



•8786 Sonoma Coast Drive, Winter Garden, FL 34787  
•(407)614-4572 Office  
•(814)243-1927 Cell  
•dkenvironmental@yahoo.com  
•www.dk-environmental.com

©2024 DK Environmental & Construction Services, Inc. All rights reserved.

## ASBESTOS SURVEY REPORT

**PREPARED FOR THE FOLLOWING PROPERTY:**



1421 NW 17th Avenue  
Ocala, FL 34475

**PERFORMED ON:**

March 18, 2024

**PERFORMED AND PREPARED BY:**

Chris Ritko  
Asbestos Building Inspector  
193196

## TABLE OF CONTENTS

- I. INTRODUCTION
- II. SURVEY SUMMARY
- III. ASBESTOS OVERVIEW
- IV. LIMITATIONS
- V. ANALYTICAL RESULTS
- VI. ASBESTOS RECOMMENDATIONS
- VII. SAMPLING LOCATIONS FLOOR PLAN
- VIII. SAMPLING PHOTOGRAPHS
- IX. LICENSING
- X. GLOSSARY
- XI. ASBESTOS CONSULTANT LETTER
- XII. LABORATORY REPORT

**Confidentiality Notice:** This Asbestos Survey Report is intended only for the use of the individual or entity addressed, and may contain information that is privileged, confidential, and exempt from disclosure under applicable law. If you are not the intended recipient or responsible for delivering this report to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this report, in whole or in part, is prohibited. If you have received this report in error, please notify us immediately. Thank you.

## **I. INTRODUCTION**

**Property Address:** 1421 NW 17th Avenue  
Ocala, FL 34475

**Property Owner:** Coice Larkins

**Survey Performed For:** City of Ocala, Community Development Services  
201 SE 3<sup>rd</sup> Street, 2<sup>nd</sup> Floor, Ocala, FL 34471

**Survey Performed By:** Chris Ritko, Asbestos Building Inspector

**Company:** DK Environmental & Construction Services  
8786 Sonoma Coast Drive  
Winter Garden, FL 34787  
407-614-4572

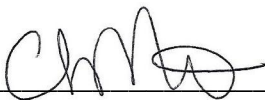
**Date of On-Site Survey:** March 18, 2024

**Date of Report:** March 29, 2024

DK Environmental & Construction Services, Inc. (DKE) has completed a limited Asbestos Survey at the property address listed above. This report contains the results of the Survey. The purpose of this Survey was to identify the presence of asbestos-containing materials that may be disturbed during planned renovation. This limited Asbestos Survey report presents data that describes the location of asbestos-containing material (ACM) identified in the subject property. This Survey was conducted on site by an EPA-trained professional asbestos building inspector.

This report is intended for the exclusive use of our client. The findings are relevant to the conditions observed during the physical process of performing the Survey. These findings should not be treated as absolute, nor should they be relied upon to represent conditions at significantly later dates.

We appreciate the opportunity to provide environmental consulting services to your organization. If you have any questions or need additional assistance, please call (321)401-5094.



---

Chris Ritko  
Asbestos Building Inspector  
193196

## **II. SURVEY SUMMARY**

On March 18, 2024 an Asbestos Survey was performed at 1421 NW 17th Avenue, Ocala, FL 34475. The property is a single-family detached dwelling. It is approximately 942 square feet and was constructed in 1967.

The purpose of this Survey was to identify the presence of asbestos-containing materials that may be disturbed during planned renovation. Limited bulk samples were collected and AHERA protocols were adhered to.

The detached exterior shed was not inspected at the request of the client.

The Asbestos Survey consisted of three basic procedures: 1) conducting a visual inspection of the property; 2) identifying homogeneous areas (HAs) of suspect surfacing, thermal system insulation, and miscellaneous materials; and 3) sampling accessible, friable, and non-friable suspect materials. Some building components may have been inaccessible at the time of this screening, or were not tested because they were covered by other building materials (paneling, tile, siding, etc.). It is possible that ACBMs may be hidden by these materials.

The property was visually inspected for the presence of building materials that are suspected to contain asbestos. With regard to asbestos, bulk material samples were collected and analyzed for asbestos content. These services were performed exercising the customary skill and competence of consulting professionals in the relevant disciplines in this region.

Bulk samples of identified suspect ACM were collected and placed into individual containers for transport to a National Voluntary Lab Accreditation Program (NVLAP)/American Industrial Hygiene Association (AIHA)-accredited laboratory for analysis. The collection of bulk samples consisted of physically removing a small piece of material and placing it in a marked, airtight container. The sample container identification numbers were also recorded in the field notes.

## **III. ASBESTOS OVERVIEW**

Asbestos is a generic name given to a fibrous variety of naturally occurring minerals that have been used for many years in commercial products, based on specific properties of the minerals. Asbestos occurs in fiber bundles, which are composed of long and thin fibers that can be easily separated from one another. These mineral products possess high tensile strength, flexibility, resistance to chemical and thermal degradation, and high electrical resistance. The minerals are easily woven into various types of textiles, fabrics, cloths, sheets, panels, or mixed into adhesives, coatings, surfacing materials and cement products. Typically asbestos-containing building materials (ACBM) are segregated into three categories: Thermal System Insulation (TSI) usually found on pipes, boilers, and HVAC ducts; surfacing materials such as sprayed or troweled-on fireproofing and insulation, and plasters; and miscellaneous materials including

vinyl composite floor tiles, floor sheeting, adhesives, roofing materials, window glazing and cement products.

*Friable* asbestos-containing material (ACM), is defined as any material containing more than one percent (1%) asbestos as determined using the method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1, Polarized Light Microscopy (PLM), that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure. (Sec. 61.141)

*Nonfriable* ACM is any material containing more than one percent (1%) asbestos as determined using the method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1, Polarized Light Microscopy (PLM), that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure. EPA also defines two categories of nonfriable ACM, Category I and Category II nonfriable ACM, which are described later in this guidance.

*"Regulated Asbestos-Containing Material"* (RACM) is (a) friable asbestos material, (b) Category I nonfriable ACM that has become friable, (c) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting or abrading, or (d) Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

The EPA's National Emission Standard for Hazardous Air Pollutants (NESHAP) regulations and the Florida Department of Environmental Protection (FDEP) Asbestos program regulate the removal and disposal of asbestos-containing building materials (any material containing more than 1% asbestos).

Potential effects on workers or occupants in buildings where asbestos-containing materials (ACM) are present may occur when exposure to asbestos fibers is caused by deterioration, damage or renovation disturbance of ACMs. Federal regulations pertaining to asbestos include 40 Code of Federal Regulations (CFR) 763 (a subchapter of the Toxic Substance Control Act (TSCA)); Occupational Safety and Health Act (OSHA) 29 CFR 1910 Subpart Z and 29 CFR 1926 Subpart Z.

