



HAZARDOUS MATERIALS SURVEY REPORT

COMMERCIAL BUILDINGS

**4140 - 4146 FREMONT AVENUE NORTH
MINNEAPOLIS, MINNESOTA**

Prepared for:

HENNEPIN COUNTY

Prepared by:

**Parks Environmental Consulting, Inc.
4749 Chicago Avenue S.
Minneapolis, MN 55407
(612) 353-6528**

Parks Project # 9465

December 19, 2014

TABLE OF CONTENTS

	<u>Page</u>
1.0 Executive Summary	1
2.0 Background	3
3.0 Methods	4
4.0 Analytical Results	5
5.0 Final Comments and Inspection Sampling Limitations	7

LIST OF TABLES

Table 1	Summary of Asbestos Containing Building Materials
Table 2	Hazardous / Special Waste Materials
Table 3	Identified and Sampled Suspect ACM

LIST OF APPENDICES

Appendix A	Site Drawings
Appendix B	Laboratory Report
Appendix C	Inspector's Credentials

1.0 Executive Summary

Parks Environmental Consulting, Inc. (Parks), on behalf of Hennepin County (at the request of Landmark Environmental), performed an inspection and sampling for asbestos-containing materials (ACM) and hazardous or special waste materials, in the commercial buildings located at 4140-4166 Fremont Avenue N., Minneapolis, Minnesota (Site).

The Site consists of a two commercial retail buildings, each divided into two address (the 4140 and 4142 building, and the 4144 and 4146 building) reportedly built in the early 1900s. The 4140/4142 building is one story plus basement. The 4144/4146 building is two stories plus basement with the upper level finished into four residential apartment units.

The buildings were vacant and unheated with utilities disconnected at the time of Parks' inspection and sampling. Parks' survey, inspection and sampling was to be a limited, non-destructive survey for suspect ACM on the interior of the buildings. This is not a pre-demolition or pre-renovation asbestos survey of the site.

Tim Marxhausen of Parks, assisted by Aaron Kuck of Landmark, conducted the asbestos and hazardous materials inspection and sampling on December 10, 2014. Accessible interior building materials were surveyed.

Asbestos

The following materials were found to contain Asbestos:

TABLE 1 – Summary of Asbestos Containing Building Materials				
Sample Series	Description	Location	Friable	Quantity*
4140 Unit				
FT-02	9" FT – brown (under carpet)	Main Level Front room	No	650 SF
CMP-01	Chimney Mortar Patch	Basement. Patch Mortar on Chimney at Former Flue	No	1 SF
DST-01	Duct Seam Tape (residue)	Basement. Residue/Remnants on some Floor Joists	Yes	1-2 SF
4142 Unit				
IP-01	Insulation Paper (aircell sheet)	Basement -Top of Furnace Duct, and Southwest Corner on Wall	Yes	5 SF
DST-02	Duct Seam Tape (residue)	Basement. Residue/Remnants on some Floor Joists and Ducts	Yes	3-5 SF

TABLE 1 – Summary of Asbestos Containing Building Materials				
Sample Series	Description	Location	Friable	Quantity*
4144 & 4146 Units - Basement				
PFI-01	Pipe Fitting Insulation (white powder/fibrous)	Basement of 4144 and 4146. Pipe Elbows, Ts and Valve Insulation	Yes	15-20 each
CMP-04	Chimney Mortar Patch	Basement of 4146. Patch Mortar on Chimney at Flue	No	1 SF
4144 & 4146 Units – Upper Level Apartments				
FT-07	9" FT – gray and black checkerboard pattern	Apartments 201, 202 (partial). Patch in Hall (center)	No	300 SF

FT = Vinyl Floor Tile

SF = Square Feet

* Quantities are approximations.

Hazardous or Special Waste Materials

The following Hazardous or Special Waste Materials were observed inside the buildings:

TABLE 2 – Hazardous / Special Waste Materials	
Description	Quantity*
4140 Unit	
Thermostat	1
Hydraulic Door Closers	1
3 to 5 foot Fluorescent Light Bulbs	23
Fluorescent Light Fixture Electrical Ballasts	12
Air Conditioning Unit (wall/window inset)	1
Alarm Bell	1
Domestic Water Heater	1
Forced Air Furnace	1
Security System Panel	1
Natural Gas Meter	1
Electrical Meter	1
4142 Unit	
Thermostat	1
Hydraulic Door Closers	1
3 to 5 foot Fluorescent Light Bulbs	32
Fluorescent Light Fixture Electrical Ballasts	12
Air Movement Fan	1
Timer Control	1
Commercial Refrigerator	1
Forced Air Furnace	1
Domestic Water Heater	1

TABLE 2 – Hazardous / Special Waste Materials	
Description	Quantity*
Natural Gas Meter	1
Electrical Panels	4
Sump Pump	1
4144 Unit (Main Level and Basement)	
Security System Panel	1
Hydraulic Door Closers	2
3 to 5 foot Fluorescent Light Bulbs	70
Fluorescent Light Fixture Electrical Ballasts	35
Air Conditioner	1
Exit Signs	2
Commercial Refrigerator	1
Forced Air Furnace	2
Domestic Water Heater	1
Electrical Panels	4
Natural Gas Meter	1
4146 Unit (Main Level and Basement)	
Security System Panel	1
Smoke Detector	1
Natural Gas Meter	1
Boiler	1
3 to 5 foot Fluorescent Light Bulbs	40
Hydraulic Door Closer	1
Fluorescent Light Fixture Electrical Ballasts	20
Exit Sign	1
Commercial Beverage Refrigerators	2
Electrical Panels	2
4144 & 4146 Unit (Upper Level Apartments)	
CFL Bulbs	7
Fuse Boxes	4
3 to 5 foot Fluorescent Light Bulbs	2
Fluorescent Light Fixture Electrical Ballasts	1
Smoke Detectors	3
Door Bell Chimes	5

- Quantities are approximations.

The hazardous and special waste materials listed above (and any like materials and chemicals) should be removed from the building prior to demolition. The materials should be properly packaged and disposed, or recycled. Refrigerants should be properly recovered and recycled/disposed.

2.0 Background

Hennepin County requested that Landmark and Parks complete an inspection, sampling, and analysis of accessible interior building materials suspected to contain asbestos, and perform a hazardous and special waste materials inspection, at the Site.

The Site consists of two commercial retail buildings, each divided into two address (the 4140 and 4142 building, and the 4144 and 4146 building) reportedly built in the early 1900s. The 4140/4142 building is one story plus basement, approximately 6,000 square feet in size (3,000 SF per floor). The 4144/4146 building is two stories plus basement with the upper level finished into four residential apartment units; total size is approximately 9,000 SF (3,000 sf per floor).

At the time of Parks' initial site visit the buildings were vacant. Floors in the structures were observed to be concrete (basements), wood, vinyl floor tile, carpet and ceramic tile (main and upper levels). Ceilings were either acoustical tiles or drywall / plaster.

On December 10, 2014, Tim Marxhausen and Aaron Kuck, Minnesota Department of Health Certified Asbestos Inspectors #AI-2271 and #AI-12661 respectively, inspected the Site buildings for suspect ACM, and collected 68 suspect asbestos-containing material samples. The samples were analyzed at Schneider Laboratories in Richmond, Virginia.

