TD Environmental
PO Box 1480
Welcome, NC 27374
Office (336) 701-5332
A division of T.D. Riggs Enterprises, LLC
tdriggsenterprises@gmail.com

October 10th , 2024

Subject: **Onsite Inspection Report**

Requested by:

EnviroPro Solution

Phone: 704-245-5000
Email: alezama@enviroprosolution.com

Project Location:

135 Rusty Nail Dr
Mooresville, NC

Project Description:

IAQ Findings and Remediation Plan Recommendation

On November 11th, 2025 , TD Environmental performed a visual inspection and air quality testing of the above listed residential structure.

The source of water was a direct source from a condensation line that had not been installed correctly on the HVAC system located above the ceiling observed.

Repairs to the condensate line have been performed to stop the water source. Visible water damage and fungal activity are present throughout the residence. The directly affected materials have visible fungal activity. Secondary start/stop surface growth has been observed throughout the structure on various contents from the elevations in humidity.

Micro-5 spore trap air samples were acquired from the main level.

A direct fungal swab was obtained from the dining room wall.

Findings:

Results yielded elevated airborne spore activity. Aggressive genus of fungi are airborne and present in all structure. Aspergillus/Penicillium is a water damage indicator and the activity is elevated on the interior and not present on the outside comparative sample. Chaetomium and Torula, which are aggressive genus, should not be present in the indoor environment. Elevated Airborne Hyphal fragments are present indicating fungal growth is active.

Recommended Remediation Plan:

All mitigation and remediation efforts should be in accordance to the IICRC S500 and S520 standards for water mitigation and mold remediation and should be performed by properly trained and certified technicians through the IICRC, ACAC, or other nationally recognized remediation association.

The structure should maintain the indoor dew point under 50 degrees Fahrenheit to control secondary sources of moisture. Recommended temperature acclimation would be in accordance to the IICRC psychrometric chart averaging 70 degrees Fahrenheit at 40 to50 percent relative humidity to keep a low dew point.

All personnel should donn appropriate PPE such as a Tyvek suit, rubber boots, and gloves in addition to respiratory protection.

SDS sheets for the intended anti-microbial disinfectant should be provided prior to remediation efforts. ***No products should be used containing sodium hypochlorite or sodium hydrochloride as the primary disinfecting agent.*** Products should only be used as directed by the manufacturer on the container as defined by EPA and OSHA regulations.

All personnel should donn appropriate respiratory protection in accordance to OSHA 29-CFR-1910.134 and if wearing a negative pressure respirator, they should participate in a medical surveillance program and be medically approved to wear a negative pressure respirator as described in 29CFR1910.134.

The structure should be placed under a containment with heavy negative pressure with filtered relief air creating a crossflow of air from one side of the structure to the other.

The negative pressure should be a minimum of 12 air exchanges 12 per hour. This should register on a manometer as averaging -0.02 to -0.03 bar of water column and be maintained throughout the remediation 24/7.

The entire structure should be under heavy negative pressure.

As this water exposure from above and the time involved is considered Category 3, all directly and visibly damaged or previously identified wall/ceiling claddings and insulation materials that encountered cat 3 water should be removed to expose the structural cavities.

Any materials that had direct contact with category 3 water should be removed down to the substrate and framing materials. This means all currently or previously wet flooring materials should be removed to expose the substrates.

In relation to contents affected with secondary fungal exposure, most items should be cleanable unless they are valued less than the cleaning cost.

Textiles can be cleaned by normal washing machine and drycleaning methods.

Fabric furniture can be HEPA vacuumed, and lightly lightly treated with a non-discoloring anti-microbial via a ULV Applicator to treat settled dust spore activity. IICRC standards should be followed for all carpet and furniture cleaning performed.

All surfaces within the contained areas should be HEPA vacuumed with a brush attachment to separate bulk surface activity including contents.

A wet wiping of all surfaces with amended water (amended using mild detergents and/or antimicrobial agents in accordance to product labeling) should occur to remove any remaining fungal activity including contents.

If fungal activity has established into wood eating fungus and deteriorated the framing or substrate integrity, those materials should be removed and replaced as necessary.

A final application of antimicrobial can be applied to exposed materials after all cleaning is done. The antimicrobial should be classified for use with porous materials such as bare wood.

The HVAC system including ducting and air handlers should be thoroughly cleaned and disinfected to NADCA standards, as airborne activity can establish while exposed to the current conditions. If not included in the remediation process, what has settled in the ducting and coils, can re-establish under the right conditions, within the coils and ducting and spread quickly throughout the entire house.

Referencing the IICRC S500 and the S520 standards are highly recommended as exploratory demolition may yield unexpected scenarios.

Repairs can be performed once the structure and remediation has been deemed successful by TD Environmental via visual inspection and re-sampling of airborne activity meeting industry standards acceptable for occupancy.

A visual inspection will be performed post remediation utilizing a high intensity flashlight and looking for settled dust and established growth. Air sampling will not be performed until visual inspections pass.

Caution should be used to ensure necessary water and electrical lockout and tagout procedures are followed to ensure worker safety prior to demolition activities. Follow all NESHAP and NCHHCU regulations for demolition to ensure no asbestos containing materials are present.

TD Environmental can provide the final air quality testing and visual inspection for re-occupancy and reconstruction when the remediation is complete to ensure a successful remediation has taken place.

The target for air sampling will be to have no aggressive fungi present in the indoor sampling. Some spore activity may be present but must be in relation to the exterior activity at the date and time of sampling. Indoor counts should preferably be less than 10% of outdoor activity counts as a rule of thumb. Any fungi found inside, not reflecting in the outdoor sample, would be considered an elevation in spore activity and not pass.

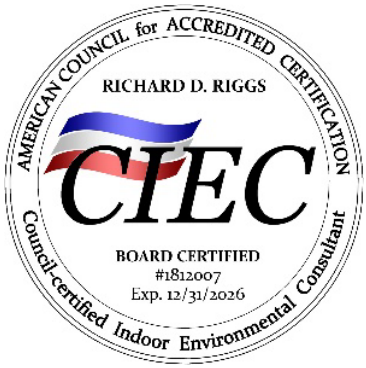
It is important to understand neither the EPA or OSHA have been able to establish a standard PEL for the industry relating airborne fungal Spore activity. Each and every person is unique as their biological make-up and the way their bodies react to contaminants. Some people can endure long durations of exposure without noticeable reaction,

while others may experience adverse health reactions to minimal or minute quantities of airborne activity. Again, Winston-Salem/Forsyth County Schools exercised an abundance of caution for the benefit of students, teachers, faculty and families. The current standard for occupancy is a professional opinion based on what would be considered acceptable conditions for 80% of the occupants that utilize the facility.

In conclusion, air quality changes every moment of every day. When levels of activity are high outdoors, it increases the opportunity for indoor levels to rise. Maintaining a proper and dry indoor environment can prevent the possibility of future outbreaks. The basic fact being, if water is reintroduced, direct or indirect, there is a high potential for microbial activity to establish again. Without water, microbial activity cannot thrive, but it can lay dormant indefinitely waiting for water. If water is reintroduced, growth can and will happen again.

If you have any questions, please call us at (336) 701-5332 or email driggs@tdenv.com.

Respectfully,



Richard Riggs, CIEC
VP/Managing Partner/Principal Consultant

NC AHERA Inspector	#12816	NC AHERA Management Planner	#21070
NC Asbestos Air Monitor	#80935	NC AHERA Project Designer	#40531
NC AHERA Supervisor	#34304	NC Lead Inspector	#110345
NC Commercial Building Contractor	#86852	NC Radon Inspector	#CRS03831
NC Home Inspector	#3831		

100964533

TD Environmental

PO Box 1480
Welcome, NC 27374
336-701-5332

Sampling Inspector Name	Tamara Riggs
Accreditation # / State	
Project	135 Rusty Nail Dr. Mooresville NC

Customer: Ennopo

Email for Report	labresults@tdenv.com, apar@tdenv.com			
Contact Name/#	Tamara Riggs 336-816-7216 triggs@tdenv.com			
Billing ID #	TDR01			
State Collected	NC		SC	
Turn Around Time	6hr	12hr	24hr	48hr	72hr

Test Selection		Type	Date Taken	11/11/25
PLM EPA 600/R93/116 (<1%)	P	Surfacing	Notes:	Mold IAQ & Swab dining area & upstair bedroom
PLM EPA NOB (<1%)	N	TSI		
TEM EPA NOB	T	Misc.		

Sample Number	H.A	Type	TEST	Sample Location/Description	Quantity
1	25 L	air		outside	
2	25 L	air		inside	
3	Swab	—		dining room wall cavity	

Accepted ☑
Rejected ☐

Relinquished by:	T Riggs	Date/Time	11/11/25
Received By:	[illegible]	Date/Time	11/12/25 12:

Direct Exam: Spore Trap Analysis

SAI Method B-SOP-003

Customer: TD Riggs Enterprises
PO Box 1480
Welcome, NC 27374

Attn: Tamara Riggs

Project: 135 Rusty Nail Dr Mooresville NC

Lab Order ID: 10096453
Analysis: STO
Date Received: 11/12/2025
Date Reported: 11/13/2025

Sample ID	1			2						EXTERIOR		
Lab Sample ID	10096453_0001			10096453_0002						AVERAGE		
Description	outside			inside						N/A		
Lab Notes										N/A		
Volume (L)	25			25						N/A		
Analytical Sensitivity (counts/m³)	40.			40.						N/A		
IDENTIFICATION	**Raw Count**	**Concentration (counts/m³)**	**% Of Total**	**Raw Count**	**Concentration (counts/m³)**	**% Of Total**	**Raw Count**	**Concentration (counts/m³)**	**% Of Total**	**Raw Count**	**Concentration (counts/m³)**	**% Of Total**
Ascospores	15	600.	55.6%	3	120.	0.432%				15	600.	55.6%
Aspergillus/Penicillium-like				79	3160	11.4%						
Basidiospores	7	280.	25.9%	3	120.	0.432%				7	280.	25.9%
Chaetomium				>300	>12000	43.2%**						
Cladosporium	3	120.	11.1%	3	120.	0.432%				3	120.	11.1%
Epicoccum	1	40.0	3.7%	1	40.0	0.144%				1	40.0	3.7%
Myxomycete/Rust/Smut-like	1	40.0	3.7%	6	240.	0.863%				1	40.0	3.7%
Torula				>300	>12000	43.2%**						
TOTAL	**27**	**1080**	**100.%**	**>695**	**>27800**	**100.%**	-	-	-	**27**	**1080**	**100.%**
Non-Cellulosic Fibers	-	-	-	-	-	-	-	-	-	-	-	-
Hyphal Fragments	1	40.0	-	71	2840	-	-	-	-	1	40	-
Insect Parts	-	-	-	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-	-	-	-
Skin Cell % of Total Debris	**0-20%**			**0-20%**			**N/A**			**N/A**		
Total Debris in Background	**20-40%**			**20-40%**			**N/A**			**N/A**		

Disclaimer: This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. Unless otherwise noted blank sample correction was not performed on analytical results. Scientific Analytical Institute participates in the AIHA EMPAT program for fungi. EMPAT Laboratory ID: 173190. Reporting Limit equals Analytical Sensitivity. Unless indicated, areas and volumes were provided by the customer.