***Asbestos NESHAP regulations must be followed for demolitions and/or renovations of facilities with at least 260 linear feet of regulated asbestos-containing materials (RACM) on pipes, 160 square feet of regulated asbestos-containing materials on other facility components, or at least 35 cubic feet of facility components where the amount of RACM previously removed from pipes and other facility components could not be measured before stripping. If dimensions fall below these thresholds, Asbestos NESHAP regulations need not be followed for demolition and/or renovation activities.***



#### **IV. LIMITATIONS**

This report has been prepared to assist in evaluating the potential presence of asbestos-containing material in the property. The objective of this assessment was to perform the work with care, exercising the customary skill and competence of consulting professionals in the relevant disciplines in this region. The conclusions presented in this report are professional opinions based upon visual observations of the site at the time of DKE's investigation and the results of laboratory analysis. The opinions presented herein apply to site conditions existing at the time of our investigation and those reasonably foreseeable. DKE cannot act as insurers, and no express or implied representation or warrant is included or intended in our report except that our work was performed, within the limits prescribed by our client, with the customary thoroughness and competence of our profession at the time and place the services were rendered. DKE cannot and will not warrant that this Asbestos Survey that was requested by the client will satisfy the dictates of, or provide a legal defense in connection with, any environmental laws or regulations. It is the responsibility of the client to know and abide by all applicable laws, regulations, and standards. The results reported and conclusions reached by DKE are solely for the benefit of the client. The results and opinions in this report, based solely upon the conditions found on the property as of the date of the Survey, will be valid only as of the date of the Survey.

Please note that the test results relate only to those homogeneous materials tested. If conditions or materials, other than those addressed in this report are encountered during the planned renovation/demolition activities, DKE should be contacted to assess the potential impact of these materials or conditions relative to the findings or recommendations included herein. The survey was performed by observing suspect materials throughout the structure where accessible. DKE must emphasize that it is not possible to look within every location of a building. The visual survey documents only general locations of suspect materials but does not determine exact boundaries. Concealed locations of asbestos may exist at the subject property, and the levels may vary from those stated in this report. There may be variations in the composition of materials which appear similar. Materials may be hidden from view and not accessible. No attempt was made to disassemble equipment or demolish structural elements and finishes as this is beyond the scope of our authorized services. Visual observations were made only at safe and convenient locations. Due to these limitations, wall voids, flooring under carpet, building cavities and mechanical equipment, and other areas may contain unreported asbestos-containing materials. Suspect materials not previously identified in this report may be encountered during any renovation/demolition activity. These materials should be assumed asbestos containing material until sample collection and subsequent analysis prove otherwise. Unsafe structures should be assumed to contain asbestos materials unless the suspect material is noted as sampled. All fire doors should be assumed asbestos containing material since disassembly of locks and/or other work to access the door insulation is not possible.

## V. ANALYTICAL RESULTS

Samples were analyzed by Hayes Microbial Consulting in Midlothian, VA. Hayes Microbial Consulting is an American Industrial Hygiene Association (AIHA)-accredited laboratory.

All samples were analyzed utilizing Polarized Light Microscopy (PLM) according to EPA Method 600/R-93/116. Any material that contains greater than one percent asbestos is considered an ACM and must be handled according to the Occupational Safety and Health Administration (OSHA), EPA and applicable state and local regulations.

The following table contains information regarding bulk samples found to contain asbestos by definition. The laboratory report has also been included at the end of this report.

<b>Bulk Collection and Sample Analysis Results</b>						
<i>Sample Number</i>	<i>Description</i>	<i>Condition</i>	<i>Friable</i>	<i>Asbestos Percent and Type</i>	<i>Location/ Amount</i>	<i>NESHAP Category</i>
1421-1-1	Asphalt Shingle/Black	Intact	No	None Detected	Typical Exterior Roof	NA
1421-1-2	Asphalt Shingle/Black	Intact	No	None Detected	Typical Exterior Roof	NA
1421-2-1	Rolled Asphalt Roofing/ Black	Intact	No	None Detected	Typical Exterior Roof	NA
1421-2-2	Rolled Asphalt Roofing/ Black	Intact	No	None Detected	Typical Exterior Roof	NA
1421-3-1	Cement Board/Brown	Intact	No	None Detected	Typical Exterior Upper Walls	NA
1421-3-2	Cement Board/Brown	Intact	No	None Detected	Typical Exterior Upper Walls	NA
1421-4-1	Caulk/White	Intact	No	None Detected	Typical Exterior Windows	NA
1421-4-2	Caulk/White	Intact	No	None Detected	Typical Exterior Windows	NA
1421-5-1	Joint Compound/White	Intact	No	None Detected	Typical Interior Walls/Ceilings	NA
1421-5-1	Drywall/White	Intact	No	None Detected	Typical Interior Walls/Ceilings	NA
1421-5-2	Joint Compound/White	Intact	No	None Detected	Typical Interior Walls/Ceilings	NA

### ***Bulk Collection and Sample Analysis Results***

<i>Sample Number</i>	<i>Description</i>	<i>Condition</i>	<i>Friable</i>	<i>Asbestos Percent and Type</i>	<i>Location/ Amount</i>	<i>NESHAP Category</i>
1421-5-2	Drywall/White	Intact	No	None Detected	Typical Interior Walls/Ceilings	NA
1421-5-3	Joint Compound/White	Intact	No	None Detected	Typical Interior Walls/Ceilings	NA
1421-5-3	Drywall/White	Intact	No	None Detected	Typical Interior Walls/Ceilings	NA
1421-6-1	Plaster/Rough Coat/ Off-White	Intact	No	None Detected	Typical Interior Walls	NA
1421-6-2	Plaster/Rough Coat/Gray	Intact	No	None Detected	Typical Interior Walls	NA
1421-6-3	Plaster/Rough Coat/Gray	Intact	No	None Detected	Typical Interior Walls	NA
1421-7-1	Rolled Flooring/Yellow	Intact	No	None Detected	Interior Kitchen	NA
1421-7-1	Adhesive/Yellow	Intact	No	None Detected	Interior Kitchen	NA
1421-7-2	Rolled Flooring/Yellow	Intact	No	None Detected	Interior Kitchen	NA
1421-7-2	Adhesive/Yellow	Intact	No	None Detected	Interior Kitchen	NA
1421-8-1	Caulk/White	Intact	No	None Detected	Typical Interior Windows	NA
1421-8-2	Caulk/White	Intact	No	None Detected	Typical Interior Windows	NA
<b>1421-9-1</b>	<b>Popcorn Texture/White</b>	<b>Intact</b>	<b>Yes</b>	<b>2% Chrysotile</b>	<b>Interior Hall Ceiling (Appx 14 sf)</b>	<b>RACM</b>
<b>1421-9-2</b>	<b>Popcorn Texture/White</b>	<b>Intact</b>	<b>Yes</b>	<b>Not Analyzed/ Positive Stop</b>	<b>Interior Hall Ceiling (Appx 14 sf)</b>	<b>RACM</b>
<b>1421-9-3</b>	<b>Popcorn Texture/White</b>	<b>Intact</b>	<b>Yes</b>	<b>Not Analyzed/ Positive Stop</b>	<b>Interior Hall Ceiling (Appx 14 sf)</b>	<b>RACM</b>
1421-10-1	12"x12" Ceiling Tile/White	Intact	No	None Detected	Typical Interior Bedroom Closets/ Hall	NA
1421-10-2	12"x12" Ceiling Tile/White	Intact	No	None Detected	Typical Interior Bedroom Closets/ Hall	NA