The following building materials were considered, for the purposes of this survey, suspect ACM, and thus sampled:

- 12" Vinyl Floor Tile, and Adhesive
- 9" Vinyl Floor Tile, and Adhesive
- Vinyl Sheet Flooring
- Flooring Slip Sheet Paper (black)
- Vinyl Baseboard Adhesive
- Plastic Wall Covering Adhesive
- Lay-in Acoustical Ceiling Tiles
- Chimney Flue Patch Mortar (four types)
- Wall and Ceiling Plaster
- Ceiling Texture
- Drywall and Joint Compound
- Pipe and Pipe Fitting insulation
- Duct Seam Tape Residue
- Insulation Paper

3.0 Methods

ACM

Suspect ACM was categorized into three principle material groups (homogeneous materials): surfacing material (sprayed or troweled-on); thermal system insulation (e.g. pipe, tank, duct, boiler insulation); or miscellaneous materials (e.g. floor tiles, ceiling tiles, wallboards). A homogeneous material is a building material that appears to be the same in color, texture, age and composition, and appears to have been installed at the same time. Friable materials are those that can be crushed or reduced to powder by hand pressure.

Parks' inspector identified homogeneous material types and collected samples of each material type in general accordance with EPA-AHERA sampling protocols. The total number of samples of each suspect material collected was determined by Parks' inspector based on the quantity of the material and its accessibility.

Material samples were analyzed for asbestos content by Polarized Light Microscopy, EPA Method 600/R-93/116, at Schneider Laboratories, Richmond, Virginia. Schneider's laboratory is accredited for asbestos bulk material analysis under the National Institute of Sciences' National Voluntary Laboratory Accreditation Program (NVLAP). The analytical method's lower detection limit is one-percent asbestos by volume. The method provides a visual estimation of asbestos in the material sample.

Hazardous or Special Waste Materials

Parks inspected the building for other hazardous or potentially hazardous materials that cannot be included in construction demolition waste or municipal solid waste. The types of hazardous materials and approximate amounts were noted and are provided in Table 3 of this report. Parks followed the guidelines of the Minnesota Pollution Control Agency (MPCA) in auditing for these materials. Our intent was not to find and list every single material or item requiring removal and special handling prior to building demolition, but rather to provide a general and approximate list of such materials and items present at the site.

4.0 Analytical Results

The following table summarizes materials sampled for asbestos with their locations, and analytical results. Materials other than those listed here, and not sampled, were not considered suspect for asbestos content (e.g. fiberglass insulation, concrete, brick, metal, plastic, ceramic tile). If suspect asbestos containing materials other than those listed and sampled below are discovered at the site, they should be considered asbestos containing until testing proves otherwise.

TABLE 3 – Identified and Sampled Suspect ACM			
Sample Set	Description	Location	Results
4140 Unit			
FT-01A, B	12" FT – Gray with white and black spots with yellow Adhesive	Main level corridor and back area	Non-Asbestos
FT-02A, B	9" FT – Brown (under carpet) with black Adhesive	Main Level front room	Asbestos 3%Chry (tile only)
PL-01A, B, C	Wall Plaster	Throughout	Non-Asbestos
CMP-01A	Chimney Mortar Patch	Basement	Asbestos 20%Chry
DST-01	Duct Seam Tape (residue)	Basement on floor joists	Asbestos 80%Chry
4142 Unit			
CT-01A, B, C	2'x 4" Lay-in Ceiling Tile. Slight texture finish	Throughout main level	Non-Asbestos
FT-03	Vinyl Floor Tile (beige) with tan Adhesive	By front entrance (under ceramic tile)	Non-Asbestos
ADH-01A, B	Plastic Wall Covering Adhesive (tan)	Wall covering in back room	Non-Asbestos
SRJC-01A, B, C	Sheetrock with Joint Compound	Front Room walls, back area ceiling	Non-Asbestos
CMP-02A	Chimney Mortar Patch (north chimney)	Basement	Non-Asbestos

TABLE 3 – Identified and Sampled Suspect ACM			
Sample Set	Description	Location	Results
CMP-03A	Chimney Mortar Patch (south chimney)	Basement	Non-Asbestos
IP-01	Insulation Paper (aircell sheet)	Basement -Top of furnace duct and southwest corner on wall	Asbestos 85%Chry
DST-02	Duct Seam Tape (residue)	Basement on floor joists and duct	Asbestos 80%Chry
PL-02A, B, C	Wall Plaster	Stairwell to basement	Non-Asbestos
4144 & 4145 Units – Basement and First floor			
FT-04A, B	12" FT – Black with cream Adhesive	Main Level, front area	Non-Asbestos
FT-05A, B	12" FT – Cream with yellow Adhesive	Main level back area/rooms	Non-Asbestos
CT-02A, B, C	2'x 4" Lay-in Ceiling Tile. Pits and pinhole finish	Main level, front area	Non-Asbestos
ADH-02A, B	Plastic Wall Covering Adhesive (tan)	Wall covering in back room	Non-Asbestos
BBA-01A, B	Baseboard Adhesive	Main level back area north wall	Non-Asbestos
SRJC-02A, B, C	Sheetrock with Joint compound	Main Level Ceiling; stairwell walls	Non-Asbestos
CTEX-01A, B, C	Ceiling Textured Plaster	Basement of 4144 and 4146	Non-Asbestos
PFI-01A, B	Pipe Fitting Insulation (white powder/fibrous)	Basement of 4144 and 4146	Asbestos 40%Chry
PI-01A, B	Pipe Insulation (gray paper/felt like)	Basement of 4144 and 4146	Non-Asbestos
CMP-04A	Chimney Mortar Patch	Basement of 4146	Asbestos 20%Chry
FT-06A, B	12" FT – Cream with black streaks and yellow Adhesive	4146 Main level back area/rooms	Non-Asbestos
4144 & 4146 Upper Level Apartments			
PL-03A, B, C	Wall Plaster	Throughout	Non-Asbestos
FT-07A, B	9" FT – gray and black checkerboard pattern with black Adhesive	Apartments 201, 202 (partial)	Asbestos 3%Chry (tile only)
LIN-01A, B	Linoleum (cream squares pattern)	Apartment 202, kitchen area	Non-Asbestos
TP-01A, B	Black tar paper	Under 9" FT in Apartments 201, 202	Non-Asbestos

TABLE 3 – Identified and Sampled Suspect ACM			
Sample Set	Description	Location	Results
VSF-01A, B	Vinyl Sheet Flooring (maroon mottle)	Top of Stairs landing area West stairwell	Non-Asbestos
VSF-02A, B	Vinyl Sheet Flooring (green and cream mottle)	Apartment 202, bedroom	Non-Asbestos
CTEX-02A, B, C	Acoustical Ceiling Texture	Apartment 204, back bedroom	Non-Asbestos
VSF-03A, B	Vinyl Sheet Flooring (beige mottle)	Apartment 202, hall by bathroom	Non-Asbestos
LIN-02	Linoleum – beige	Stairs to basement in Unit 4146	Non-Asbestos

FT = Floor Tile

Adh = Adhesive

Chy = Chrysotile Asbestos

5.0 Final Comments and Inspection Sampling Limitations

It is possible that some suspect asbestos, or asbestos containing, materials and hazardous materials were not identified during the course of Parks' inspection at this site. Building materials known to possibly contain asbestos that were not evaluated as part of this survey should be assumed to be asbestos containing until proven otherwise.

Quantities of asbestos and hazardous materials given in this report and illustrated on the report drawings are approximations and not intended for asbestos abatement bidding or budgeting purposes. This report is not an asbestos abatement removal specification or bid document.