**High spore concentrations denote an approximate percentage of total amount.

Darrin Parrick (2)
Analyst

Approved Signatory

Scientific Analytical Institute, Inc. 4604 Dundas Dr. Greensboro, NC 27407 (336) 292-3888

Direct Exam: Swab Analysis

SAI Method B-SOP-005

Customer: TD Riggs Enterprises
PO Box 1480
Welcome, NC 27374

Attn: Tamara Riggs

Project: 135 Rusty Nail Dr.

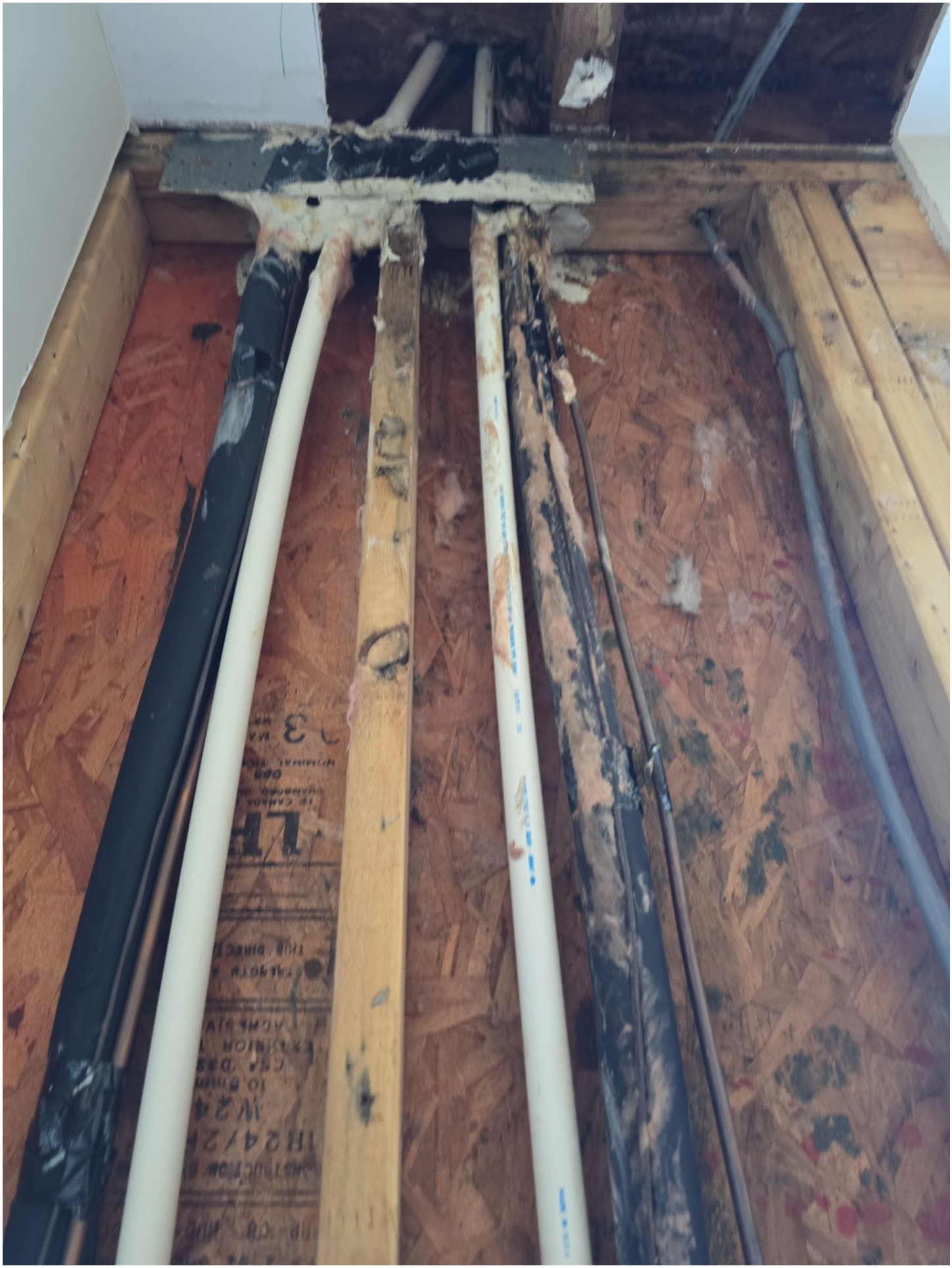
Lab Order ID: 10096454
Analysis: DES
Date Received: 11/12/2025
Date Reported: 11/13/2025

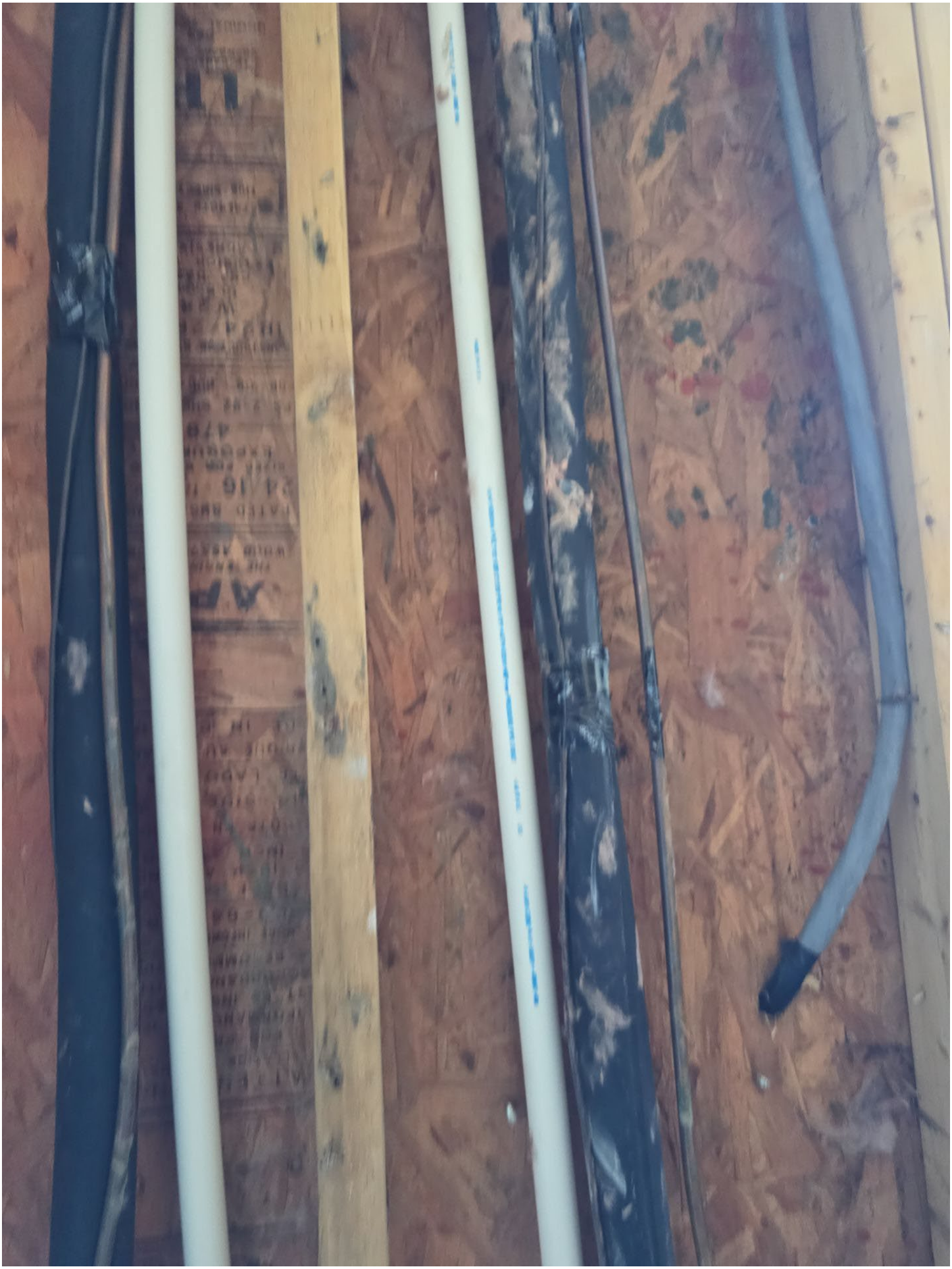
Sample ID	3							
Lab Sample ID	10096454_0001							
Description	Dining room wall							
Lab Notes								
IDENTIFICATION								
Aspergillus/Penicillium-like	3							
Chaetomium	4							
Torula	4							
Fruiting Bodies	4							
Hyphal Fragments	4							
Pollen								
Debris	1							

LEGEND: 1=Trace (1-10 Spores); 2=Light (11-100 spores); 3=Abundant (101-300); 4=Loaded (>300 spores)