## VI. ASBESTOS RECOMMENDATIONS

***Asbestos NESHAP regulations must be followed for demolitions and/or renovations of facilities with at least 260 linear feet of regulated asbestos-containing materials (RACM) on pipes, 160 square feet of regulated asbestos-containing materials on other facility components, or at least 35 cubic feet of facility components where the amount of RACM previously removed from pipes and other facility components could not be measured before stripping. If dimensions fall below these thresholds, Asbestos NESHAP regulations need not be followed for demolition and/or renovation activities.***

The EPA and NESHAP recommend that a point-counting procedure be utilized for confirmation of asbestos percentage in friable materials that are visually estimated by PLM methodology to contain less than 10% asbestos. The 400 Point Count Procedure referenced in EPA 600/M4-82-020 (1987) and EPA 600/R-93/116 (1993) is commonly employed. Without the material being point counted or if point counting determined that material contains greater than one percent asbestos, it would be deemed an asbestos containing material and would need to be removed by a Florida licensed asbestos contractor prior to disturbance.

Disturbances to Asbestos Containing Materials:

- Should be performed by a Florida Licensed Asbestos Abatement Contractor
- U.S. Occupational Safety and Health Administration (OSHA) regulations apply to the disturbance of material; containing any percentage of asbestos fibers as outlined in 29 CFR 1926.1101-OSHA's Asbestos Standard for the Construction Industry. The contractor will need to comply with the specific training, duties and responsibilities outlined in this CFR.
- OSHA 29 CFR 1910.1001. OSHA 29 CFR 1910.1001 requires the communication of information concerning asbestos hazards. Employees engaged in work activities with installed ACM may be exposed to asbestos fibers. The owner or operator should take the necessary steps to reduce the potential for disturbance.

EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) is applicable to amounts of asbestos that contains at least 260 linear feet on pipes or at least 160 square feet on other facility components, or (ii) At least 35 cubic feet off facility components where the length or area could not be measured previously.

The EPA's National Emission Standard for Hazardous Air Pollutants (NESHAP) regulations and the Florida Department of Environmental Protection (DEP) Asbestos program regulate the removal and disposal of asbestos-containing building materials. The Florida Department of Environmental Protection (DEP) administers an asbestos removal program under Chapter 62-257, Florida

Administrative Code. The Asbestos NESHAP has been adopted by reference in section 62-204.800, Florida Administrative Code. The program's intent is to minimize the release of asbestos fibers during activities involving the processing, handling, and disposal of asbestos-containing material.

The regulations of these agencies require the removal of friable asbestos-containing materials prior to extensive renovation or demolition projects, and the removal of non-friable asbestos-containing materials that may be rendered friable in the course of renovation or demolition projects. Only a Florida licensed asbestos contractor using properly trained, certified, and licensed asbestos workers can perform asbestos removal projects in Florida. Air monitoring during and after abatement activities is also recommended to document the fiber levels inside and outside the abatement work area.

The asbestos NESHAP requires that an asbestos trained person be on site i.e. 40 CFR 61.145 (c) (8) states in part "no RACM shall be stripped, removed, or otherwise handled or disturbed at a facility regulated by this section unless at least one on-site representative, such as a foreman or management level person or other authorized person, trained in the provisions of this regulation and the means of complying with them is present."

DEP recommends that this "trained person" be on site when non-friable ACM is present so that developing problems can be caught early and corrected without delay. In addition, the regulations require the owner of the building and/or the operator to notify the applicable DEP District Office or Local Pollution Control Agency before any demolition, or before renovations of buildings that contain a certain threshold amount of asbestos or asbestos containing materials.

Florida requires the submission of a 10-Day Notification for all renovations and demolitions of facilities with at least 260 linear feet of regulated asbestos-containing materials (RACM), 160 square feet of regulated asbestos containing materials on other facility components, or at least 35 cubic feet off facility components. Asbestos waste requires disposal at an approved solid waste disposal facility.

Local agencies may also have specific requirements for demolition/renovation projects involving asbestos-containing building materials.

OSHA 29 CFR 1910.1001 requires the communication of information concerning asbestos hazards. Employees engaged in work activities with installed ACM may be exposed to asbestos fibers. The owner or operator should take the necessary steps to reduce the potential for disturbance.

29 CFR 1926.1101- OSHA's Asbestos Standard for the Construction Industry does apply to the abatement, renovation and/or demolition of all buildings identified with asbestos containing material. The contractor will need to comply with the specific training, duties and responsibilities outlined in this CFR.

If asbestos containing materials identified within, or on, the property will be disturbed or otherwise caused to become friable within the scope of the renovation, they should be removed from the structures prior to the maneuvers taking place according to applicable regulations.

