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

- L03
- L23
- L37
- M18 (two locations)
- M20
- Central area on the main floor

(see map at end of document for locations):

- o Collections
- o Circulation
- o Reference
- o Advising Desk
- o Writing Center Desk (WC Desk)
- o Plus Time Clock

Report #: 150-18 Date: May 7, 2018

LABORATORY REPORT

To: Chad Johnson EWU, EH+S 002 Martin Hall Cheney, WA 99004

PHONE: (509) 359-6455 FAX: (509) 359-4690 E-MAIL: djohnson@ewu.edu

SUBJECT: Particle Identification SPECIMEN: Four Sets of Tapelifts

REFERENCE:

INTRODUCTION

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

TAPELIFTS	
L03	
L23	
L37	
M18	
M18a	
M20	
Collections	
Circulation	
Reference	
Advising Desk	
Plus Time Clock	
WC Desk	

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 three tapelifts from marked with "L"; L03, L23, and L37, contained paper fiber, clothing fiber, skin flakes, natural minerals, pollen, starch, algae, abrasive minerals, fly ash, grass phytoliths, charred wood, ink, fungal spores, shoe wear, glass fiber, and cosmetics. All of the samples had very

Report #: 150-18 Date: May 7, 2018

low particle loading. The presence of glass fiber in the environment tends to increase sensitivity to allergens. Pine and Douglas fir pollen were the two most potent allergens in this set of tapelifts.

The tapelifts from "WC Desk", "Plus Time Clock", and "Advising Desk" contained skin flakes, paper fiber, clothing fiber, natural minerals, phytoliths, starch, pollen, spores, pencil debris, tire wear, paint, dog dander, dry-erase ink, plant debris, cosmetics, metal wear, shoe wear, paint, feather barbules, and glass fiber. There were 2 glass fibers on "Plus Time Clock". Both glass fibers were associated with resin and were otherwise clean. That is consistent with thermal blanket material. They were not from the HVAC system.

The tapelifts M18, M18a, and M20 contained paper fiber, clothing fiber, skin flakes, fern spores, cosmetics, shoe wear, and glass fiber. The particle loading on all these samples was low. The amount of glass fiber found in M18 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.

The samples from "Collections", "Circulations", and "Reference" contained clothing fiber, skin flakes, paper debris, natural minerals, starch, metal wear, HVAC agglomerate, shoe wear, silica phytoliths, plant parts, ink, and red resin.

The samples L23, L37, and L03 contained clothing fibers, skin flakes, plant parts, wear medal, paper, natural minerals, tire wear, starch, paint spheres, pet dander, pollen, silica phytoliths, pollen, and glass fiber. The tapelift marked L23 was dominated by wear metal. The tapelift marked L37 contained 2 glass fibers. Neither one was from the HVAC system.

CONCLUSION

All of the tapelifts had relatively low total particle loading. There were only three tapelifts containing glass fibers; "Plus Time Clock", M18, and L37. They were above background levels but well below the level associate with health complaints.

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

Signed: Heidie Crutcher, Analyst

Signed: CR

E. R. Crutcher, Consultant