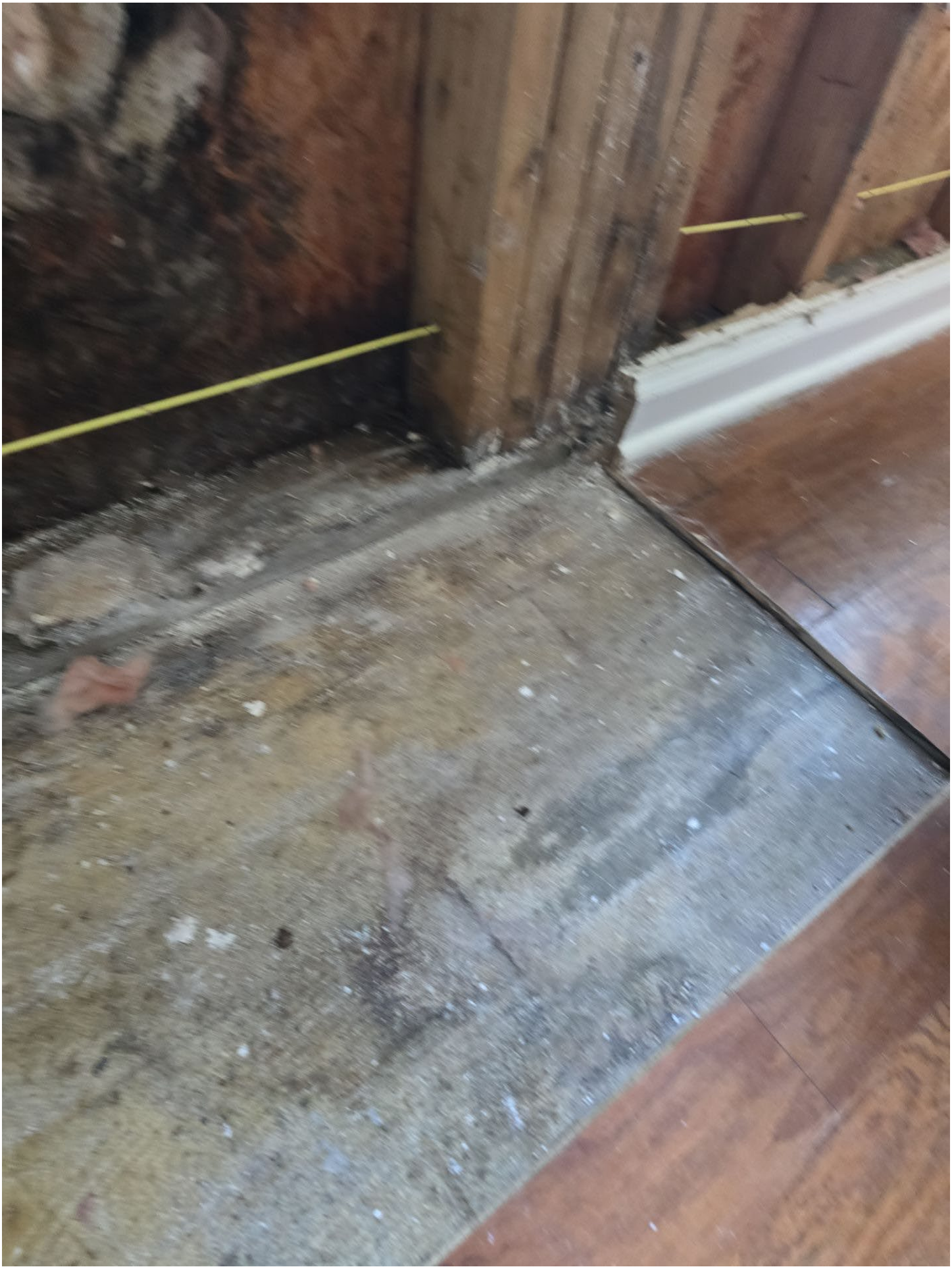
Palmer Hines (1)
Analyst

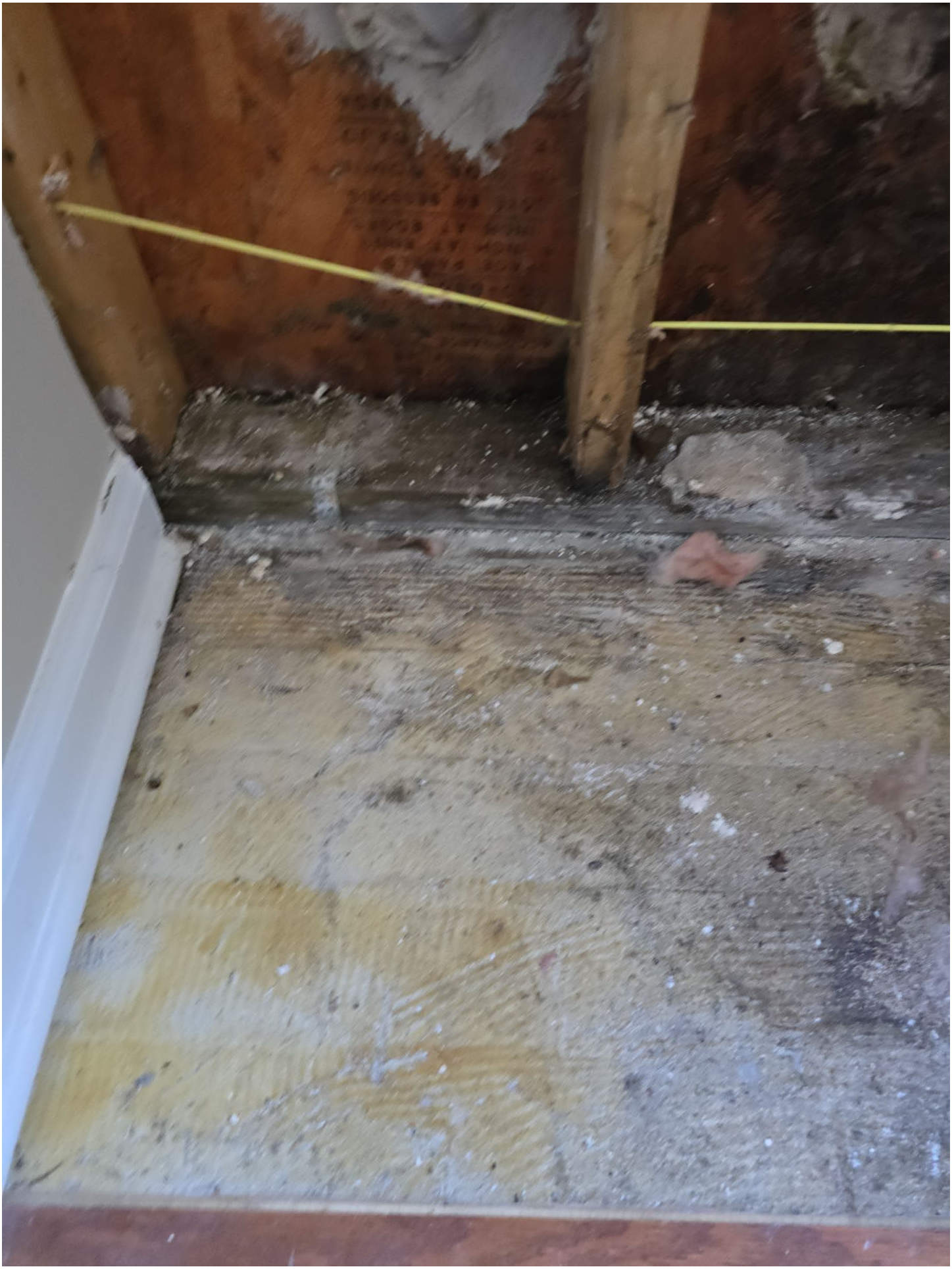
Approved Signatory

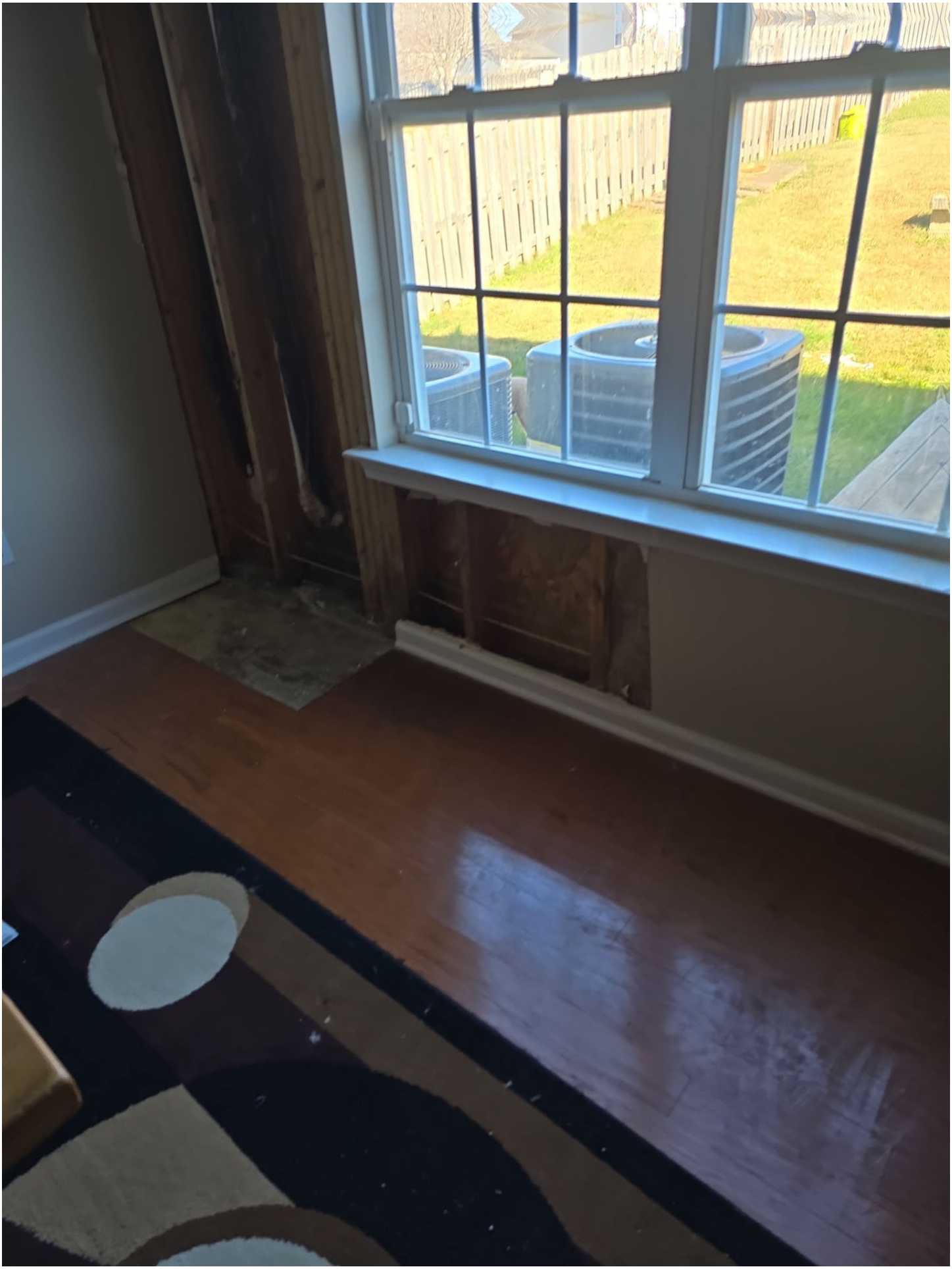