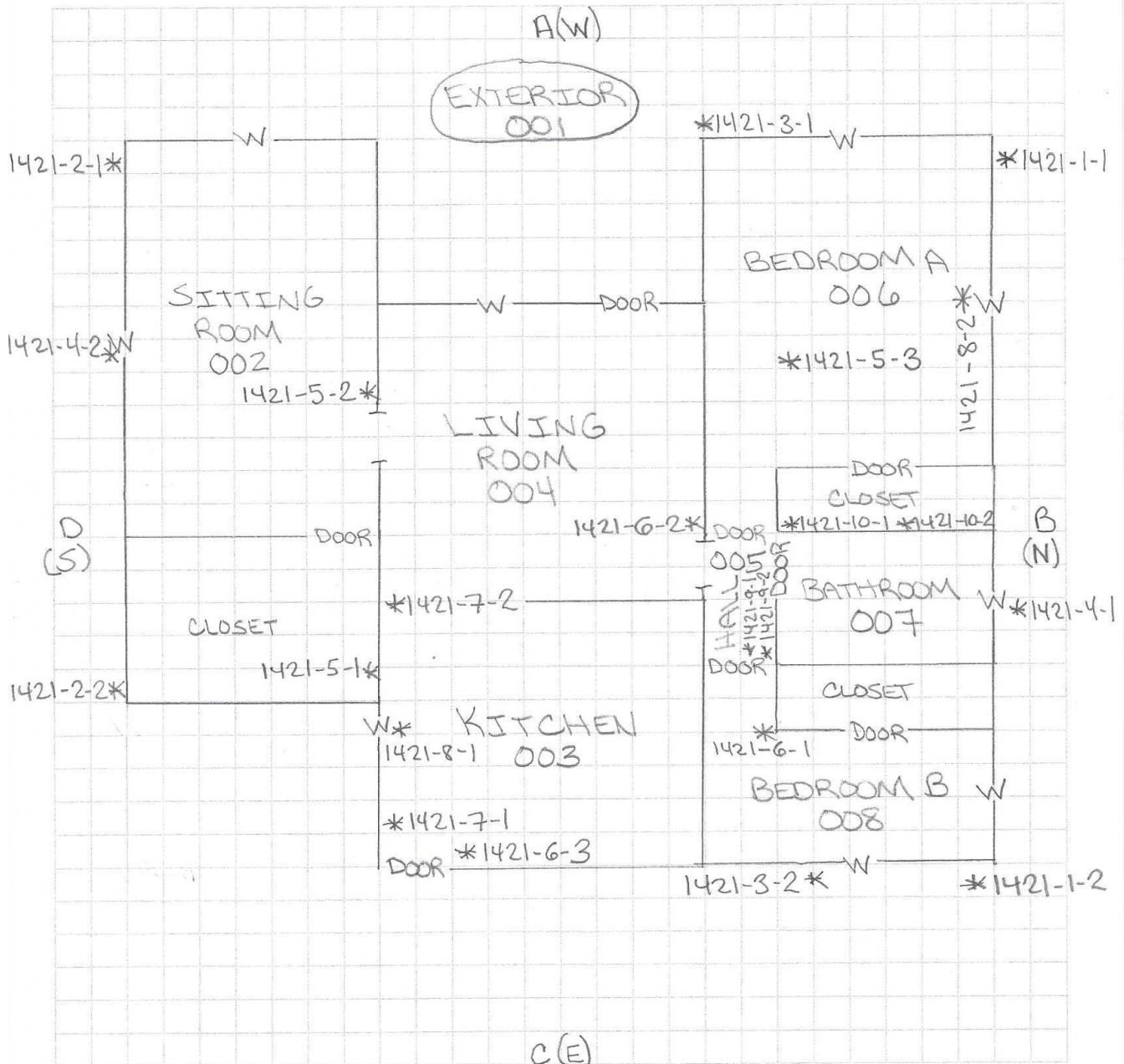
No other recommendations regarding asbestos containing materials are required at this time. In the event concealed building materials are discovered during future renovation or demolition activities, which are suspected to contain asbestos, the materials should be sampled and analyzed to confirm the presence of asbestos prior to the disturbing such materials.

## VII. SAMPLING LOCATIONS FLOOR PLAN



DK Environmental & Construction Services, Inc.  
8786 Sonoma Coast Drive, Winter Garden, FL 34787  
407-614-4572 814-243-1927  
dkenvironmental@yahoo.com

## SITE PLAN



Case # \_\_\_\_\_

Address 1421 NW 17<sup>th</sup> Avenue  
Ocala, FL 34475



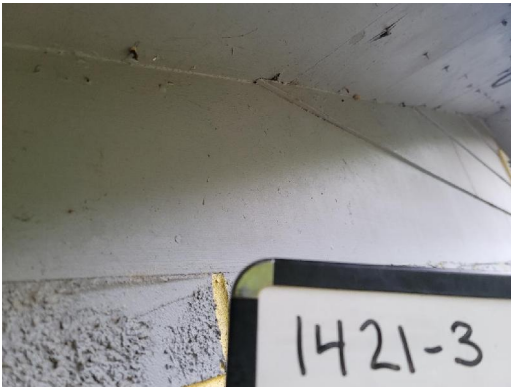
## VIII. SAMPLING PHOTOGRAPHS



1421-1  
Asphalt Shingle  
Typical Exterior Roof



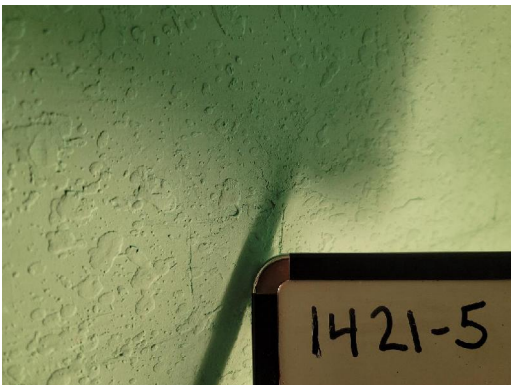
1421-2  
Rolled Asphalt Roofing  
Typical Exterior Roof



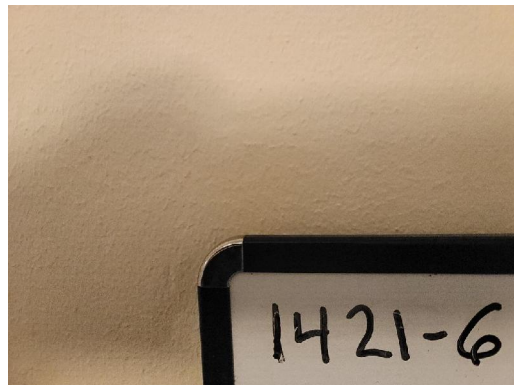
1421-3  
Cement Board  
Typical Exterior Upper Walls



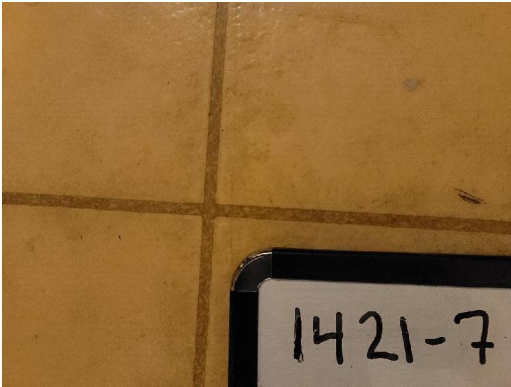
1421-4  
Caulk  
Typical Exterior Windows