Material samples collected by Parks were analyzed by an independent outside laboratory; the results of their laboratory analyses are presented herein. While we choose an established, reputable and certified lab to perform the sample analysis, Parks does not warrant the accuracy laboratory results.

The information contained in this report represents Parks' best efforts to determine the presence of asbestos containing and other hazardous materials at the site given the project time and cost limitations. Parks warrants that its efforts are consistent with prevalent environmental and industrial hygiene standards for building hazardous material surveys and at this time and place.

Parks Environmental Consulting, Inc.



Tim Marxhausen
Project Manager
MDH Asbestos Inspector #AI-2271

December 19, 2014

Date

APPENDIX A
SITE DRAWINGS

PARKS

Environmental Consulting, Inc.
4749 Chicago Avenue S.
Minneapolis, MN 55407

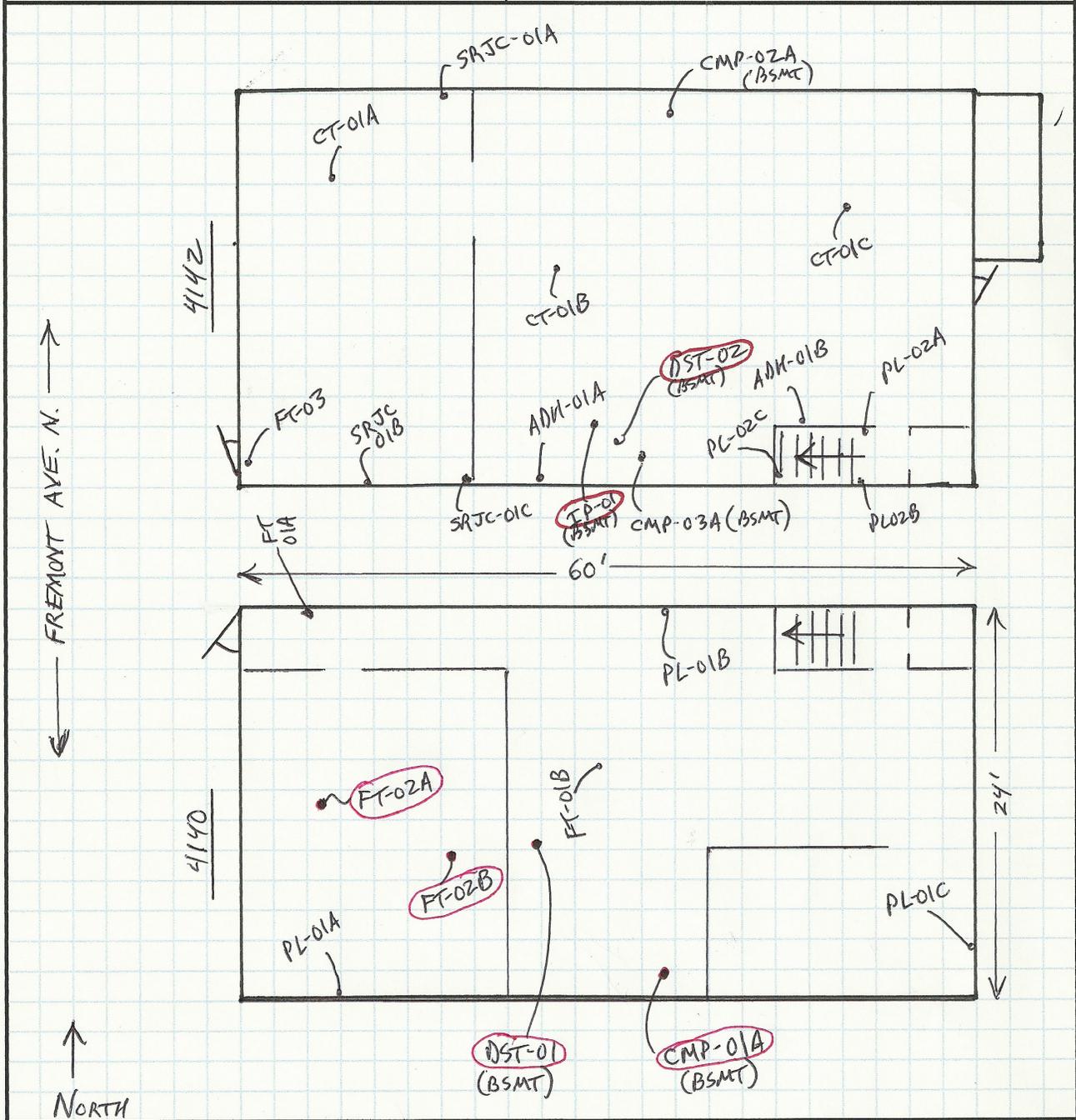
Project No. 9465

Page 1 of 3

Project Location 4140 - 4146 Fremont Avenue N, Minneapolis

By Tim M. Date 12/10/14

Subject Asbestos & Haz Materials Survey & Sampling



PARKS

Environmental Consulting, Inc.
4749 Chicago Avenue S.
Minneapolis, MN 55407

Project No. 9465

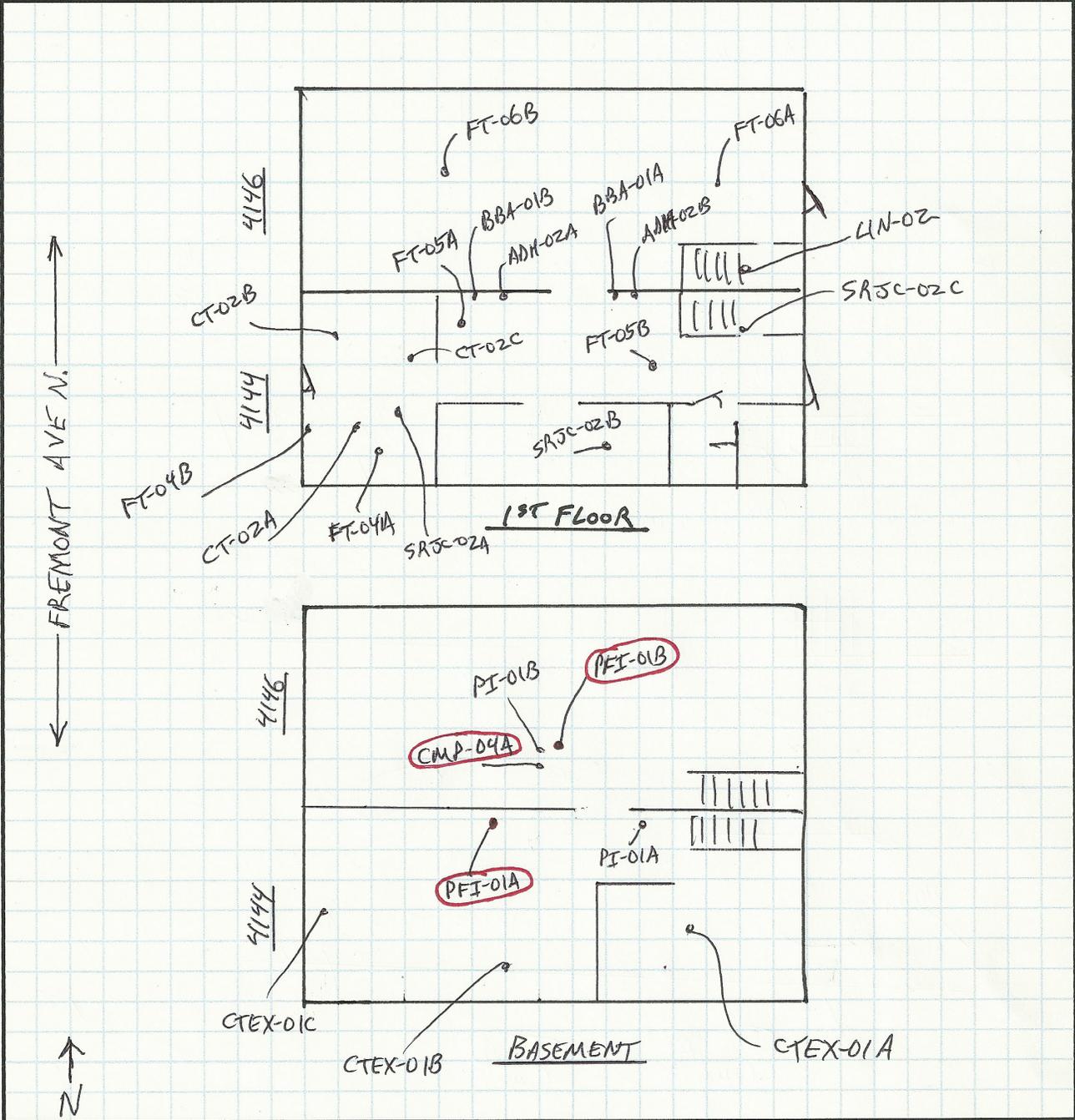
Page 2 of 3

Project Location 4140 - 4146 Fremont Avenue N, Minneapolis

By Tim M.

Date 12/10/14

Subject Asbestos & Haz Materials Survey & Sampling



PARKS

Environmental Consulting, Inc.
4749 Chicago Avenue S.
Minneapolis, MN 55407

Project No. 9465

Page 3 of 3

Project Location 4140 - 4146 Fremont Avenue N, Minneapolis

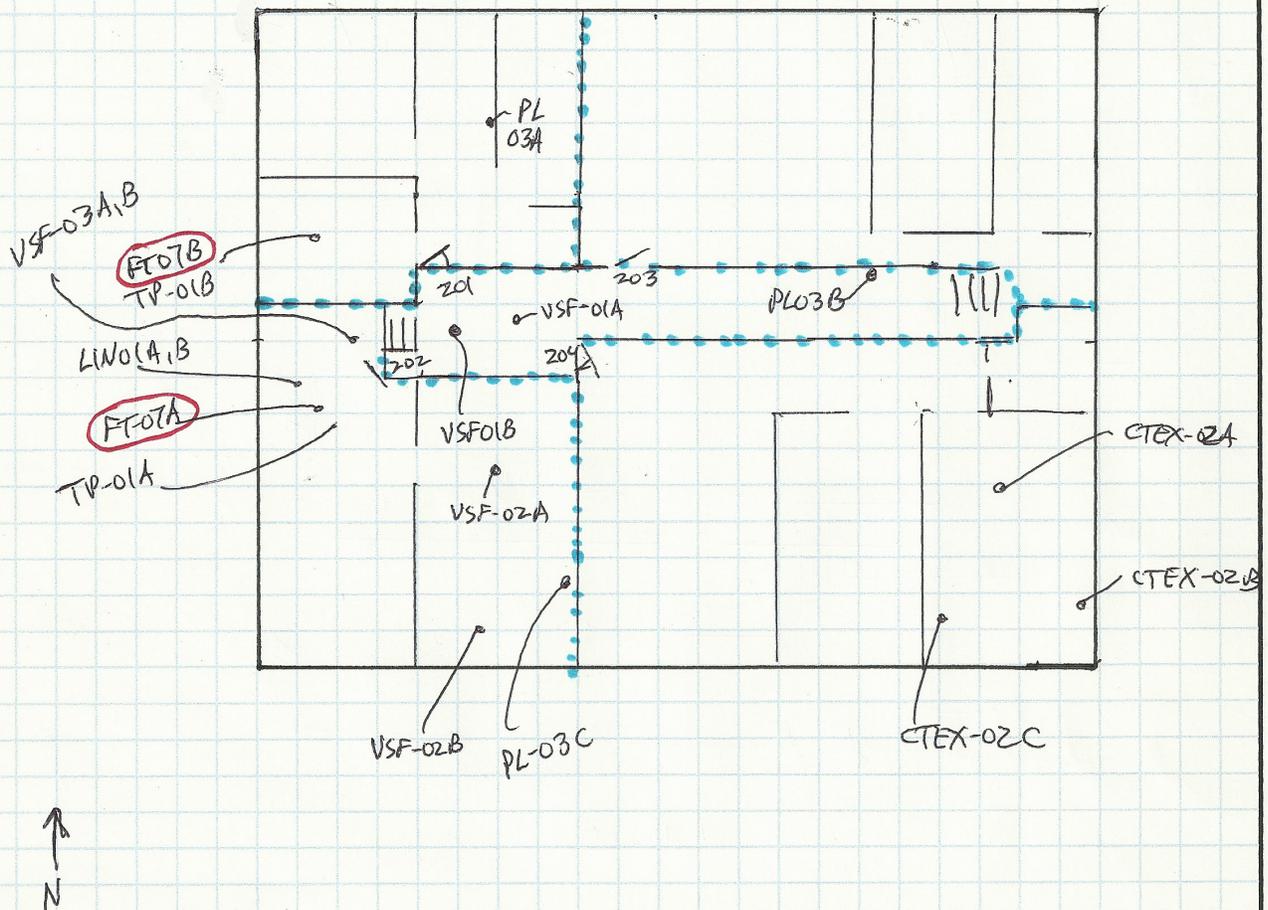
By Tim M.

Date 12/10/14