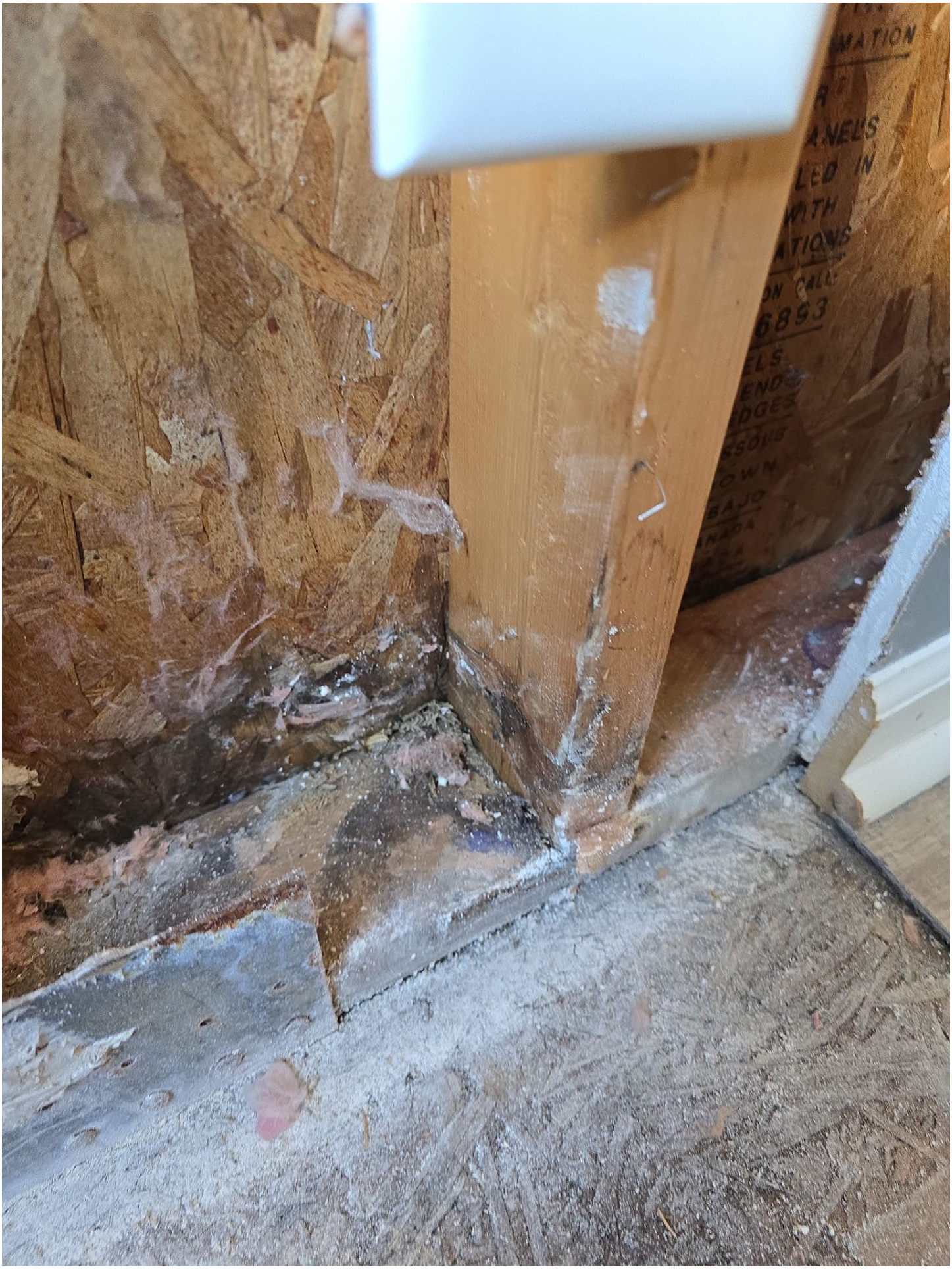



PRESSURE PIPE





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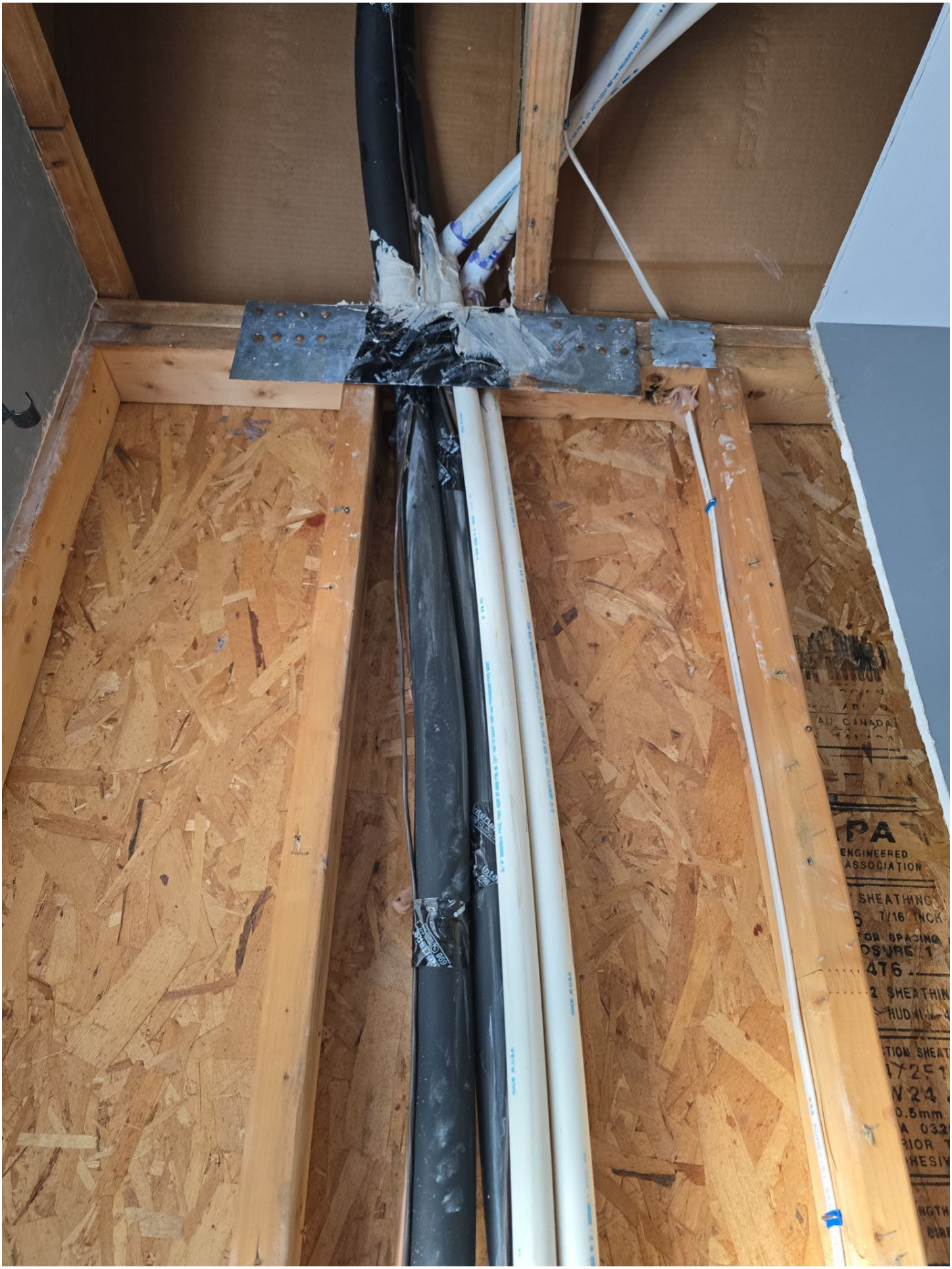