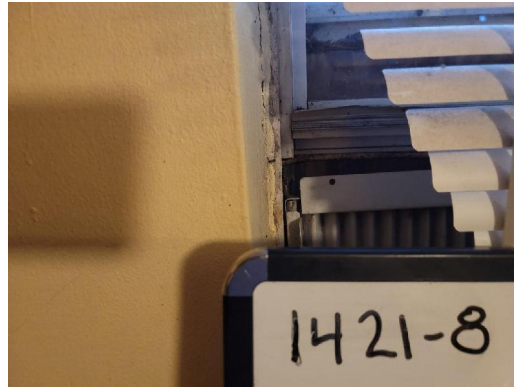
1421-5  
Drywall/Joint Compound  
Typical Interior Walls/Ceilings



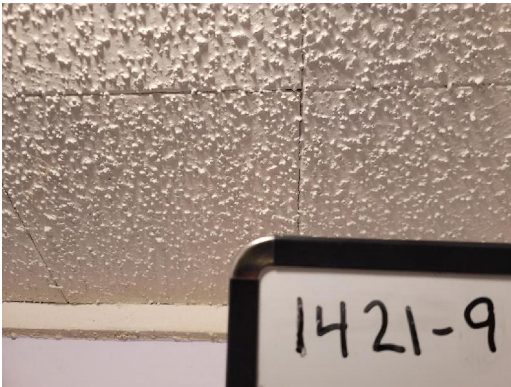
1421-6  
Plaster  
Typical Interior Walls



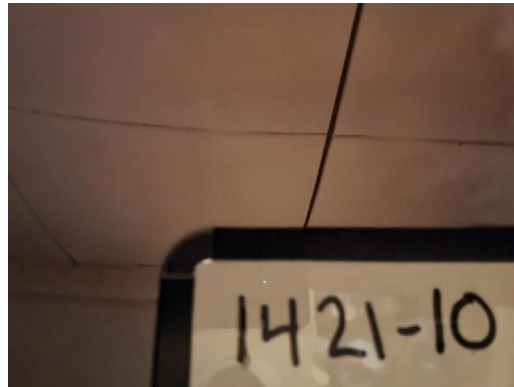
1421-7  
Rolled Flooring/Adhesive  
Interior Kitchen



1421-8  
Caulk  
Typical Interior Windows



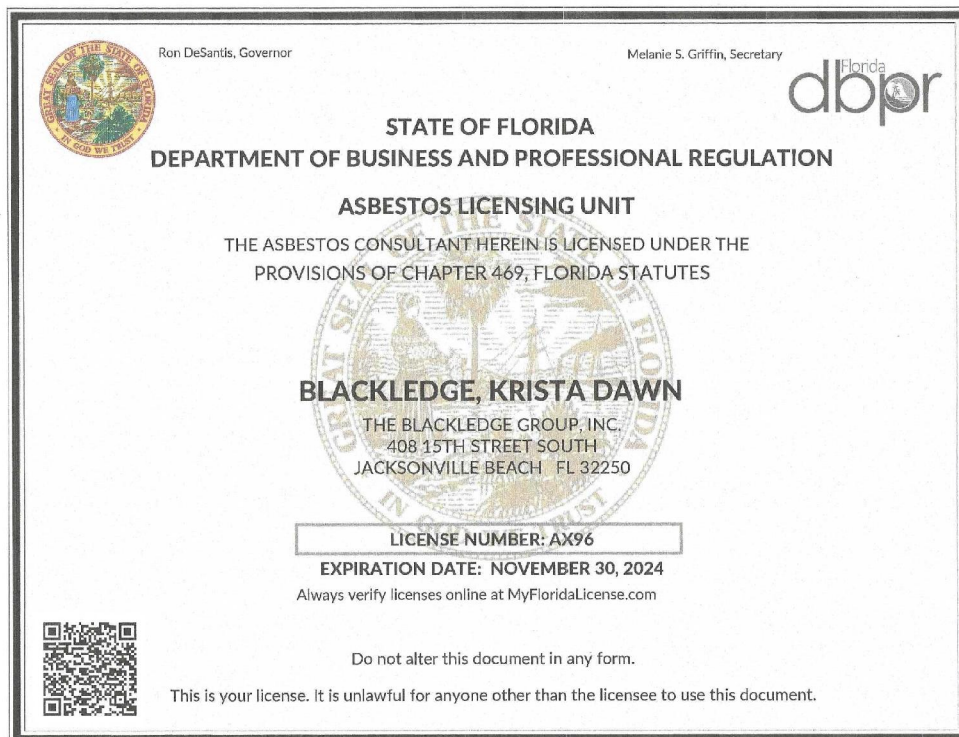
1421-9  
Popcorn Ceiling Texture/White  
(2% Chrysotile)  
Interior Hall  
(Approximately 14 sf)



1421-10  
12"x12" Ceiling Tile  
Typical Interior Bedroom Closets/Hall



## IX. LICENSING



## **X. GLOSSARY**

**Active waste disposal site:** any disposal site other than an inactive site.

**Adequately wet:** sufficiently mix or penetrate with liquid to prevent the release of particulates. If visible emissions are observed coming from asbestos-containing material, then that material has not been adequately wetted. However, the absence of visible emissions is not sufficient evidence of being adequately wet.

**Asbestos:** the asbestiform varieties of serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite, anthophyllite, and actinolite-tremolite.

**Asbestos-containing waste materials:** mill tailings or any waste that contains commercial asbestos and is generated by a source subject to the provisions of this subpart. This term includes filters from control devices, friable asbestos waste material, and bags or other similar packaging contaminated with commercial asbestos. As applied to demolition and renovation operations, this term also includes regulated asbestos-containing material waste and materials contaminated with asbestos including disposable equipment and clothing.

**Asbestos mill:** any facility engaged in converting, or in any intermediate step in converting, asbestos ore into commercial asbestos. Outside storage of asbestos material is not considered a part of the asbestos mill.

**Asbestos tailings:** any solid waste that contains asbestos and is a product of asbestos mining or milling operations.

**Asbestos waste from control devices:** any waste material that contains asbestos and is collected by a pollution control device.

**Category I nonfriable asbestos-containing material (ACM):** asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than 1 percent asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy.

**Category II nonfriable ACM:** any material, excluding Category I nonfriable ACM, containing more than 1 percent asbestos as determined using the methods specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

**Commercial asbestos:** any material containing asbestos that is extracted from ore and has value because of its asbestos content.

