removal of the affected materials and cleaning.

Pre Inspection Hypothesis

The affected drywall, carpet, and carpet pad have been removed followed by cleaning of the framing and air within the southeastern side of the basement returning the property to a pre loss condition.

Inspection

ZWS Environmental Services, Inc. performed a fungal and moisture PRV assessment in accordance with the ASTM International D7338-10 Standard Guide for Assessment of Fungal Growth in Buildings at SITE on April 15, 2013. The goal of the assessments was to determine if fungal growth was still present during the inspection surrounding the mechanical room, if proper conditions still exist for fungal growth (i.e. excess moisture) in the areas affected by the loss, and to provide a scope of work for remediation in accordance with the IICRC S520 if abnormal fungal contamination exists or a letter stating the property current conditions.

Fungi will not grow without a source of moisture; therefore, ZWS begins each inspection with a moisture assessment. As part of the moisture assessment, relative humidity (RH) readings were taken throughout the building (see FIG 1.0). All RH readings should be maintained within the 'Comfort Range' (30-50%)₁. RH within this acceptable range will generally not cause or sustain fungal growth.

FIG 1.0 Thermo Hygrometer Readings₂

Location	Temperature (°F)	Relative Humidity (%)	Specific Humidity (GPP)
Outside	57	65	45
Basement Southeast	64	48	42

^{1&#}x27;Comfort Range' (30-50%), as defined by the American Society of Heating, Refrigerating and Air-Conditioning Engineers
2Thermo hygrometer readings taken with an Extech® Digital SuperHeat Psychrometer (Model: RH490)

During the moisture assessment, ZWS utilized the following equipment to locate areas of elevated surface moisture.

• Delmhorst® (Model: BD 2100) moisture meter

The visual assessment of the southeastern corner of the basement observed the carpet and pad removed from the southeastern room and hallway, affected tack strip, and the affected drywall from the bathroom, southeastern room, and hallway all

adjoining the mechanical room just above the sole plate. The visual assessment of the remaining materials did not observe the presence of fungal growth. The exposed sole plate, framing, and drywall contained 8-10% moisture during the assessment.

Laboratory Methodology

To assess airborne levels of fungal spores, Air-O-Cell® Cassettes are commonly used. Air-O-Cell® Cassettes are a form of non-culturable sampling that quantifies the number of fungal spores (viable and non-viable) in the air. The samples are taken by pulling a calibrated amount of air (15.0 liters/minute) through the cassette. In the cassette, air passes over a microscope slide, causing the particulates (fungal spores, dust, etc.) to stick. The slide is then examined by an American Industrial Hygiene Association (AIHA) accredited laboratory to determine the genera of fungal spores present.

All air samples are taken with a Gast[®] Pump (Model: R-G557X) equipped with a rotameter. Before sampling begins, the pump is calibrated with a Bios DryCal[®] Defender Primary Flow Meter (Model: 520) to the appropriate flow rate. Samples are taken at an approximate height or four (4) feet.

All indoor air samples are compared to an outdoor reference to determine if elevated spore counts are present. As a general rule of thumb, the genus of fungi collected from indoor air should match outdoor air and be present at equal or lower levels. In some cases, outdoor air may not be a reliable baseline reading. This occurs when fungi are at extremely low levels (e.g. snow cover, rain, frost, etc.). In these cases, an 'area of non-concern' or EMLAB's Extended Outdoor Comparison will be used.

Fungal growth occurs when a commercial or residential building has a source of excess moisture, either from an indoor or outdoor source. Fungal spores can be found in the air of every environment, but it takes a source of moisture for fungi to grow. To ensure proper remediation, all sources of excess moisture must be corrected. Finding sources of moisture is not the responsibility of ZWS. If the remediator can not find all sources of moisture, a structural engineer or a water intrusion specialist should be consulted.

Two (2) Air-O-Cell® Cassettes were collected for analysis. The samples were sent overnight express to Environmental Microbiology Laboratory Inc. (EMLAB) in Elmhurst, Illinois.

Interpretation of Laboratory Results

According to the laboratory results, the Goetsch Residence had normal to low levels of allergenic fungal spores in the ambient air of the basement southeastern room. These levels are considered normal to low in comparison to the outdoor reference sample collected and normal outdoor ambient levels generally discovered within the outdoor air of this geographical region during the present season (Refer to MoldRANGE provided by Emlab P&K for more information). It is the opinion of ZWS Environmental Services, Inc. that the southeastern corner of the Goetsch residence basement has been returned to a pre loss condition and ready for reconstruction.

For complete results, see SPORE TRAP REPORT provided by EMLAB.

Mold (and other allergens) are naturally occurring; consequently, consulting services for proper removal are only valid at the time of the service. Also, ZWS may have relied on information from the client, contractor, etc. for the preparation of this protocol. ZWS can not be held responsible for misinformation or omissions of information from the client, contractor, etc. Therefore, damages (indirect or consequential) resulting from the misinformation or omission is not the responsibility of ZWS.

ZWS inspections are limited due to the fact that they are non destructive and testing is often non invasive. As a result, there can be no guarantees that hidden fungal growth does not exist within the building. Furthermore, ZWS is not liable for any undiscovered hazardous materials or any undiscovered structural problems.

ZWS recommends that any questions pertaining to possible health effects of mold be answered by a physician.