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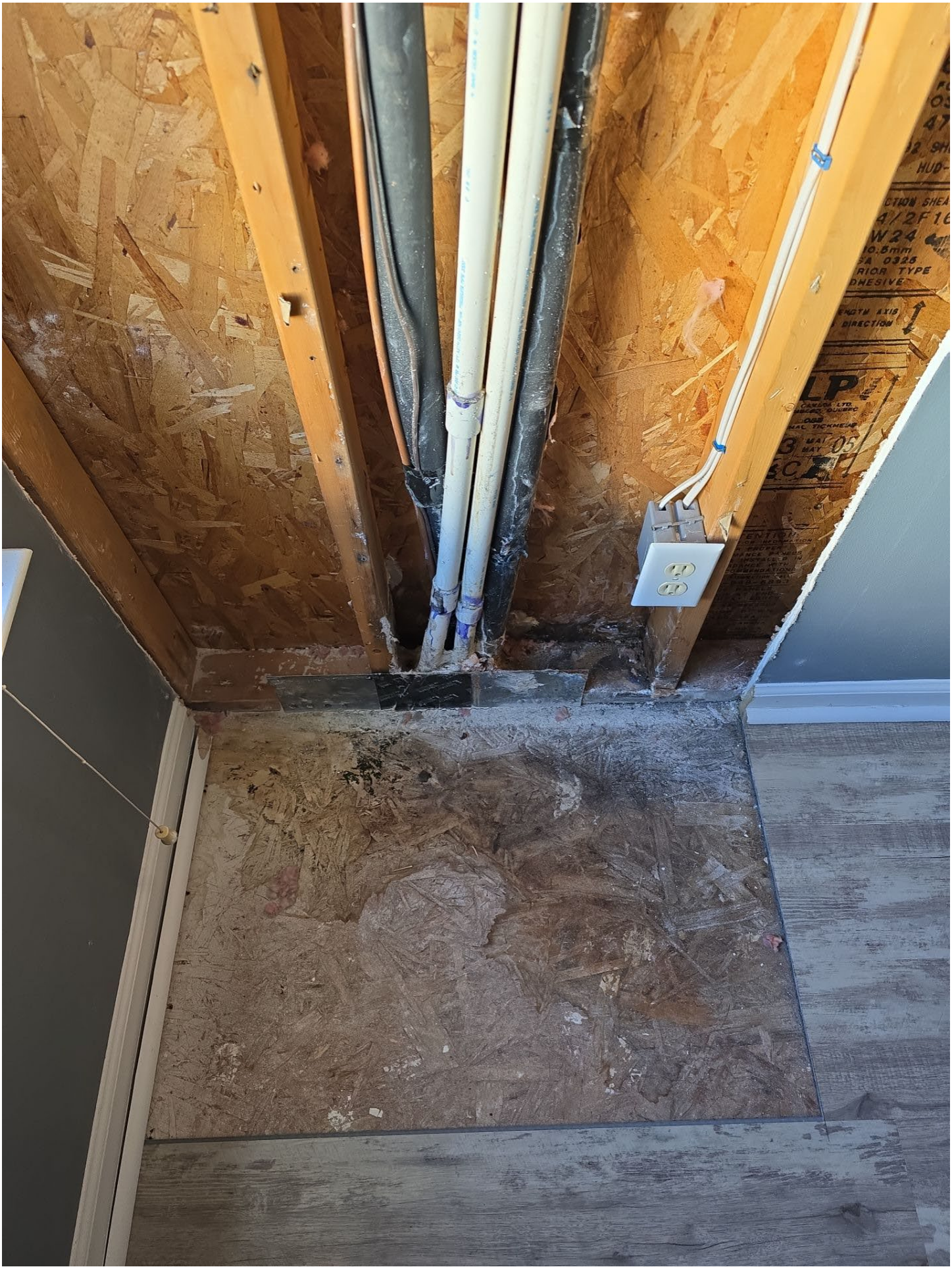
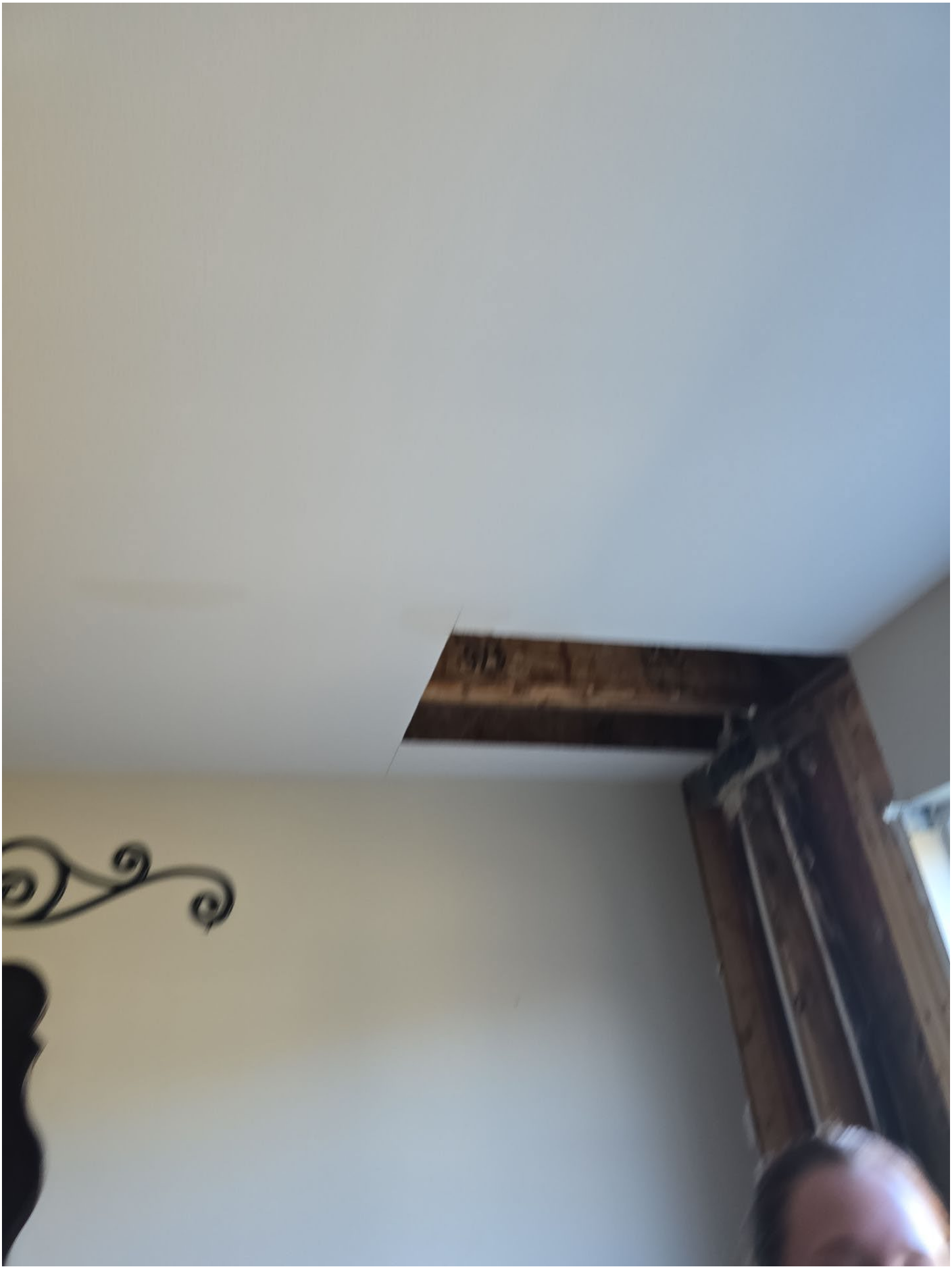