**Cutting:** to penetrate with a sharp-edged instrument and includes sawing, but

does not include shearing, slicing, or punching.

**Demolition:** the wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations or the intentional burning of any facility.

**Emergency renovation operation:** a renovation operation that was not planned but results from a sudden, unexpected event that, if not immediately attended to, presents a safety or public health hazard, is necessary to protect equipment from damage, or is necessary to avoid imposing an unreasonable financial burden. This term includes operations necessitated by nonroutine failures of equipment.

**Fabricating:** any processing (e.g., cutting, sawing, drilling) of a manufactured product that contains commercial asbestos, with the exception of processing at temporary sites (field fabricating) for the construction or restoration of facilities. In the case of friction products, fabricating includes bonding, debonding, grinding, sawing, drilling, or other similar operations performed as part of fabricating.

**Facility:** any institutional, commercial, public, industrial, or residential structure, installation, or building (including any structure, installation, or building containing condominiums or individual dwelling units operated as a residential cooperative, but excluding residential buildings having four or fewer dwelling units); any ship; and any active or inactive waste disposal site. For purposes of this definition, any building, structure, or installation that contains a loft used as a dwelling is not considered a residential structure, installation, or building. Any structure, installation or building that was previously subject to this subpart is not excluded, regardless of its current use or function.

**Facility component:** any part of a facility including equipment.

**Friable asbestos material:** any material containing more than 1 percent asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763 section 1, Polarized Light Microscopy, that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10 percent as determined by a method other than point counting by polarized light microscopy (PLM), verify the asbestos content by point counting using PLM.

**Fugitive source:** any source of emissions not controlled by an air pollution control device.

**Glove bag:** a sealed compartment with attached inner gloves used for the handling of asbestos-containing materials. Properly installed and used, glove bags provide a small work area enclosure typically used for small-scale asbestos stripping operations. Information on glove-bag installation, equipment and supplies, and work practices is contained in the Occupational Safety and Health

Administration's (OSHA's) final rule on occupational exposure to asbestos (appendix G to 29 CFR 1926.58).

**Grinding:** to reduce to powder or small fragments and includes mechanical chipping or drilling.

**In poor condition:** the binding of the material is losing its integrity as indicated by peeling, cracking, or crumbling of the material.

**Inactive waste disposal site:** any disposal site or portion of it where additional asbestos-containing waste material has not been deposited within the past year. Installation means any building or structure or any group of buildings or structures at a single demolition or renovation site that are under the control of the same owner or operator (or owner or operator under common control).

**Leak-tight:** solids or liquids cannot escape or spill out. It also means dust-tight.

**Malfunction:** any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner so that emissions of asbestos are increased. Failures of equipment shall not be considered malfunctions if they are caused in any way by poor maintenance, careless operation, or any other preventable upset conditions, equipment breakdown, or process failure.

**Manufacturing:** the combining of commercial asbestos-or, in the case of woven friction products, the combining of textiles containing commercial asbestos-with any other material(s), including commercial asbestos, and the processing of this combination into a product. Chlorine production is considered a part of manufacturing.

**Natural barrier:** a natural object that effectively precludes or deters access. Natural barriers include physical obstacles such as cliffs, lakes or other large bodies of water, deep and wide ravines, and mountains. Remoteness by itself is not a natural barrier.

**Nonfriable asbestos-containing material:** any material containing more than 1 percent asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy, that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

**Nonscheduled renovation operation:** a renovation operation necessitated by the routine failure of equipment, which is expected to occur within a given period based on past operating experience, but for which an exact date cannot be predicted.

**Outside air:** the air outside buildings and structures, including, but not limited to, the air under a bridge or in an open air ferry dock.

**Owner or operator of a demolition or renovation activity:** any person who owns, leases, operates, controls, or supervises the facility being demolished or renovated or any person who owns, leases, operates, controls, or supervises the demolition or renovation operation, or both.

**Particulate asbestos material:** finely divided particles of asbestos or material containing asbestos.

**Planned renovation operations:** a renovation operation, or a number of such operations, in which some RACM will be removed or stripped within a given period of time and that can be predicted. Individual nonscheduled operations are included if a number of such operations can be predicted to occur during a given period of time based on operating experience.

**Regulated asbestos-containing material (RACM):** (a) Friable asbestos material, (b) Category I nonfriable ACM that has become friable, (c) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this subpart.

**Remove:** to take out RACM or facility components that contain or are covered with RACM from any facility.

**Renovation:** altering a facility or one or more facility components in any way, including the stripping or removal of RACM from a facility component. Operations in which load-supporting structural members are wrecked or taken out are demolitions.

**Resilient floor covering:** asbestos-containing floor tile, including asphalt and vinyl floor tile, and sheet vinyl floor covering containing more than 1 percent asbestos as determined using polarized light microscopy according to the method specified in appendix E, subpart E, 40 CFR part 763, Section 1, Polarized Light Microscopy.

**Roadways:** surfaces on which vehicles travel. This term includes public and private highways, roads, streets, parking areas, and driveways.

**Strip:** to take off RACM from any part of a facility or facility components.



**Structural member:** any load-supporting member of a facility, such as beams and load supporting walls; or any nonload-supporting member, such as ceilings and nonload-supporting walls.

**Visible emissions:** any emissions, which are visually detectable without the aid of instruments, coming from RACM or asbestos-containing waste material, or from any asbestos milling, manufacturing, or fabricating operation. This does not include condensed, uncombined water vapor.

**Waste generator:** any owner or operator of a source covered by this subpart whose act or process produces asbestos-containing waste material.

**Waste shipment record:** the shipping document, required to be originated and signed by the waste generator, used to track and substantiate the disposition of asbestos-containing waste material.

**Working day:** Monday through Friday and includes holidays that fall on any of the days Monday through Friday.





March 25, 2024

City of Ocala  
Community Development Services  
201 SE 3<sup>rd</sup> Street, 2<sup>nd</sup> Floor  
Ocala, FL 34471

**RE: Limited Asbestos Survey  
Single-Family Detached Dwelling  
1421 NW 17<sup>th</sup> Avenue  
Ocala, FL 34475**

Dear Client:

Pursuant to your request, a limited Asbestos Survey was performed at the referenced property. The survey was performed to visually identify homogenous areas that need to have bulk samples collected for laboratory analysis in order to determine the presence of Asbestos-Containing Building Materials within the structure. The scope of work for this survey included sampling and analysis of suspect building materials. On March 18, 2024, a limited Asbestos Survey was performed at 1421 NW 17<sup>th</sup> Avenue, Ocala, Florida. The property consists of an approximate 942 square-foot single-family detached dwelling constructed in 1967. The structure is scheduled for renovation.

