

The following samples were collected from the JFK Library, rooms/areas:

- M23
- M23A
- M23C
- M22
- M26
- M28

## LABORATORY REPORT

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**SUBJECT:** Particle Identification  
**SPECIMEN:** Two Sets of Three Tapelifts  
**REFERENCE:** JFK

### INTRODUCTION

Two sets of three tapelifts each were received for analysis. The tapelifts were labeled as follows.

| TAPELIFTS |
|-----------|
| M23       |
| M23A      |
| M23C      |
| M26       |
| M22       |
| M28       |

The tapelifts were placed on clean microscope slides and immersed in acetone for about two hours and then removed. The slides with the tapelifts were rinsed with clean acetone as they were removed from the immersion tank. The tapelifts were allowed to dry for twenty minutes in a laminar flow Clean Work Station and then mounted using a synthetic resin (Shurmount). The completed mounts were analyzed using analytical light microscopy. The materials identified are listed in decreasing order of frequency, the most common materials first. The significance of a material's location in the list is not necessarily related to its health impact because some materials have a greater health impact at low levels than other materials do at high levels.

### RESULTS

The tapelifts from M 23, M 23A, and M 23C contained skin flakes, paper fiber, clothing fiber, pet dander, natural minerals, silica phytoliths, starch, pollen, spores, pencil debris, tire wear, wild bird feather barbules, insect debris, charred wood, cleaning agglomerate, and glass fiber. M 23C contained 4 glass fibers from an acoustic ceiling tile. M 23 contained 2 glass fibers one from the acoustic tile and one was in a cleaning agglomerate. M 23A had one straight clean glass fiber. These glass fibers are not typical fibers found in a HVAC system.

The tapelifts M26, M22, and M28 contained paper fiber, clothing fiber, skin flakes, pet dander, pollen, spores, starch, sawdust, charred wood, feather barbules, wear metal, phytoliths, cleaning agglomerate, shoe wear, ink, insect debris, stone cell, and glass fiber. M22 had very low particle loading. M 26 contained 3 glass fibers from 3 different possible sources; fiberglass composite, HVAC, and one clean fiber that could not be linked to a source. M28 contained 2 glass fibers from a fiberglass composite material. The amount of glass fiber found in M26 and M28 was high relative to the particle loading but below the amount of glass fiber associated with health complaints. There were 5 glass fibers shorter than 500um. Health complaints are associated with 13 or more short glass fibers and/or 4 or more glass fibers longer than five hundred micrometers per square inch.

## CONCLUSION

The "M" tapelift sets had relatively low total particle loading. The glass fibers found were above background level but well below the amount associated with health complaints. The glass fibers present were not from the HVAC system.

Thank you for this opportunity to be of service. If I can provide any further assistance please contact me.

Signed: Heidie Crutcher  
Heidie Crutcher, Analyst

Signed: ERC  
E. R. Crutcher, Consultant