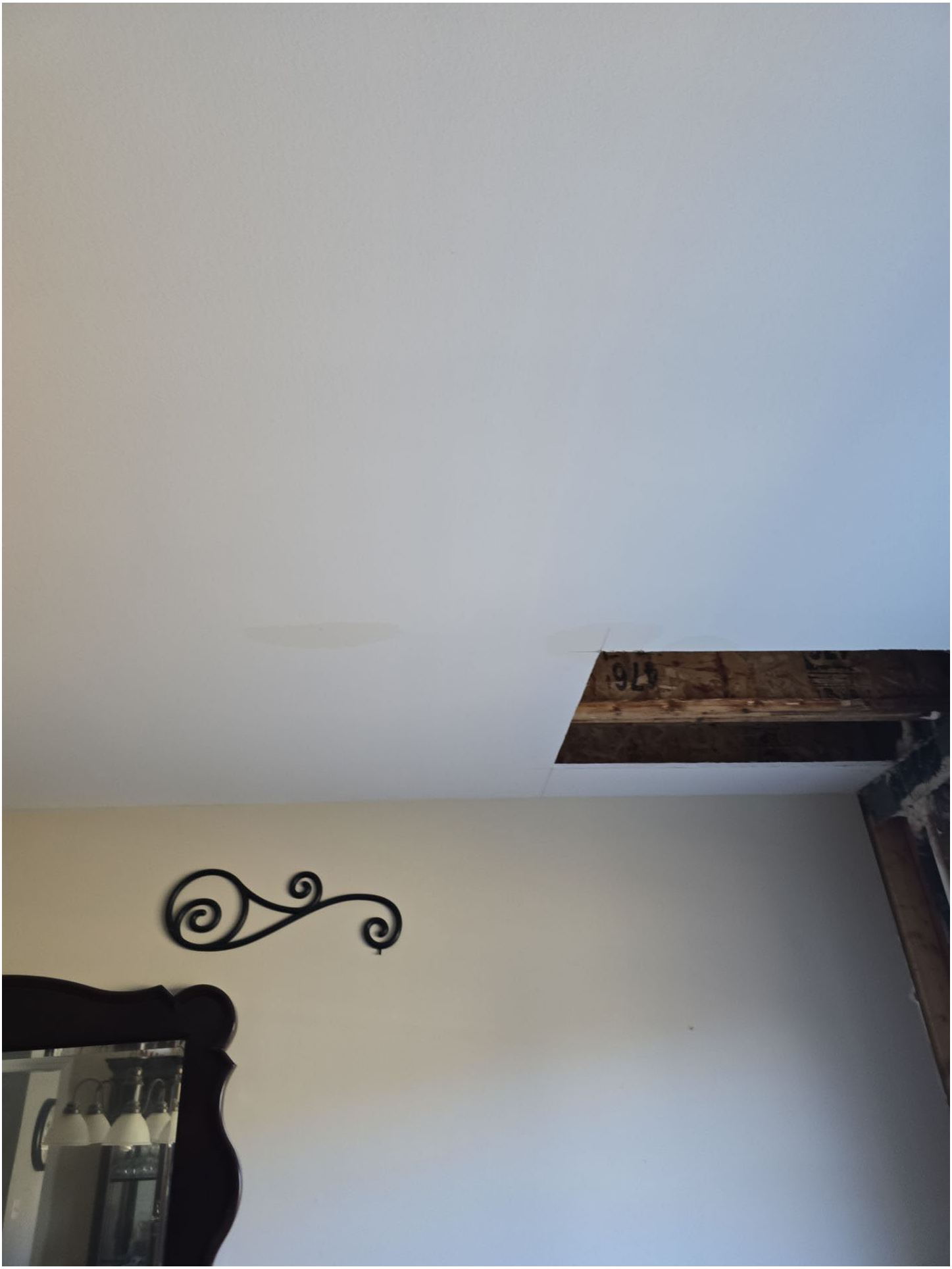
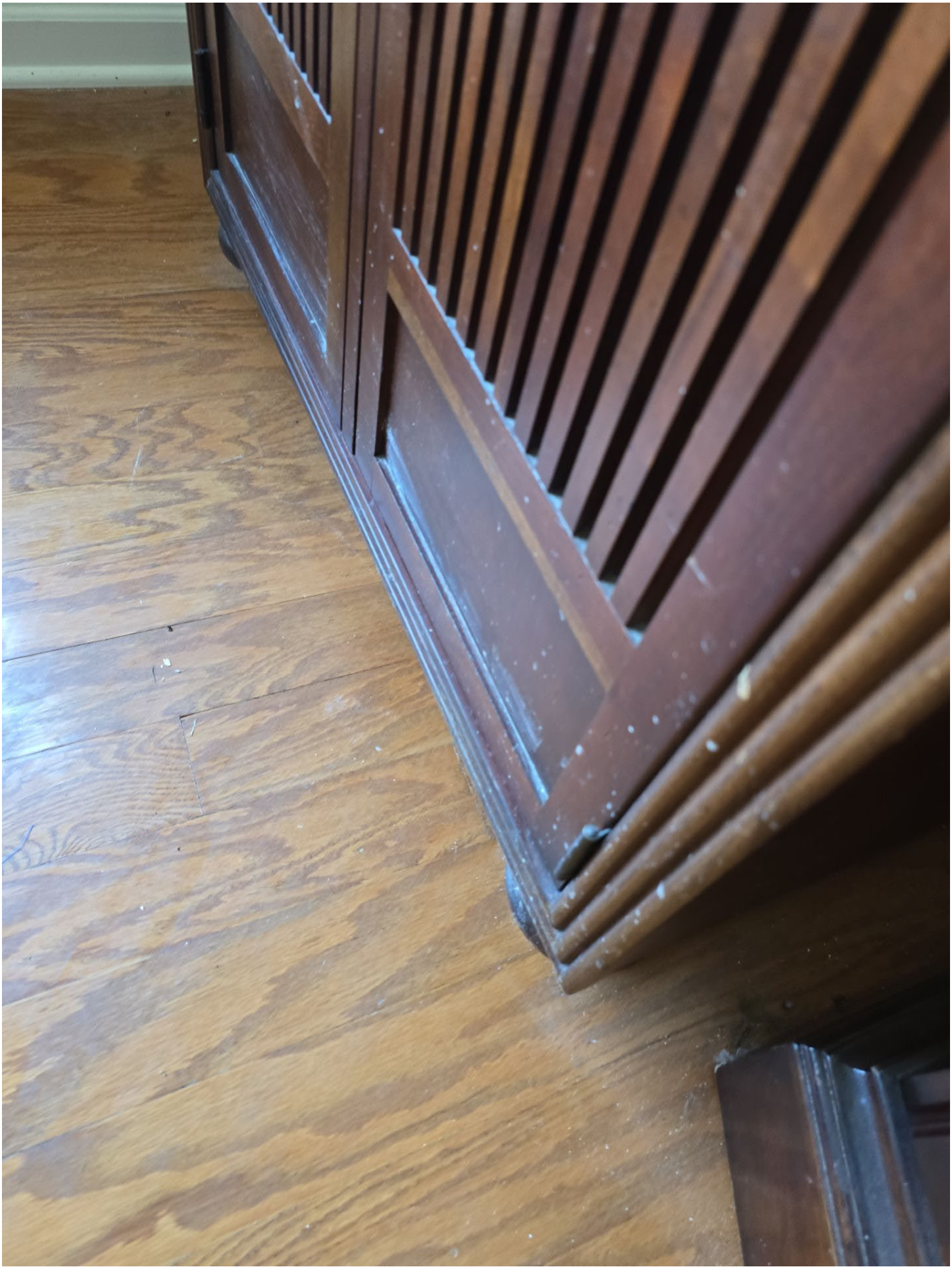
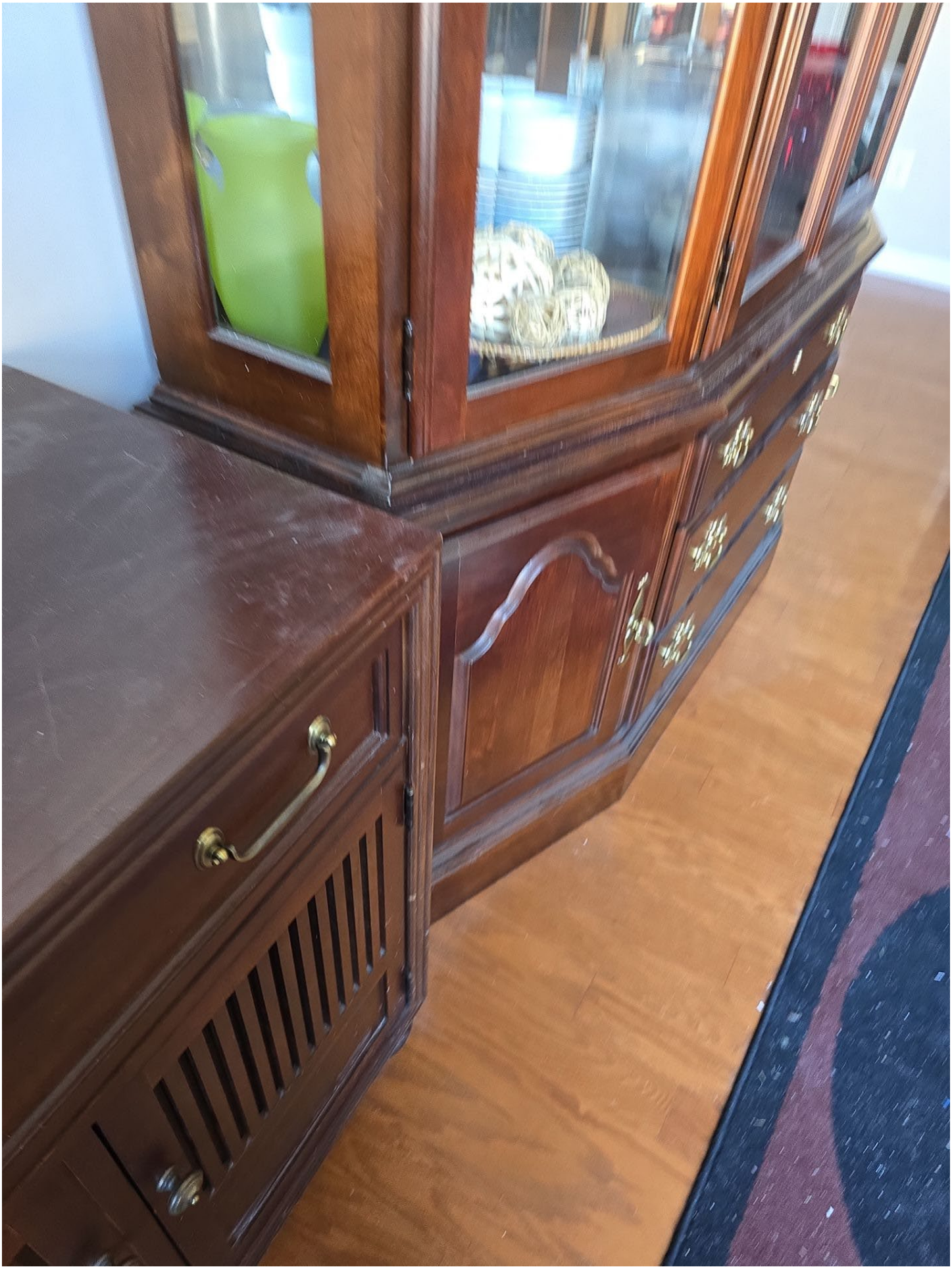
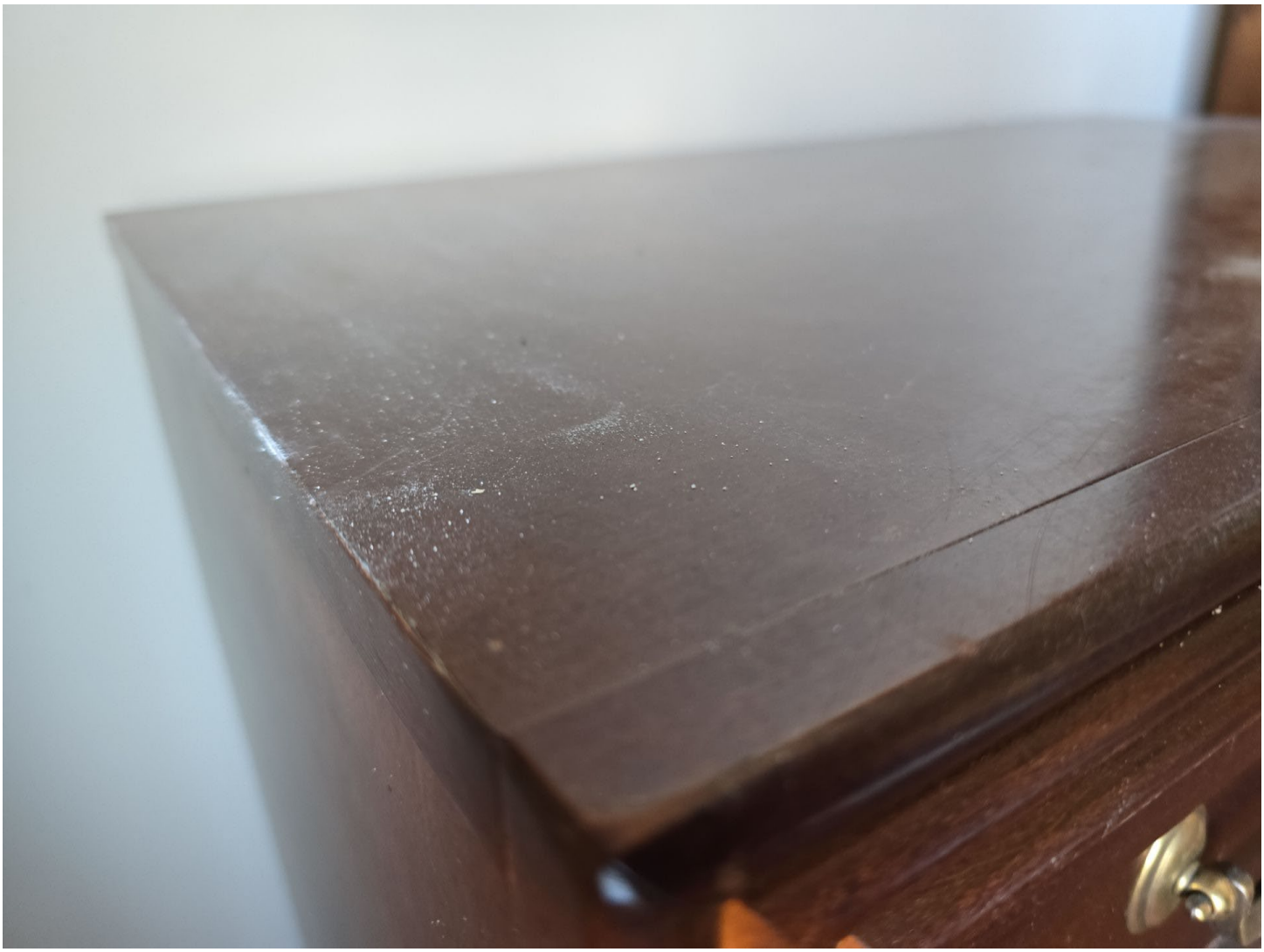