Twenty-three (23) samples of suspect materials were collected and submitted to Hayes Microbial Consulting (Hayes), an American Industrial Hygiene Association (AIHA)-accredited laboratory in, Midlothian, VA, for laboratory analysis. Due to the presence of additional layers in the collected samples, 28 samples were identified and analyzed by the laboratory. All samples were analyzed utilizing Polarized Light Microscopy (PLM) according to EPA Method 600/R-93/116. Materials must contain greater than 1% asbestos to be regulated.

Analytical results revealed that one homogeneous area contained asbestos in concentrations >1% by PLM analysis, as follows:

- Sample 1421-9-1, Popcorn Texture/White, Hall ceiling, showed 2% Chrysotile Asbestos

Popcorn Texture is a Regulated Asbestos Containing Material (RACM). RACMs must be removed by a licensed asbestos abatement contractor following OSHA Class I work activities and disposed of at a class one landfill prior to renovation, remodeling or demolition of the building.

Due to the presence of ACM, OSHA's Asbestos Standard for the Construction Industry (29 CFR 1926.1101) must be followed. Any renovation, remodeling, or demolition of RACMs must be handled by a State Licensed Contractor under Florida Administrative Code (F.A.C.) Title XXXII Chapter 469 for Asbestos Abatement. If the materials contain asbestos that is less than or equal to 1%, the contractor must observe the asbestos permissible exposure limits (PELs) and 29 CFR 1926.1101.

In accordance with the OSHA Asbestos Standard for the Construction Industry (29 CFR 1926.1101), demolition of a building with ACM left in place falls under the definition of removal of installed ACM. The removal of installed ACM is either Class I or Class II asbestos work, and all applicable requirements of this

standard apply. Whether such demolition is Class I asbestos work or Class II asbestos work is determined by the type of ACM left in place. If any asbestos-containing thermal system insulation or surfacing material is left installed in the building, then the work being performed is Class I asbestos work. If the ACM left installed in the building does not include any thermal system insulation or surfacing material, then the work being performed is Class II asbestos work.

Suspect ACMs encountered during renovation/demolition activities that are not identified in this survey should be assumed to contain asbestos or be sampled by an AHERA-certified inspector and analyzed by an accredited laboratory.

Sincerely,

A handwritten signature in blue ink, reading "K. Dawn Blackledge". The signature is fluid and cursive, with the first name "K. Dawn" and last name "Blackledge" clearly distinguishable.

K. Dawn Blackledge, P.G., LAC  
Senior Project Engineer  
Licensed Asbestos Consultant AX96  
Asbestos Consulting License #ZA539

Analysis Report prepared for

## DK Environmental & Construction Services, Inc.

8786 Sonoma Coast Drive  
Winter Garden, FL 34787

Phone: (814) 243-1927

1421 NW 17th Avenue  
Ocala, FL 34475

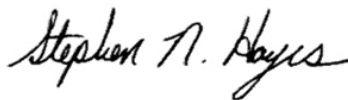
Collected: **March 18, 2024**  
Received: **March 21, 2024**  
Reported: **March 22, 2024**

We would like to thank you for trusting Hayes Microbial for your analytical needs!  
We received 23 samples by FedEx in good condition for this project on March 21st, 2024.

The results in this analysis pertain only to this job, collected on the stated date, and should not be used in the interpretation of any other job. Information supplied by the customer can affect the validity of results. These results apply only to the samples as received. This report may not be duplicated, except in full, without the written consent of Hayes Microbial Consulting, LLC.

All information provided to Hayes Microbial is confidential information relating to our customers and their clients. We will not disclose, copy, or distribute any information verbally or written, except to those designated by the customer(s). We take confidentiality very seriously. No changes to the distribution list will be made without the express consent of the customer.

This laboratory bears no responsibility for sample collection activities, analytical method limitations, or your use of the test results. Interpretation and use of test results are your responsibility. Any reference to health effects or interpretation of mold levels is strictly the opinion of Hayes Microbial. In no event, shall Hayes Microbial or any of its employees be liable for lost profits or any special, incidental or consequential damages arising out of the use of these test results.



Steve Hayes, BSMT(ASCP)  
Laboratory Director  
Hayes Microbial Consulting, LLC.



EPA Laboratory ID: VA01419



Lab ID: #188863



DPH License: #PH-0198

**Asbestos PLM Bulk**

EPA 600/R-93/116; EPA 40 CFR Appendix E to Subpart E of Part 763

#	Sample	Material Description	Non-Fibrous	Non-Asbestos Fibers	Asbestos Fibers
1	1421-1-1 - Asphalt Shingle / Typical Exterior Roof	Heterogenous / Shingle / Black	85%	15% Fiberglass	None Detected
2	1421-1-2 - Asphalt Shingle / Typical Exterior Roof	Heterogenous / Shingle / Black	85%	15% Fiberglass	None Detected
3	1421-2-1 - Rolled Asphalt Roofing / Typical Exterior Roof	Heterogenous / Shingle / Black	85%	15% Fiberglass	None Detected
4	1421-2-2 - Rolled Asphalt Roofing / Typical Exterior Roof	Heterogenous / Shingle / Black	85%	15% Fiberglass	None Detected
5	1421-3-1 - Cement Board / Exterior Upper Walls	Homogenous / Fibrous / Brown	2%	98% Cellulose Fibers	None Detected
6	1421-3-2 - Cement Board / Exterior Upper Walls	Homogenous / Fibrous / Brown	2%	98% Cellulose Fibers	None Detected
7	1421-4-1 - Caulk / Typical Exterior Windows	Homogenous / Caulk / White	100%		None Detected
8	1421-4-2 - Caulk / Typical Exterior Windows	Homogenous / Caulk / White	100%		None Detected
9	1421-5-1 - Drywall / Joint Compound / Typical Interior Walls, Ceilings	Homogenous / Joint Compound / White	100%		None Detected
		Heterogenous / Drywall / White	95%	5% Cellulose Fibers	None Detected