Subject Asbestos & Haz Materials Survey & Sampling

4144 + 4146 UPPER LEVEL APARTMENTS

..... APARTMENT BOUNDARIES



APPENDIX B

LABORATORY REPORT

SCHNEIDER LABORATORIES GLOBAL

INCORPORATED

2512 W. Cary Street • Richmond, Virginia • 23220-5117
804-353-6778 • 800-785-LABS (5227) • (FAX) 804-359-1475

Over 25 Years of Excellence in Service and Technology

LABORATORY ANALYSIS REPORT

Asbestos Identification by EPA Method¹ 600/R-93/116; EPA 600/M4-82-020

ACCOUNT #: 2662-14-1034
CUSTOMER: Parks Environmental Consulting
ADDRESS: 4749 Chicago Ave Ste 3
Minneapolis, MN 55407-3561

DATE COLLECTED: 12/10/2014
DATE RECEIVED: 12/15/2014
DATE ANALYZED: 12/16/2014
DATE REPORTED: 12/17/2014

PROJECT NAME: 4140-4146 Fremont
JOB LOCATION: Minneapolis, MN
PROJECT NO.: 9465
PO NO.:

SampleType: Bulk

Customer Sample No.	SLI Sample/ Layer ID	Sample Identification/ Layer Name	PLM Analysis Results	
			Asbestos Fibers	Other Materials
FT-01A	33342655	Mn Lvl Corridor Back Area		
Layer 1:	Floor Tile Gray/White, Organically Bound		None Detected	100% NON FIBROUS MATERIAL
Layer 2:	Adhesive Yellow, Soft		None Detected	5% CELLULOSE FIBER 95% NON FIBROUS MATERIAL
FT-01B	33342656	Mn Lvl Corridor Back Area		
Layer 1:	Floor Tile Gray/White, Organically Bound		None Detected	100% NON FIBROUS MATERIAL
Layer 2:	Adhesive Yellow, Soft		None Detected	5% CELLULOSE FIBER 95% NON FIBROUS MATERIAL
FT-02A	33342657	Mn Lvl Frt Rm		
Layer 1:	Floor Tile Brown, Organically Bound		3% CHRYSOTILE	97% NON FIBROUS MATERIAL
Layer 2:	Adhesive Black, Bituminous		None Detected	3% CELLULOSE FIBER 97% NON FIBROUS MATERIAL

Total Number of Pages in Report: 11

Results relate only to samples as received by the laboratory.

Visit www.slabin.com for current certifications.

Accrediting bodies: AIHA-LAP, LLC 100527, NVLAP 101150-0, VELAP/NELAC 460135 - Call laboratory for current national and state certifications.

Method reporting limit is 1%. PLM analysis is based on Visual Estimation and NESHAP recommends that any asbestos content less than 10 percent be verified by PLM Point Count or TEM Analysis. This report must not be reproduced except in full with the approval of the laboratory.

Customer Sample No.	SLI Sample/ Layer ID	Sample Identification/ Layer Name	PLM Analysis Results	
			Asbestos Fibers	Other Materials
FT-02B	33342658	Mn Lvl Frt Rm		
Layer 1:	Floor Tile Brown, Organically Bound		3% CHRYSOTILE	97% NON FIBROUS MATERIAL
Layer 2:	Adhesive Black, Bituminous		None Detected	4% CELLULOSE FIBER 96% NON FIBROUS MATERIAL
PL-01A	33342659	Throughout		
Layer 1:	Wall Plaster Gray, Granular		None Detected	3% CELLULOSE FIBER 97% NON FIBROUS MATERIAL
PL-01B	33342660	Throughout		
Layer 1:	Wall Plaster Gray, Granular		None Detected	2% CELLULOSE FIBER 98% NON FIBROUS MATERIAL
PL-01C	33342661	Throughout		
Layer 1:	Wall Plaster Gray, Granular		None Detected	2% CELLULOSE FIBER 98% NON FIBROUS MATERIAL
CMP-01A	33342662	Bsmnt		
Layer 1:	Mortar Gray, Granular		20% CHRYSOTILE	80% NON FIBROUS MATERIAL
DST-01	33342663	Bsmnt Floor Joist		
Layer 1:	Duct Tape Gray, Fibrous		80% CHRYSOTILE	15% CELLULOSE FIBER 5% NON FIBROUS MATERIAL
CT-01A	33342664	Throughout Mn Lvl		
Layer 1:	Ceiling Tile White, Fibrous		None Detected	60% CELLULOSE FIBER 30% MINERAL/GLASS WOOL 10% NON FIBROUS MATERIAL
CT-01B	33342665	Throughout Mn Lvl		
Layer 1:	Ceiling Tile White, Fibrous		None Detected	60% CELLULOSE FIBER 30% MINERAL/GLASS WOOL 10% NON FIBROUS MATERIAL

Total Number of Pages in Report: 11

Results relate only to samples as received by the laboratory.

Visit www.slabin.com for current certifications.

Accrediting bodies: AIHA-LAP, LLC 100527, NVLAP 101150-0, VELAP/NELAC 460135 - Call laboratory for current national and state certifications.

Method reporting limit is 1%. PLM analysis is based on Visual Estimation and NESHAP recommends that any asbestos content less than 10 percent be verified by PLM Point Count or TEM Analysis. This report must not be reproduced except in full with the approval of the laboratory.

Customer Sample No.	SLI Sample/ Layer ID	Sample Identification/ Layer Name	PLM Analysis Results	
			Asbestos Fibers	Other Materials
CT-01C	33342666	Throughout Mn Lvl		
Layer 1:	Ceiling Tile White, Fibrous		None Detected	60% CELLULOSE FIBER 30% MINERAL/GLASS WOOL 10% NON FIBROUS MATERIAL
FT-03	33342667	Frnt Entrance		
Layer 1:	Vinyl Floor Tile Beige, Organically Bound		None Detected	100% NON FIBROUS MATERIAL
Layer 2:	Adhesive Tan, Soft		None Detected	3% CELLULOSE FIBER 97% NON FIBROUS MATERIAL
ADH-01A	33342668	Wall Covering Back Rm		
Layer 1:	Wall Covering White, Brittle		None Detected	100% NON FIBROUS MATERIAL
Layer 2:	Adhesive Tan, Soft		None Detected	2% CELLULOSE FIBER 98% NON FIBROUS MATERIAL
ADH-01B	33342669	Wall Covering Back Rm		
Layer 1:	Wall Covering White, Brittle		None Detected	100% NON FIBROUS MATERIAL
Layer 2:	Adhesive Tan, Soft		None Detected	2% CELLULOSE FIBER 98% NON FIBROUS MATERIAL
SRJC-01A	33342670	Front Rm Walls Back Ceiling		
Layer 1:	Sheetrock White, Powdery		None Detected	20% CELLULOSE FIBER 5% MINERAL/GLASS WOOL 75% NON FIBROUS MATERIAL
Layer 2:	Joint Compound White, Granular		None Detected	100% NON FIBROUS MATERIAL
Layer 3:	Sheetrock/Jnt Cmpd White, Powdery/Granular		None Detected	10% CELLULOSE FIBER 2% MINERAL/GLASS WOOL 88% NON FIBROUS MATERIAL
SRJC-01B	33342671	Front Rm Walls Back Ceiling		
Layer 1:	Sheetrock White, Powdery		None Detected	20% CELLULOSE FIBER 5% MINERAL/GLASS WOOL 75% NON FIBROUS MATERIAL

Total Number of Pages in Report: 11

Results relate only to samples as received by the laboratory.

Visit www.slabin.com for current certifications.

Accrediting bodies: AIHA-LAP, LLC 100527, NVLAP 101150-0, VELAP/NELAC 460135 - Call laboratory for current national and state certifications.

Method reporting limit is 1%. PLM analysis is based on Visual Estimation and NESHAP recommends that any asbestos content less than 10 percent be verified by PLM Point Count or TEM Analysis. This report must not be reproduced except in full with the approval of the laboratory.

Customer Sample No.	SLI Sample/ Layer ID	Sample Identification/ Layer Name	PLM Analysis Results	
			Asbestos Fibers	Other Materials
Layer 2:	Joint Compound White, Granular		None Detected	100% NON FIBROUS MATERIAL
Layer 3:	Sheetrock/Jnt Cmpd White, Powdery/Granular		None Detected	10% CELLULOSE FIBER 3% MINERAL/GLASS WOOL 87% NON FIBROUS MATERIAL
SRJC-01C	33342672	Front Rm Walls Back Ceiling		
Layer 1:	Sheetrock White, Powdery		None Detected	20% CELLULOSE FIBER 5% MINERAL/GLASS WOOL 75% NON FIBROUS MATERIAL
Layer 2:	Joint Compound White, Granular		None Detected	100% NON FIBROUS MATERIAL
Layer 3:	Sheetrock/Jnt Cmpd White, Powdery/Granular		None Detected	10% CELLULOSE FIBER 2% MINERAL/GLASS WOOL 88% NON FIBROUS MATERIAL
CMP-02A	33342673	Bsmnt		
Layer 1:	Mortar Gray, Hard		None Detected	100% NON FIBROUS MATERIAL
CMP-03A	33342674	Bsmnt		
Layer 1:	Mortar Gray, Granular		None Detected	100% NON FIBROUS MATERIAL
IP-01	33342675	Bsmnt Top Furnace SW Corner		
Layer 1:	Insulation White, Fibrous		85% CHRYSOTILE	15% NON FIBROUS MATERIAL
DST-02	33342676	Bsmnt Floor Joist Duct		
Layer 1:	Tape Gray, Fibrous		80% CHRYSOTILE	10% CELLULOSE FIBER 10% NON FIBROUS MATERIAL
PL-02A	33342677	Stairwell Bsmnt		
Layer 1:	Wall Plaster Gray, Granular		None Detected	<1% ANIMAL HAIR 100% NON FIBROUS MATERIAL <1% SYNTHETIC FIBER

Total Number of Pages in Report: 11

Results relate only to samples as received by the laboratory.

Visit www.slabin.com for current certifications.

Accrediting bodies: AIHA-LAP, LLC 100527, NVLAP 101150-0, VELAP/NELAC 460135 - Call laboratory for current national and state certifications.

Method reporting limit is 1%. PLM analysis is based on Visual Estimation and NESHAP recommends that any asbestos content less than 10 percent be verified by PLM Point Count or TEM Analysis. This report must not be reproduced except in full with the approval of the laboratory.

Customer Sample No.	SLI Sample/ Layer ID	Sample Identification/ Layer Name	PLM Analysis Results	
			Asbestos Fibers	Other Materials
PL-02B	33342678	Stairwell Bsmnt		
Layer 1:	Wall Plaster Gray, Granular		None Detected	<1% ANIMAL HAIR 100% NON FIBROUS MATERIAL <1% SYNTHETIC FIBER
PL-02C	33342679	Stairwell Bsmnt		
Layer 1:	Wall Plaster Gray, Granular		None Detected	<1% ANIMAL HAIR 100% NON FIBROUS MATERIAL <1% SYNTHETIC FIBER
FT-04A	33342680	Mn Lvl Frt Area		
Layer 1:	Floor Tile Black, Organically Bound		None Detected	100% NON FIBROUS MATERIAL
Layer 2:	Adhesive Cream, Brittle		None Detected	100% NON FIBROUS MATERIAL
FT-04B	33342681	Mn Lvl Frt Area		
Layer 1:	Floor Tile Black, Organically Bound		None Detected	100% NON FIBROUS MATERIAL
Layer 2:	Adhesive Cream, Brittle		None Detected	100% NON FIBROUS MATERIAL
FT-05A	33342682	Mn Lvl Back Area Rm		
Layer 1:	Floor Tile Cream, Organically Bound		None Detected	100% NON FIBROUS MATERIAL
Layer 2:	Adhesive Yellow, Soft		None Detected	3% CELLULOSE FIBER 97% NON FIBROUS MATERIAL
FT-05B	33342683	Mn Lvl Back Area Rm		
Layer 1:	Floor Tile Cream, Organically Bound		None Detected	100% NON FIBROUS MATERIAL
Layer 2:	Adhesive Yellow, Soft		None Detected	3% CELLULOSE FIBER 97% NON FIBROUS MATERIAL

Total Number of Pages in Report: 11

Results relate only to samples as received by the laboratory.

Visit www.slabin.com for current certifications.

Accrediting bodies: AIHA-LAP, LLC 100527, NVLAP 101150-0, VELAP/NELAC 460135 - Call laboratory for current national and state certifications.

Method reporting limit is 1%. PLM analysis is based on Visual Estimation and NESHAP recommends that any asbestos content less than 10 percent be verified by PLM Point Count or TEM Analysis. This report must not be reproduced except in full with the approval of the laboratory.

Customer Sample No.	SLI Sample/ Layer ID	Sample Identification/ Layer Name	PLM Analysis Results	
			Asbestos Fibers	Other Materials
CT-02A	33342684	Mn Lvl Frt Area		
Layer 1:	Ceiling Tile White, Fibrous		None Detected	55% CELLULOSE FIBER 35% MINERAL/GLASS WOOL 10% NON FIBROUS MATERIAL
CT-02B	33342685	Mn Lvl Frt Area		
Layer 1:	Ceiling Tile White, Fibrous		None Detected	55% CELLULOSE FIBER 35% MINERAL/GLASS WOOL 10% NON FIBROUS MATERIAL
CT-02C	33342686	Mn Lvl Frt Area		
Layer 1:	Ceiling Tile White, Fibrous		None Detected	55% CELLULOSE FIBER 35% MINERAL/GLASS WOOL 10% NON FIBROUS MATERIAL
ADH-02A	33342687	Wall Covering Back Rm		
Layer 1:	Wall Covering White, Fibrous/Hard		None Detected	75% MINERAL/GLASS WOOL 25% NON FIBROUS MATERIAL
Layer 2:	Adhesive Tan, Soft		None Detected	100% NON FIBROUS MATERIAL
Layer 3:	Wall Material White, Powdery		None Detected	30% CELLULOSE FIBER 70% NON FIBROUS MATERIAL
ADH-02B	33342688	Wall Covering Back Rm		
Layer 1:	Wall Covering White, Fibrous/Hard		None Detected	75% MINERAL/GLASS WOOL 25% NON FIBROUS MATERIAL
Layer 2:	Adhesive Tan, Soft		None Detected	100% NON FIBROUS MATERIAL
Layer 3:	Wall Material White, Powdery		None Detected	30% CELLULOSE FIBER 70% NON FIBROUS MATERIAL
BBA-01A	33342689	Main Lvl Back Area N Wall		
Layer 1:	Baseboard Black, Rubbery		None Detected	100% NON FIBROUS MATERIAL
Layer 2:	Adhesive Tan, Soft		None Detected	100% NON FIBROUS MATERIAL

Total Number of Pages in Report: 11

Results relate only to samples as received by the laboratory.

Visit www.slabin.com for current certifications.

Accrediting bodies: AIHA-LAP, LLC 100527, NVLAP 101150-0, VELAP/NELAC 460135 - Call laboratory for current national and state certifications.

Method reporting limit is 1%. PLM analysis is based on Visual Estimation and NESHAP recommends that any asbestos content less than 10 percent be verified by PLM Point Count or TEM Analysis. This report must not be reproduced except in full with the approval of the laboratory.

Customer Sample No.	SLI Sample/ Layer ID	Sample Identification/ Layer Name	PLM Analysis Results	
			Asbestos Fibers	Other Materials
BBA-01B	33342690	Main Lvl Back Area N Wall		
Layer 1:	Baseboard Black, Rubbery		None Detected	100% NON FIBROUS MATERIAL
Layer 2:	Adhesive Tan, Soft		None Detected	100% NON FIBROUS MATERIAL
SRJC-02A	33342691	Mn Lvl Ceiling		
Layer 1:	Sheetrock White, Powdery		None Detected	25% CELLULOSE FIBER 75% NON FIBROUS MATERIAL
Layer 2:	Joint Compound Beige, Granular		None Detected	100% NON FIBROUS MATERIAL
Layer 3:	Sheetrock/Jnt Cmpd White/Beige, Powdery/Granular		None Detected	10% CELLULOSE FIBER 90% NON FIBROUS MATERIAL
SRJC-02B	33342692	Mn Lvl Ceiling		
Layer 1:	Sheetrock White, Powdery		None Detected	20% CELLULOSE FIBER 80% NON FIBROUS MATERIAL
Layer 2:	Joint Compound Beige, Granular		None Detected	100% NON FIBROUS MATERIAL
Layer 3:	Sheetrock/Jnt Cmpd White/Beige, Powdery/Granular		None Detected	10% CELLULOSE FIBER 90% NON FIBROUS MATERIAL
SRJC-02C	33342693	Mn Lvl Ceiling		
Layer 1:	Sheetrock White, Powdery		None Detected	20% CELLULOSE FIBER 80% NON FIBROUS MATERIAL
Layer 2:	Joint Compound White, Granular		None Detected	100% NON FIBROUS MATERIAL
Layer 3:	Sheetrock/Jnt Cmpd White, Powdery/Granular		None Detected	10% CELLULOSE FIBER 90% NON FIBROUS MATERIAL

Total Number of Pages in Report: 11

Results relate only to samples as received by the laboratory.

Visit www.slabin.com for current certifications.

Accrediting bodies: AIHA-LAP, LLC 100527, NVLAP 101150-0, VELAP/NELAC 460135 - Call laboratory for current national and state certifications.

Method reporting limit is 1%. PLM analysis is based on Visual Estimation and NESHAP recommends that any asbestos content less than 10 percent be verified by PLM Point Count or TEM Analysis. This report must not be reproduced except in full with the approval of the laboratory.

Customer Sample No.	SLI Sample/ Layer ID	Sample Identification/ Layer Name	PLM Analysis Results	
			Asbestos Fibers	Other Materials
CTEX-01A	33342694	Bsmnt 4144 & 4146		
Layer 1:	Ceiling Plaster Gray, Granular		None Detected	3% CELLULOSE FIBER 97% NON FIBROUS MATERIAL
CTEX-01B	33342695	Bsmnt 4144 & 4146		
Layer 1:	Ceiling Plaster Gray, Granular		None Detected	3% CELLULOSE FIBER 97% NON FIBROUS MATERIAL
CTEX-01C	33342696	Bsmnt 4144 & 4146		
Layer 1:	Ceiling Plaster Gray, Granular		None Detected	3% CELLULOSE FIBER 97% NON FIBROUS MATERIAL
PFI-01A	33342697	Bsmnt 4144 & 4146		
Layer 1:	Pipe Insulation White, Powdery/Fibrous		40% CHRYSOTILE	30% CELLULOSE FIBER 30% NON FIBROUS MATERIAL
PFI-01B	33342698	Bsmnt 4144 & 4146		
Layer 1:	Pipe Insulation White, Powdery/Fibrous		40% CHRYSOTILE	30% CELLULOSE FIBER 30% NON FIBROUS MATERIAL
PI-01A	33342699	Bsmnt 4144 & 4146		
Layer 1:	Pipe Insulation Gray, Fibrous		None Detected	50% CELLULOSE FIBER 10% NON FIBROUS MATERIAL 40% SYNTHETIC FIBER
PI-01B	33342700	Bsmnt 4144 & 4146		
Layer 1:	Pipe Insulation Gray, Fibrous		None Detected	50% CELLULOSE FIBER 10% NON FIBROUS MATERIAL 40% SYNTHETIC FIBER
CMP-04A	33342701	Bsmnt 4146		
Layer 1:	Mortar Gray, Granular		20% CHRYSOTILE	80% NON FIBROUS MATERIAL
FT-06A	33342702	4146 Mn Lvl Back Area Rm		
Layer 1:	Floor Tile Cream/Black, Organically Bound		None Detected	100% NON FIBROUS MATERIAL

Total Number of Pages in Report: 11

Results relate only to samples as received by the laboratory.

Visit www.slabin.com for current certifications.

Accrediting bodies: AIHA-LAP, LLC 100527, NVLAP 101150-0, VELAP/NELAC 460135 - Call laboratory for current national and state certifications.

Method reporting limit is 1%. PLM analysis is based on Visual Estimation and NESHAP recommends that any asbestos content less than 10 percent be verified by PLM Point Count or TEM Analysis. This report must not be reproduced except in full with the approval of the laboratory.

Customer Sample No.	SLI Sample/ Layer ID	Sample Identification/ Layer Name	PLM Analysis Results	
			Asbestos Fibers	Other Materials
Layer 2:	Adhesive Yellow, Soft		None Detected	5% CELLULOSE FIBER 95% NON FIBROUS MATERIAL
FT-06B	33342703	4146 Mn Lvl Back Area Rm		
Layer 1:	Floor Tile Cream/Black, Organically Bound		None Detected	100% NON FIBROUS MATERIAL
Layer 2:	Adhesive Yellow, Soft		None Detected	100% NON FIBROUS MATERIAL
PL-03A	33342704	Throughout		
Layer 1:	Wall Plaster Gray, Granular		None Detected	100% NON FIBROUS MATERIAL
PL-03B	33342705	Throughout		
Layer 1:	Wall Plaster Gray, Granular		None Detected	100% NON FIBROUS MATERIAL
PL-03C	33342706	Throughout		
Layer 1:	Wall Plaster Gray, Granular		None Detected	100% NON FIBROUS MATERIAL
FT-07A	33342707	Apts 201 202 Partial		
Layer 1:	Floor Tile Black, Organically Bound		3% CHRYSOTILE	2% CELLULOSE FIBER 95% NON FIBROUS MATERIAL
Layer 2:	Adhesive Black, Bituminous		None Detected	5% CELLULOSE FIBER 95% NON FIBROUS MATERIAL
FT-07B	33342708	Apts 201 202 Partial		
Layer 1:	Floor Tile Gray, Organically Bound		3% CHRYSOTILE	2% CELLULOSE FIBER 95% NON FIBROUS MATERIAL
Layer 2:	Adhesive Black, Bituminous		None Detected	5% CELLULOSE FIBER 95% NON FIBROUS MATERIAL

Total Number of Pages in Report: 11

Results relate only to samples as received by the laboratory.

Visit www.slabin.com for current certifications.

Accrediting bodies: AIHA-LAP, LLC 100527, NVLAP 101150-0, VELAP/NELAC 460135 - Call laboratory for current national and state certifications.

Method reporting limit is 1%. PLM analysis is based on Visual Estimation and NESHAP recommends that any asbestos content less than 10 percent be verified by PLM Point Count or TEM Analysis. This report must not be reproduced except in full with the approval of the laboratory.

Customer Sample No.	SLI Sample/ Layer ID	Sample Identification/ Layer Name	PLM Analysis Results	
			Asbestos Fibers	Other Materials
LIN-01A	33342709	Apt 203 Kitchen Area		
Layer 1:	Linoleum Cream, Org.Bound/Fibrous		None Detected	55% CELLULOSE FIBER 10% MINERAL/GLASS WOOL 35% NON FIBROUS MATERIAL
Sample was inhomogenous, subsamples of each component were analyzed separately.				
LIN-01B	33342710	Apt 203 Kitchen Area		
Layer 1:	Linoleum Cream, Org.Bound/Fibrous		None Detected	55% CELLULOSE FIBER 10% MINERAL/GLASS WOOL 35% NON FIBROUS MATERIAL
Sample was inhomogenous, subsamples of each component were analyzed separately.				
TP-01A	33342711	Under 9" FT 201 202		
Layer 1:	Tar Paper Black, Bituminous/Fibrous		None Detected	60% CELLULOSE FIBER 40% NON FIBROUS MATERIAL
TP-01B	33342712	Under 9" FT 201 202		
Layer 1:	Tar Paper Black, Bituminous/Fibrous		None Detected	60% CELLULOSE FIBER 40% NON FIBROUS MATERIAL
VSF-01A	33342713	Top Stairs W Stairwell		
Layer 1:	Vinyl Sheet Flrng Maroon, Org.Bound/Bituminous/Fibrous		None Detected	65% CELLULOSE FIBER 35% NON FIBROUS MATERIAL
Sample was inhomogenous, subsamples of each component were analyzed separately.				
VSF-01B	33342714	Top Stairs W Stairwell		
Layer 1:	Vinyl Sheet Flrng Maroon, Org.Bound/Bituminous/Fibrous		None Detected	60% CELLULOSE FIBER 40% NON FIBROUS MATERIAL
Sample was inhomogenous, subsamples of each component were analyzed separately.				
VSF-02A	33342715	Apt 202 Bedrm		
Layer 1:	Vinyl Sheet Flrng Green/Cream, Org.Bound/Bituminous/Fibrous		None Detected	55% CELLULOSE FIBER 45% NON FIBROUS MATERIAL
Sample was inhomogenous, subsamples of each component were analyzed separately.				

Total Number of Pages in Report: 11

Results relate only to samples as received by the laboratory.

Visit www.slabin.com for current certifications.

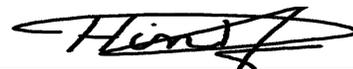
Accrediting bodies: AIHA-LAP, LLC 100527, NVLAP 101150-0, VELAP/NELAC 460135 - Call laboratory for current national and state certifications.

Method reporting limit is 1%. PLM analysis is based on Visual Estimation and NESHAP recommends that any asbestos content less than 10 percent be verified by PLM Point Count or TEM Analysis. This report must not be reproduced except in full with the approval of the laboratory.

Customer Sample No.	SLI Sample/ Layer ID	Sample Identification/ Layer Name	PLM Analysis Results	
			Asbestos Fibers	Other Materials
VSF-02B	33342716	Apt 202 Bedrm		
Layer 1:	Vinyl Sheet Flrng Green/Cream, Org.Bound/Bituminous/Fibrous		None Detected	55% CELLULOSE FIBER 45% NON FIBROUS MATERIAL
Sample was inhomogenous, subsamples of each component were analyzed separately.				
CTEX-02A	33342717	Spt 204 Back Bdrm		
Layer 1:	Ceiling Texture White, Granular		None Detected	100% NON FIBROUS MATERIAL
CTEX-02B	33342718	Spt 204 Back Bdrm		
Layer 1:	Ceiling Texture White, Granular		None Detected	100% NON FIBROUS MATERIAL
CTEX-02C	33342719	Spt 204 Back Bdrm		
Layer 1:	Ceiling Texture White, Granular		None Detected	100% NON FIBROUS MATERIAL
VSF-03A	33342720	Apt 202 Hall Bathrm		
Layer 1:	Vinyl Sheet Flrng Beige, Org.Bound/Fibrous		None Detected	40% CELLULOSE FIBER 20% MINERAL/GLASS WOOL 40% NON FIBROUS MATERIAL
Sample was inhomogenous, subsamples of each component were analyzed separately.				
VSF-03B	33342721	Apt 202 Hall Bathrm		
Layer 1:	Vinyl Sheet Flrng Beige, Org.Bound/Fibrous		None Detected	40% CELLULOSE FIBER 20% MINERAL/GLASS WOOL 40% NON FIBROUS MATERIAL
Sample was inhomogenous, subsamples of each component were analyzed separately.				
LIN-02	33342722	Stairs Bsmnt Unit 4146		
Layer 1:	Linoleum Beige, Org.Bound/Fibrous		None Detected	25% CELLULOSE FIBER 15% MINERAL/GLASS WOOL 50% NON FIBROUS MATERIAL 10% SYNTHETIC FIBER
Sample was inhomogenous, subsamples of each component were analyzed separately.				



Analyst: **Johnathan D. Wilson**



Reviewed By: **Hind Eldanaf, Microscopy Supervisor**

Total Number of Pages in Report: 11

Results relate only to samples as received by the laboratory.

Visit www.slabin.com for current certifications.

Accrediting bodies: AIHA-LAP, LLC 100527, NVLAP 101150-0, VELAP/NELAC 460135 - Call laboratory for current national and state certifications.

Method reporting limit is 1%. PLM analysis is based on Visual Estimation and NESHAP recommends that any asbestos content less than 10 percent be verified by PLM Point Count or TEM Analysis. This report must not be reproduced except in full with the approval of the laboratory.

Sample #	Chimney Mortar Patch	Location / Area	Amount
4140 Unit			
FT-01A, B	12" FT – Gray with white and black spots with yellow adhesive	Main level corridor and back area	
FT-02A, B	9" FT – brown (under carpet) with black Adhesive	Main Level Front room	650 SF
PL-01A, B, C	Wall Plaster	Throughout	UND
CMP-01A	Chimney Mortar Patch	Basement	1SF
DST-01	Duct Seam Tape (residue)	Basement on floor joist	1 SF
4142 Unit			
CT-01A, B, C	2'x 4" Lay-in Ceiling Tile. Slight Texture finish	Throughout main level	1,500 SF
FT-03	Vinyl Floor Tile (beige) with tan adhesive	By front entrance (under ceramic tile)	unknown
ADH-01A, B	Plastic Wall Covering Adhesive (tan)	Wall covering in back room	
SRJC-01A, B, C	Sheetrock with Joint Compound	Front Room walls, back area ceiling	und
CMP-02A	Chimney Mortar Patch (north chimney)	Basement	1SF
CMP-03A	Chimney Mortar Patch (south chimney)	Basement	1SF
IP-01	Insulation Paper (aircell sheet)	Basement -Top of furnace duct And southwest corner on wall	5 SF
DST-02	Duct Seam Tape (residue)	Basement on floor joists and duct	3 SF
PL-02A, B, C	Wall Plaster	Stairwell to basement	UND

Sample #	Chimney Mortar Patch	Location / Area	Amount
TP-01A, B	Black tar paper	Under 9" FT in 201, 202	300
VSF-01A, B	Vinyl Sheet Flooring (maroon mottle)	Top of Stairs landing area West stairwell	50 SF
VSF-02A, B	Vinyl Sheet Flooring (green and cream mottle)	APT 202 bedroom)	140 SF
CTEX-02A, B, C	Acoustical Ceiling Texture	Apt 204 back bedroom	150 SF
VSF-03A, B	Vinyl Sheet Flooring (beige mottle)	APT 202 hall by bathroom	20 SF
LIN-02	Linoleum – beige	Stairs to basement in Unit 4146	25 SF

APPENDIX C
INSPECTORS' CREDENTIALS



Director, Env. Health Div.



**ASBESTOS
INSPECTOR**

Certified by:
State of Minnesota
Department of Health

Expires: 04/10/2015

Timothy J Marxhausen
4805 Elliot Ave
Minneapolis, MN 55417

No. AI2271

Issued: 04/16/2014

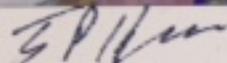


**ASBESTOS
INSPECTOR**

Certified by:
State of Minnesota
Department of Health

Expires: 04/10/2015

Aaron D. Kuck
18816 Chennault Way
Eden Prairie, MN 55344


Director, Env. Health Div.

No. A112661 / Issued: 05/15/2014