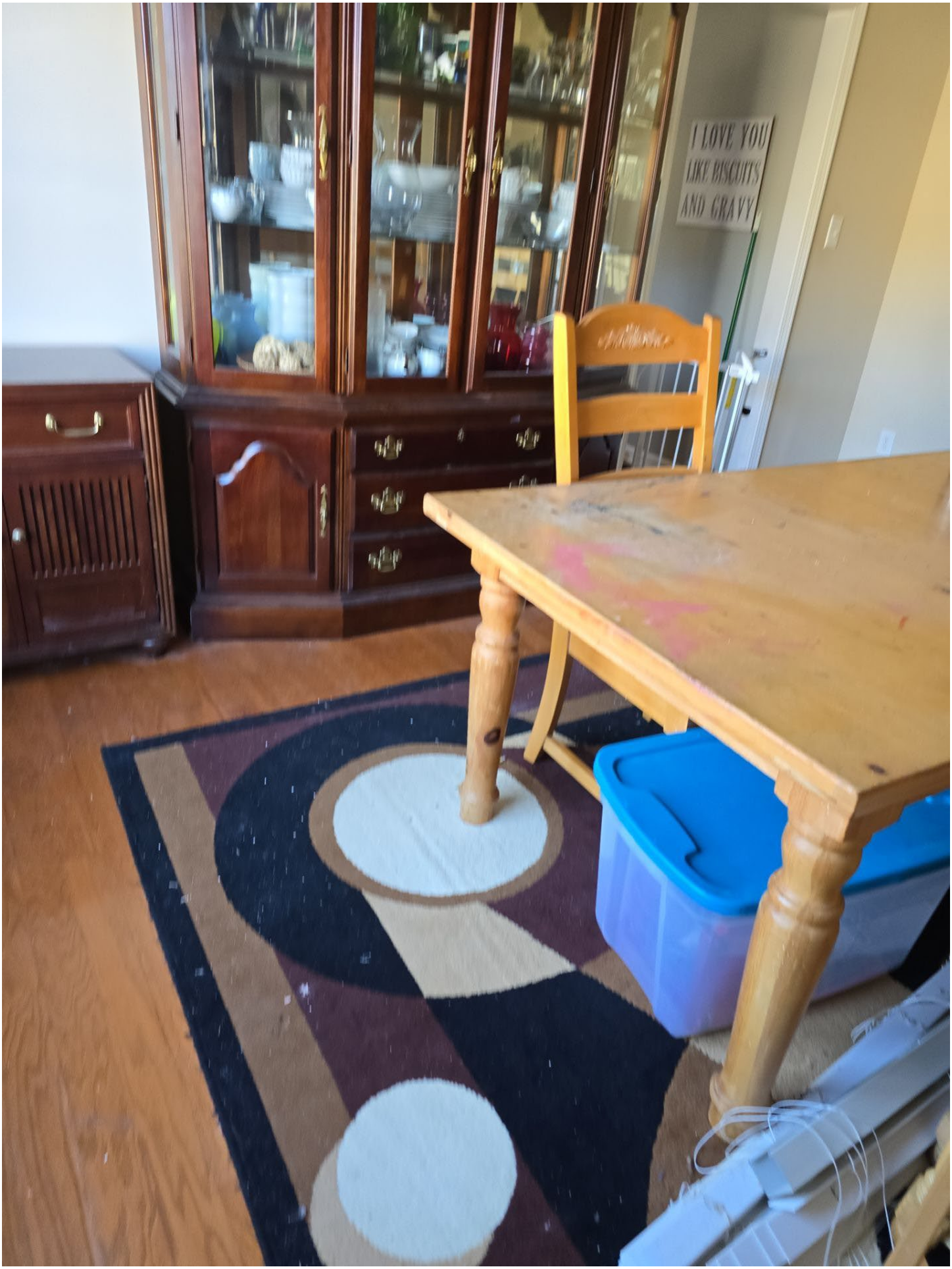


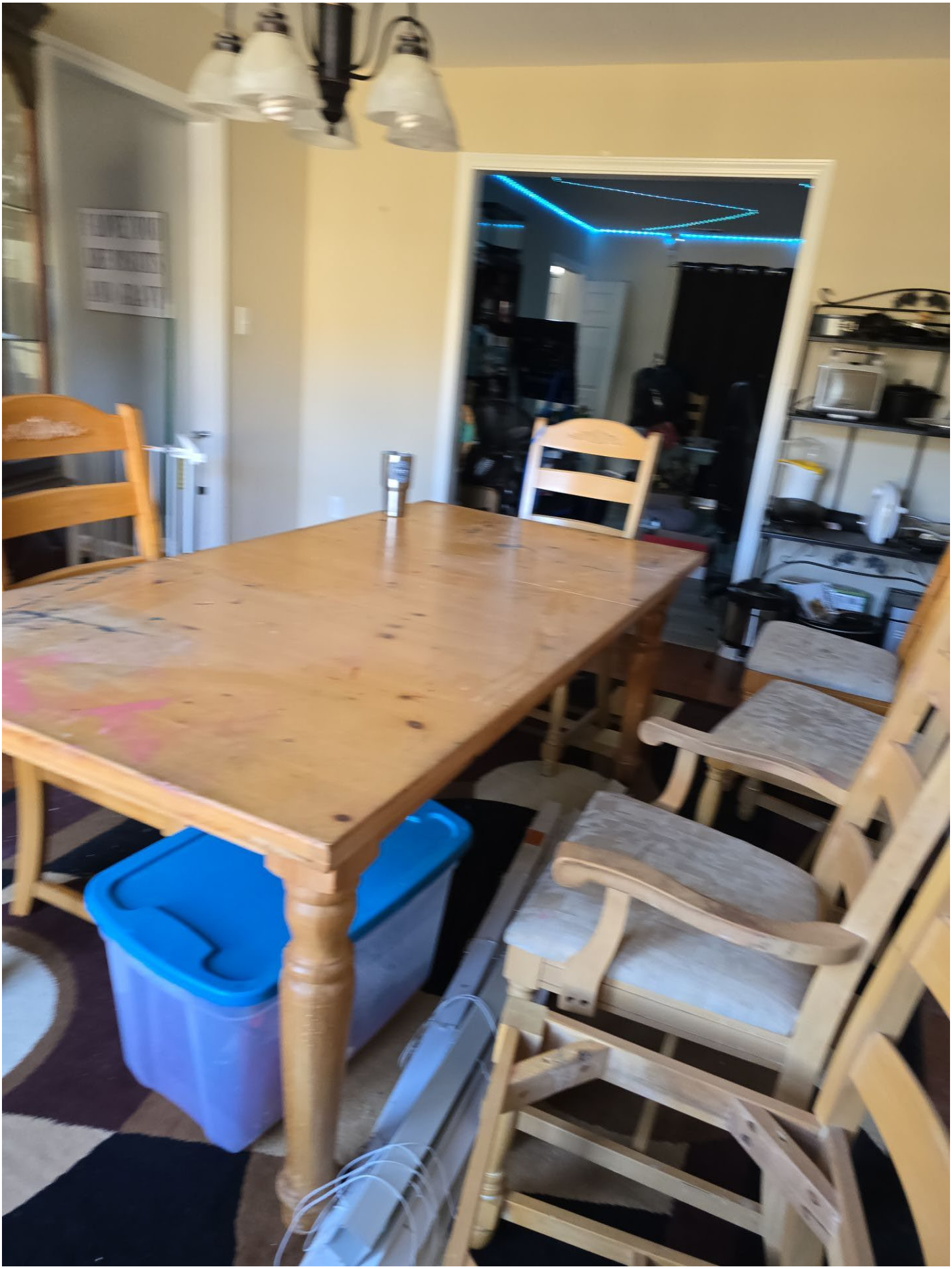


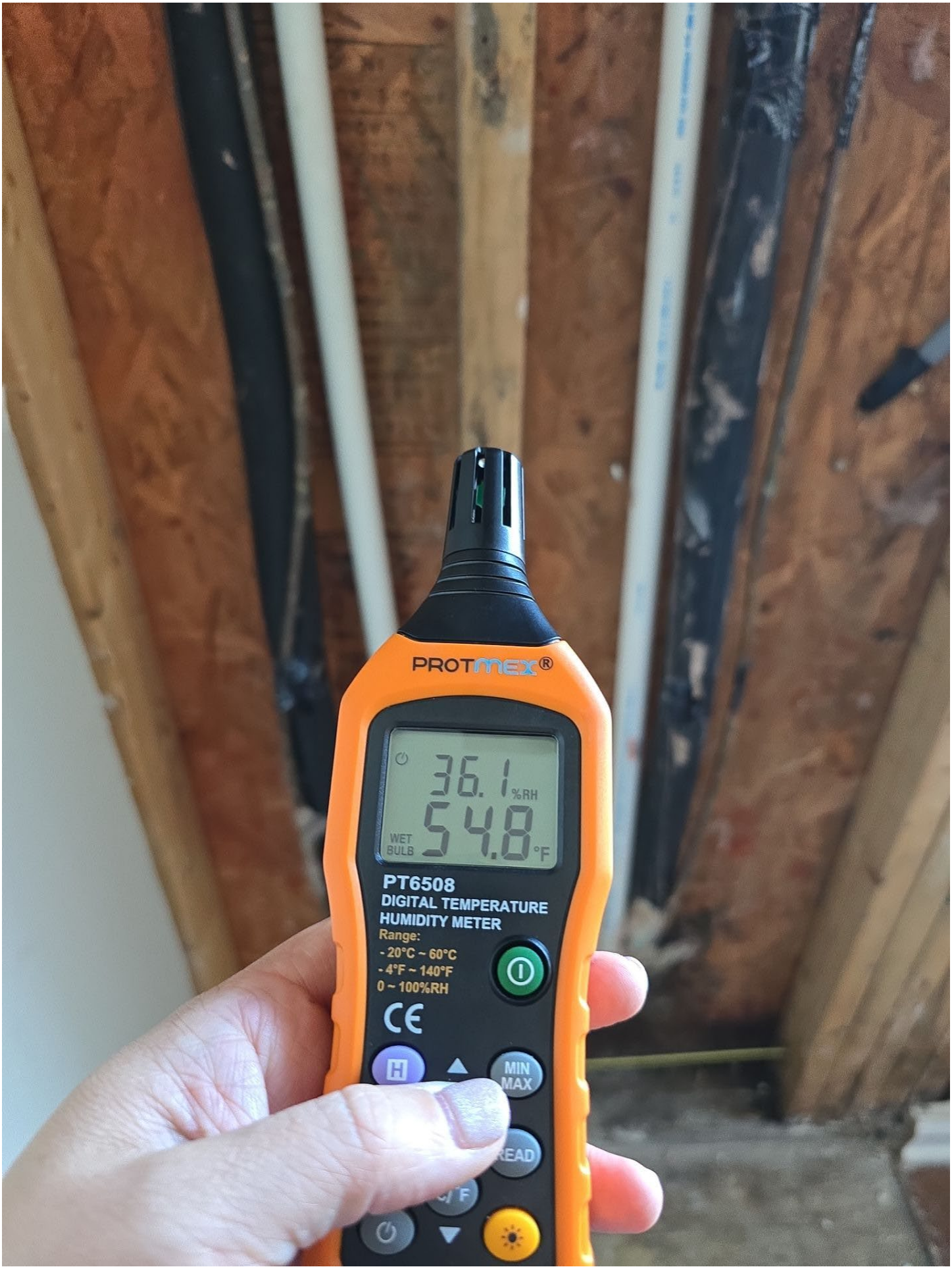







I LOVE YOU
LIKE BISCUITS
AND GRAVY

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36.1 %RH
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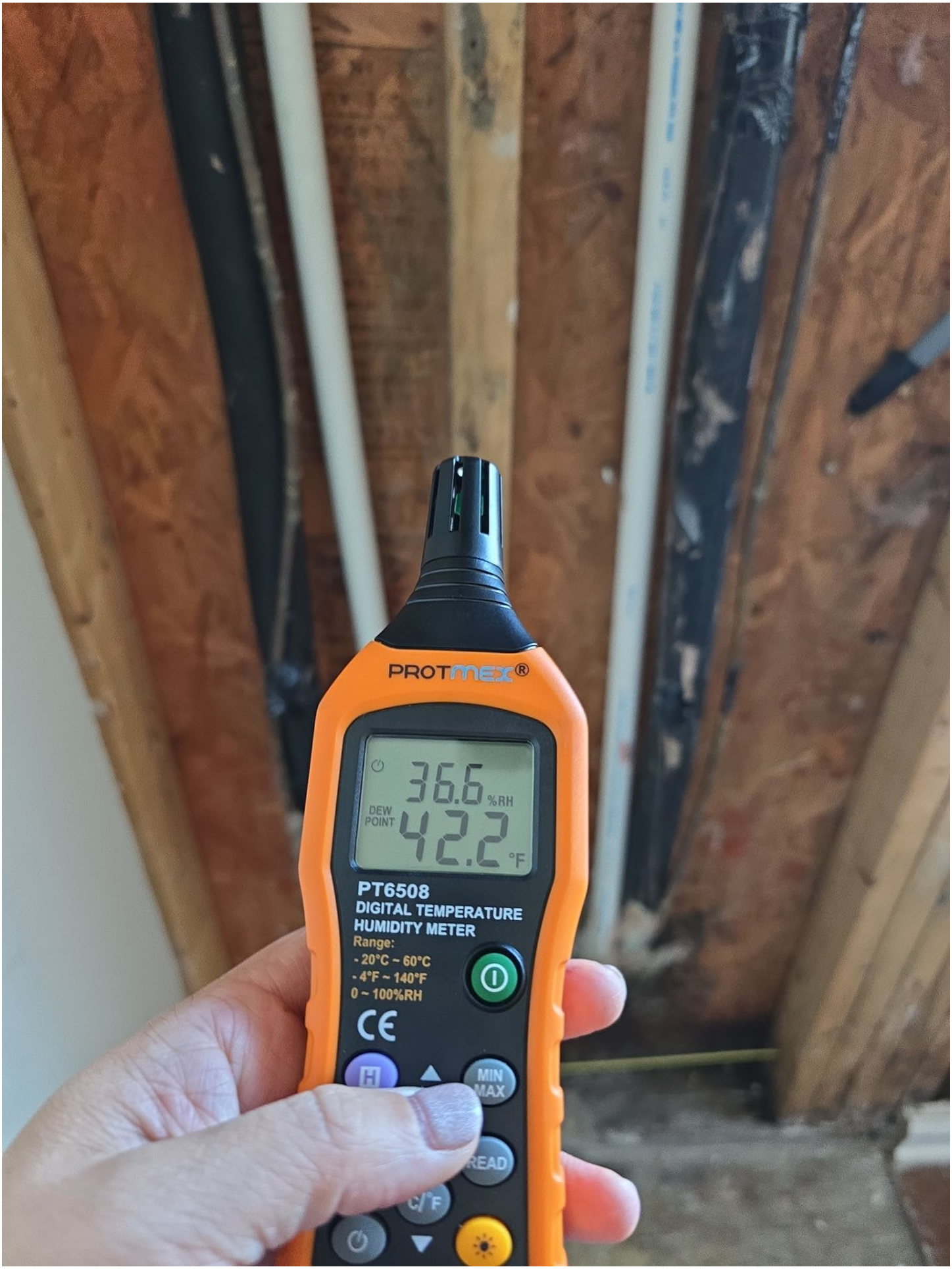
PROTMEX®
36.6 %RH
DEW POINT
42.2 °F
PT6508
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HUMIDITY METER
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- 4°F ~ 140°F
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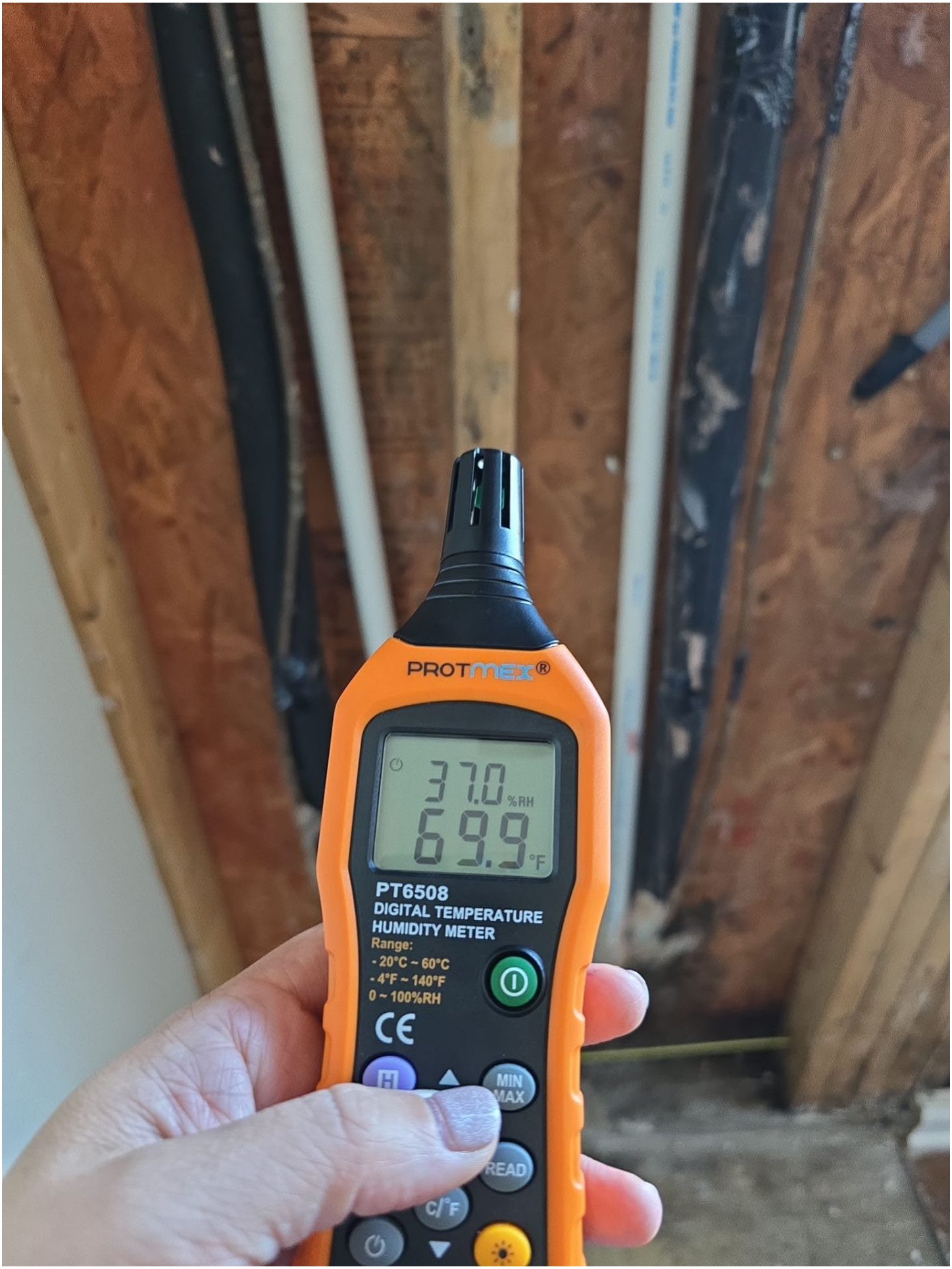
PROTMEX®
37.0 %RH
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- 20°C ~ 60°C
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