**Asbestos PLM Bulk**

EPA 600/R-93/116; EPA 40 CFR Appendix E to Subpart E of Part 763

#	Sample	Material Description	Non-Fibrous	Non-Asbestos Fibers	Asbestos Fibers
10	1421-5-2 - Drywall / Joint Compound / Typical Interior Walls, Ceilings	Homogenous / Joint Compound / White	100%		None Detected
		Heterogenous / Drywall / White	95%	5% Cellulose Fibers	None Detected
11	1421-5-3 - Drywall / Joint Compound / Typical Interior Walls, Ceilings	Homogenous / Joint Compound / White	100%		None Detected
		Heterogenous / Drywall / White	95%	5% Cellulose Fibers	None Detected
12	1421-6-1 - Plaster / Typical Interior Walls	Heterogenous / Rough Coat / Off-White	100%		None Detected
13	1421-6-2 - Plaster / Typical Interior Walls	Heterogenous / Rough Coat / Gray	100%		None Detected
14	1421-6-3 - Plaster / Typical Interior Walls	Heterogenous / Rough Coat / Gray	100%		None Detected
15	1421-7-1 - Rolled Flooring / Mastic / Interior Kitchen	Heterogenous / Vinyl Flooring / Yellow	80%	15% Cellulose Fibers 5% Fiberglass	None Detected
		Homogenous / Adhesive / Yellow	100%		None Detected
16	1421-7-2 - Rolled Flooring / Mastic / Interior Kitchen	Heterogenous / Vinyl Flooring / Yellow	80%	15% Cellulose Fibers 5% Fiberglass	None Detected
		Homogenous / Adhesive / Yellow	100%		None Detected

#	Sample	Material Description	Non-Fibrous	Non-Asbestos Fibers	Asbestos Fibers
17	1421-8-1 - Caulk / Typical Interior Windows	Homogenous / Caulk / White	100%		None Detected
18	1421-8-2 - Caulk / Typical Interior Windows	Homogenous / Caulk / White	100%		None Detected
19	1421-9-1 - Popcorn Texture / Hall Ceiling / 14 SF	Homogenous / Texture / White	98%		2% Chrysotile
20	1421-9-2 - Popcorn Texture / Hall Ceiling / 14 SF	Homogenous / Texture / White			( Not Analyzed, Positive Stop )
21	1421-9-3 - Popcorn Texture / Hall Ceiling / 14 SF	Homogenous / Texture / White			( Not Analyzed, Positive Stop )
22	1421-10-1 - 12"x 12" Ceiling Tile / Interior Bedroom Closets	Heterogenous / Ceiling Tile / White	5%	95% Cellulose Fibers	None Detected
23	1421-10-2 - 12"x 12" Ceiling Tile / Interior Bedroom Closets	Heterogenous / Ceiling Tile / White	5%	95% Cellulose Fibers	None Detected



Asbestos Analysis Information

Analysis Details	All samples were received in acceptable condition unless otherwise noted on the report. This report must not be used by the client to claim product certification, approval, or endorsement by AIHA, NIST, NVLAP, NY ELAP, or any agency. The results relate only to the items tested. Hayes Microbial Consulting reserves the right to dispose of all samples after a period of 60 days in compliance with state and federal guidelines.
PLM Analysis	All Polarized Light Microscopy (PLM) results include an inherent uncertainty of measurement associated with estimating percentages by PLM. Materials with interfering matrix, low asbestos content, or small fiber size may require additional analysis via TEM Analysis.
TEM Analysis	Analysis by TEM is capable of providing positive identification of asbestos type(s) and semi-quantitation of asbestos content.
Definitions	'None Detected' - Below the detected reporting limit of 1% unless point counting is performed, then the detected reporting limit is .25%.
New York ELAP	<p>Per NY ELAP198.6 (NOB), TEM is the only reliable method to declare an NOB material as Non-Asbestos Containing.</p> <p>Any NY ELAP samples that are subcontracted to another laboratory will display the name and ELAP Lab Identification number in the report page heading of those samples. The original report provided to Hayes Microbial Consulting is available upon request.</p>

**DK Environmental & Construction Services, Inc.**

8786 Sonoma Coast Drive  
Winter Garden, FL 34787  
407-614-4572

814-243-1927

dkenvironmental@yahoo.com

**Chain of Custody****N**

SHIP: FEDEX - PAK 50  
TI: 03-21-2024

0083 1358

**ASBESTOS****24012089**

Job Number:	Job Name:	Collector: Chris Ritko	Email: dkenvironmental@yahoo.com
Date Collected: 03/18/24	1421 NW 17TH AVENUE OCALA, FL 34475	Notes: <b>STOP AT FIRST POSITIVE</b>	
Mobile:			

Sample #	Sample Name	Analysis Type	Volume	TAT	Notes
1421-1-(1-2)	ASPHALT SHINGLES/TYPICAL EXTERIOR ROOF	PLM		1 DAY	
1421-2-(1-2)	ROLLED ASPHALT ROOFING/TYPICAL EXTERIOR ROOF				
1421-3-(1-2)	CEMENT BOARD/EXTERIOR UPPER WALLS				
1421-4-(1-2)	CAULK/TYPICAL EXTERIOR WINDOWS				
1421-5-(1-3)	DRYWALL JOINT COMPOUND/TYPICAL INTERIOR WALLS, CEILING				
1421-6-(1-3)	PLASTER/TYPICAL INTERIOR WALLS				
1421-7-(1-2)	ROLLED FLOORING/MASTIC/INTERIOR KITCHEN				
1421-8-(1-2)	CAULK/TYPICAL INTERIOR WINDOWS				
1421-9-(1-3)	POPCORN TEXTURE/HALL CEILING/14 SF				
23 1421-10-(1-2)	12"X12" CEILING TILE/INTERIOR BEDROOM CLOSETS				

Analysis Type	Description	TAT	Sample Types
Spore Trap S	Identification & Enumeration of Fungal Spores	24 Hour	Spore Trap cassettes, Impact slides
S+	I & E of Fungal Spores + total dander, fiber and pollen count	24 Hour	Spore Trap cassettes, Impact slides
Direct ID D	ID and Semi-quantitative enumeration of spores and mycelium	24 Hour	Tape, Bio-Tape, Swab, Bulk, Agar Plate for ID only
D+	ID and Enumeration with spores count	24 Hour	Tape, Bio-Tape, Swab, Bulk, Agar Plate for ID only
Culture C1	Identification & Enumeration of Mold only	7 Day	Anderson Air Plate, Swab, Bulk
C2	Identification & Enumeration of Bacteria only	4 Day	Anderson Air Plate, Swab, Bulk
C3	Identification & Enumeration of Mold and Bacteria	7 Day	Anderson Air Plate, Swab, Bulk
C5	Coliform Screen for Sewage Bacteria	2 Day	Anderson Air Plate, Swab, Bulk
Dust Mite A1	Semi-quantitative analysis of dust mite allergen	24 Hour	Bulk Dust
Particle P	Total Particulate Analysis	24 Hour	Spore Trap cassettes, Impact slides, Bio-Tape
Relinquished by:	Date: 03/18/24	Rcvd By:	Date: 3/21/24 Time: