Pre-Renovation Hazardous Building Materials Inspection Report

Residential Duplex Building 1022 Freemount Avenue Saint Paul, Minnesota

Prepared for

Ramsey County



Project B1602097.02 May 5, 2016

Braun Intertec Corporation



Braun Intertec Corporation 11001 Hampshire Avenue S Minneapolis, MN 55438 Phone: 952.995.2000 Fax:952.995.2020 Web: braunintertec.com

May 6, 2016

Project B1602097.02

Mr. Paul Scharf Ramsey County 90 West Plato Boulevard Saint Paul, MN 55107

Re:

Pre-Renovation Hazardous Building Material Inspection Report

Residential Building

1022 Fremont Avenue East

Saint Paul, Minnesota

Dear Mr. Scharf:

The enclosed report provides the results of the pre-renovation hazardous building materials inspection conducted on April 13, 2016, at the residential building located at 1022 Fremont Avenue East in Saint Paul, Minnesota (Site). Braun Intertec Corporation was authorized to conduct this inspection in accordance with our Proposal QTB035378 dated March 15, 2016 and the Braun Intertec General Conditions.

The following outline provides the structure of the report-

- Scope of Services
- Site Description
- Results
- Discussion
- Limitations

If you have any questions or need further assistance, please call Justin Michael at 952.995.2617 or Stephen Luth at 952.995.2662.

Sincerely,

BRAUN INTERTEC CORPORATION

Wistin P. Michael, GIT

Environmental Technician

Stephen A. Luth

Project Scientist

Attachments:

Pre-Renovation Hazardous Building Materials Inspection Report

AA/EOE

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- B: Table II. Bulk Asbestos Analytical Results
- C: Table III. Lead-Based Paint Testing Results
- D: Bulk Asbestos Analysis Reports
- E: Sample Location Sketch
- F: Asbestos Inspector Certificate



A. Scope of Services

The scope of our services was limited to:

- Visually examine accessible areas and identify locations of suspect asbestos-containing material (ACM), lead, poly-chlorinated biphenyls (PCB), mercury, and other miscellaneous hazardous material.
- Collect and analyze representative bulk samples of materials suspected of containing asbestos.
- Conduct limited lead-based paint (LBP) testing of potential re-useable components with painted surfaces suspected of containing lead (where applicable). Testing will be accomplished using a Niton X-ray fluorescence (XRF) spectrum analyzer.
- Assign a hazard rating based on asbestos content with respect to the materials condition, friability, accessibility, and hazard potential.
- Document the various materials' current conditions and ACM quantities.
- Generate a final report documenting the sample locations, analysis results, conditions, ACM quantities and recommendations.

B. Site Description

The subject of the inspection is the residential building located at 1022 Fremont Avenue East in Saint Paul, Minnesota. The dwelling is a two level wood structure with a basement. It was constructed in 1932 and has a footprint that encompasses approximately 1,000 square feet. The dwelling is constructed of wood, concrete and concrete block foundation walls. The typical interior finishes included plaster, sheetrock/joint compound, floor tile, wall texture, ceiling texture, carpet, and vinyl sheet flooring. The exterior of the dwelling has vinyl and wood siding with an asphalt roof shingle roof system. The building was vacant and unoccupied at the time of the inspection.

C. Results

C.1. Asbestos

Fifteen (15) bulk samples were collected on April 13, 2016 and submitted to Pace Analytical, Inc. for analysis.

C.1.a. Asbestos-Containing Materials

The following is a summary of building materials found or assumed to contain greater than one percent asbestos (asbestos-containing materials by regulatory definition).



- Window glaze (gray) from the second level windows contains 2 percent chrysotile (asbestos).
- Light ripple ceiling plaster in the kitchen contains 3 percent chrysotile.
- Sink undercoating in the kitchen contains 3 percent chrysotile.

C.1.b. Non-Asbestos-Containing Materials

The following is a summary of building materials found to contain no asbestos or materials that contain one percent or less asbestos (non-asbestos-containing materials by regulatory definition).

- Wall plaster, smooth texture
- Splatter texture ceiling plaster
- 12" by 12" Green floor tile with brown mastic
- Brown underlying sheet flooring
- Floor tile
- Thermal blanket
- Drywall and plaster
- Small popcorn texture plaster
- Shingle (gray)
- Flashing, (black)
- Flashing, (gray)
- Window caulk (white)

Refer to Table I in Appendix A, which lists individual functional spaces of the building, the suspect materials identified in that functional space, whether the suspect material was identified by analysis to be an asbestos-containing material, an estimated amount of each suspect material for the functional space, and includes condition, assessment categories and hazard ratings based on subjective observations made by our representatives.

Refer to Table II in Appendix B, which lists the homogenous material sample numbers, sample locations, suspect material descriptions, and the analysis results for each sample. This table summarizes the results from the Bulk Asbestos Laboratory Report, which is attached in Appendix D.

Bulk asbestos analysis was conducted in accordance with the Environmental Protection Agency's (EPA) Method 40 CFR, Chapter 1, Part 763, Subpart F, and Appendix A (7/1/87 Edition).

C.2. Lead-Based Paint

Testing of limited building components for lead-based paint was accomplished utilizing a Niton XL X-Ray Fluorescence (XRF) field portable analyzer,

Model No. XLP303A - Serial No. 22287, equipped with a 40-milocurie CD-109 source - Serial No. TR3277, installed on March 17, 2015.



Analysis decision-making protocols were based on compliance with the United States (US) EPA and Minnesota Department of Health (MDH), which consider any x-ray fluorescence (XRF) result of 1.0 milligram per square centimeter (mg/cm²) or greater to be "lead-based paint." The following is a list of lead-based paints that were found on the limited building components tested.

- All interior wood window jambs and troughs
- All exterior wood and metal cladded window sashes, sills, troughs, jambs and cases.
- Garage wood ceiling.
- Wood garage door and door jamb into house
- Exterior garage door and garage door jamb.

Note: The painted components were observed to be in poor to good condition at the time of the inspection.

Refer to Table III in Appendix C, which lists the sample numbers, sample locations, component descriptions, XRF field results, and the paint condition for each sample.

C.3. Miscellaneous Regulated Waste

A visual inspection for miscellaneous regulated waste materials that require separate handling and disposal prior to disturbance during building demolition was also performed as part of this assessment. The following is a list of items documented at the site:

C.3.a. Poly-Chlorinated Biphenyls (PCBs)

None identified

C.3.b. Mercury

- Batteries smoke detectors, emergency lighting, and security system.
- Heating boiler controls, unit heater controls, thermostats
- Electrical Systems electrical panels, load meters, supply relays, control switches.

C.3.c. Chlorofluorocarbons (CFCs) and Hydrochlorofluorocarbons (HCFCs)

None identified

C.3.d. Hazardous Waste

None identified

C.3.e. Miscellaneous

- Water heaters
- Bathroom fans



D. Discussion

D.1. Asbestos-Containing Materials

D.1.a. Friable ACM

The following asbestos-containing materials are classified as friable materials according to EPA 40 CFR Part 61 National Emission Standard for Hazardous Air Pollutants (NESHAPs):

Light ripple ceiling plaster

The above friable ACM was observed to be in good condition at the time of our assessment. This material should be maintained in good condition to prevent potential exposure to asbestos. Friable ACMs are to be removed prior to disturbance by demolition in accordance with applicable state and federal regulations.

D.1.b. Category I Non-Friable ACM

The following asbestos-containing materials are classified as Category I non-friable materials according to EPA 40 CFR Part 61 National Emission Standard for Hazardous Air Pollutants (NESHAPs):

None identified

The above Category I non-friable ACM was observed to be in good condition at the time of our assessment. This material should be maintained in good condition to prevent potential exposure to asbestos. Category I non-friable ACMs are not considered a hazard unless cut, drilled, sanded, or otherwise abraded. However, any Category I material that may become friable during demolition must be removed prior to that activity. Category I materials in good condition may be left in place for demolition. However, if left in place, the crushing or recycling of demolition debris is strictly prohibited. In addition, all demolition debris containing Category I materials must be disposed of at a landfill specifically permitted to accept this type of waste.

D.1.c. Category II Non-Friable ACM

The following asbestos-containing materials are classified as Category II non-friable materials according to EPA NESHAPs:

- Window glaze (gray)
- Sink undercoating

The above Category II non-friable ACMs were observed to be in good condition at the time of our assessment. These materials should be maintained in good condition to prevent potential exposure to asbestos. Category II non-friable ACMs are not considered a hazard unless cut, drilled, sanded, or otherwise abraded. However, Category II non-friable ACMs that may become friable during demolition must be removed prior to that activity. In accordance with applicable state and federal regulations.



D.2. Lead-Based Paint

Building components with lead-based paint should be maintained in good condition. If lead-based paint is to be disturbed during renovation, contractors should follow "Lead Safe Work Practices" and the OSHA Lead in Construction Standard. If the building were to be demolished in its entirety, building components with lead paint are not required to be removed or disposed of as lead or hazardous waste. Any lead-based paint-containing demolition waste and/or debris generated during building renovation or demolition should be subject to proper handling and disposal, consistent with applicable regulations and requirements.

The U.S. OSHA Lead in Construction Standard 29 Code of Federal Regulations (CFR) 1926.62 applies to all situations where employees are engaged in the disturbance of lead-containing coatings, regardless of the quantity of lead involved. Therefore, any XRF result above 0.0 mg/cm² is considered "lead-containing coatings" in order to be in compliance with the OSHA standard. Demolition of the building may involve disturbing lead-containing coatings. Contractors should be informed of the presence of lead coatings and that they will be required to comply with the OSHA lead standard.

D.3. Miscellaneous Regulated Waste

In the case of building renovation/demolition, any of the miscellaneous regulated waste items listed in Section C.3 that will be disturbed, must be removed prior to disturbance and must be recycled or disposed of in accordance with state and federal guidelines.

E. Limitations

This inspection was limited to areas available for observation via non-destructive means. In any building, the potential exists for hazardous building materials to be located inside walls, above ceilings, under floors, and other inaccessible areas. Braun Intertec cannot be held responsible for the presence of any such hidden materials. In the case of building renovation/demolition, contractors involved in the project should be made aware of this potential. If previously unidentified suspect hazardous building materials are exposed during their activities they should be sampled and analyzed for content prior to any disturbance.

Note: A destructive ACM investigation is required by the MPCA prior to building renovation/demolition. It is recommended that the destructive ACM investigation is performed once the building is vacant.

Note: Various electrical systems were identified during the survey. These systems were believed to be currently "charged" and active. Suspect materials are located within these electrical boxes, control panels (breaker bars, insulation, and electrical wire insulation). For the purpose of this report, all electrical systems associated in these areas assessed are to be assumed to contain asbestos until proven otherwise by sampling and analysis.

Note: It is assumed that pipe insulation may be present in currently inaccessible chases, wall cavities, and above hard ceilings.



Date: __ 5-6-16

In performing its services, Braun Intertec used that degree of care and skill ordinarily exercised under similar circumstances by reputable members of its profession currently practicing in the same locality. No warranty, express or implied, is made.

F. Asbestos Inspector Certification

I, the undersigned, do hereby certify that I am an accredited Asbestos Inspector in the State of Minnesota. A photocopy of my current asbestos inspector certificate is attached in Appendix F.

Signature:

stin P. Michael

Énvironmental Technician II

Minnesota Department of Health Asbestos Inspector No: Al12434

Signature:

Stephen A. Luth

tephen A. Luth

Project Scientist

Minnesota Department of Health Asbestos Inspector No: Al10702



Appendix A

Table I. Asbestos Building Inspection Results





Client: Ramsey County Department of Development

Location: 1022 Fremont Avenue East Date of Inspection: April 13, 2016

Project: B1602097.02

Functional Space	Homogeneous Material Description	Contains Asbestos (Yes/No)	Ref. Client Sample No. (See Table II)	Estimated Quantity Units	Material Condition ¹	Hazard Category ²
Living/Dining Room	Wall Plaster, Smooth Texture	No	1A - 1E	1,600 square feet	D	0
Living/Dining Room	Splatter Texture Ceiling Plaster	No	2A - 2C	800 square feet	D	0
Living/Dining Room	Window Glaze, Gray	Yes	3	linear 16 at 14 feet	D	3
Kitchen	Light Ripple Ceiling Plaster	Yes	4	200 square feet	D	5
Kitchen	Wall Plaster, Smooth Texture	No	1A - 1E	300 square feet	D	0
Kitchen	Window Glaze, Gray	Yes	3	2 at 14 feet	ND	3
Kitchen	12" by 12" Green Floor Tile with Brown Mastic	No	5	300 square feet	ND	0
Kitchen	Brown Underlying Sheet Flooring	No	6	300 square feet	ND	0
Kitchen	Sink Undercoat	Yes	7	1 each	ND	5
2nd Level	Window Glaze, Gray	Yes	3	3 at 14 feet	ND	3
Basement	Floor Tile	No	8	30 square feet	ND	0
Basement	Thermal Blanket	No	9	1 each	ND	0
Kitchen	Drywall and Plaster	No	10	900 square feet	ND	0
Garage	Small Popcorn Texture Plaster	No	11A - 11C	200 square feet	ND	0
Garage	Drywall and Plaster	No	10	200 square feet	ND	0
Exterior	Shingle, Gray	No	12	2000 square feet	ND	0
Exterior	Flashing, Black	No	13	2000 square feet	ND	0
Exterior	Flashing, Gray	No	14	750 square feet	ND	0
Exterior	Window Caulk (White)	No	15	100 square feet	ND	0
Bathroom	Large Ripple Texture Plaster		Assumed	80 square feet	ND	
Bathroom	Floor Tile, Hexagon Pattern		Assumed	60 square feet	ND	

1. Condition of ACM:

ND = Not Damaged

D = Damaged

SD = Significantly Damaged

Table I. Asbestos Building Inspection Results

1022 Fremont Avenue East, St. Paul, Minnesota B1602097.02

Page 2

			Contains	Ref. Client			
		Homogeneous Material	Asbestos	Sample No.	Estimated Quantity	Material	Hazard
ı	Functional Space	Description	(Yes/No)	(See Table II)	Units	Condition ¹	Category ²

2. Hazard Category:

- 0 = No hazard material does not contain asbestos
- 1 = ACM with potential for damage
- 2 = ACM with potential for significant damage
- 3 = Damaged or significantly damaged asbestos-containing miscellaneous material
- 4 = Damaged or significantly damaged friable asbestos-containing thermal system insulation
- 5 = Damaged or significantly damaged friable asbestos-containing surfacing material



Appendix B

Table II. Bulk Asbestos Analytical Results





Client: Ramsey County Economic Development

Location: 1022 Fremont Avenue Eas Date of Inspection: April 13, 2016

Project: B1602097.02

Sample No.	Sample Location	Material	Asbestos Content (%) ¹
1A - 1E	Living/Dining Room	Wall Plaster, Smooth Texture	None Detected
2A - 2C	Living/Dining Room	Splatter Texture Ceiling Plaster	None Detected
3	Living/Dining Room	Window Glaze, Gray	Chrysotile 2
4	Kitchen	Light Ripple Ceiling Plaster	Chrysotile 3
5	Kitchen	12" by 12" Green Floor Tile with Brown Mastic	None Detected
6	Kitchen	Brown Underlying Sheet Flooring	None Detected
7	Kitchen	Sink Undercoat	Chrysotile 3
8	Basement	Floor Tile	None Detected
9	Basement	Thermal Blanket	None Detected
10	Kitchen	Drywall and Plaster	None Detected
11A - 11C	Garage	Small Popcorn Texture Plaster	None Detected
12	Exterior	Shingle, Gray	None Detected
13	Exterior	Flashing, Black	None Detected
14	Exterior	Flashing, Gray	None Detected
15	Exterior	Window Caulk (White)	None Detected

^{*} Materials containing 1 percent of asbestos or less are not considered to be asbestos-containing materials by the U.S.EPA.

^{1.} Asbestos content is indicated as an approximate percent by area.

Appendix C

Table III. Lead-Based Paint Testing Results



Client: Ramsey County

Location: 1022 Fremont Avenue East, St. Paul, MN.

Date of Ins 13-Apr-16
Project #: B1602097.02

431 C 432 C 433 D 434 D 435 D 436 C 437 W	cal cal cal WALL	Substrate DRYWALL	Side	Condition	Color	Site 1022 1022		Room KITCHEN	Results Positive	PhC	PbC Error	PbL	PbL Error	PbK	PbK Error
424 ca 425 ca 426 W 427 W 428 W 429 W 430 C 431 C 432 C 433 D 434 D 435 D 436 C 437 W	cal cal WALL	DRYWALL					FIRST	KITCHEN	Positive	1 2	0.2	1 2	0.2		
425 ca 426 W 427 W 428 W 429 W 430 C 431 C 432 C 433 D 434 D 435 D 436 C 437 W	cal WALL	DRYWALL				1022			. 0511110	1.2	0.2	1.2	0.2	< LOD	1.07
426 W 427 W 428 W 429 W 430 C 431 C 432 C 433 D 434 D 435 D 436 C 437 W	WALL	DRYWALL				1022	FIRST	KITCHEN	Positive	1.1	0.1	1.1	0.1	< LOD	0.61
427 W 428 W 429 W 430 C 431 C 432 C 433 D 434 D 435 D 436 C 437 W		DRYWALL				1022	FIRST	KITCHEN	Positive	1.1	0.1	1.1	0.1	< LOD	0.7
428 W 429 W 430 C 431 C 432 C 433 D 434 D 435 D 436 C 437 W	WALL		Α	INTACT	WHITE	1022	FIRST	KITCHEN	Negative	< LOD	0.26	< LOD	0.26	< LOD	2.73
429 W 430 C 431 C 432 C 433 D 434 D 435 D 436 C 437 W		PLASTER	В	INTACT	WHITE	1022	FIRST	KITCHEN	Negative	< LOD	0.45	< LOD	0.45	< LOD	1.8
430 C 431 C 432 C 433 D 434 D 435 D 436 C 437 W	WALL	PLASTER	С	INTACT	WHITE	1022	FIRST	KITCHEN	Negative	< LOD	0.07	< LOD	0.07	< LOD	2.08
431 C 432 C 433 D 434 D 435 D 436 C 437 W	WALL	PLASTER	D	INTACT	WHITE	1022	FIRST	KITCHEN	Negative	< LOD	0.03	< LOD	0.03	< LOD	2.5
432 C 433 D 434 D 435 D 436 C 437 W	CEILING	PLASTER	D	INTACT	WHITE	1022	FIRST	KITCHEN	Negative	< LOD	0.26	< LOD	0.26	< LOD	2.11
433 D 434 D 435 D 436 C 437 W	CABINET	WOOD	С	INTACT	WHITE	1022	FIRST	KITCHEN	Negative	< LOD	0.03	< LOD	0.03	< LOD	2.31
434 D 435 D 436 C 437 W	CABINET	WOOD	С	INTACT	WHITE	1022	FIRST	KITCHEN	Negative	< LOD	0.03	< LOD	0.03	< LOD	2.17
435 D 436 C 437 W	OOOR case	WOOD	С	INTACT	stain	1022	FIRST	KITCHEN	Negative	< LOD	0.04	< LOD	0.04	< LOD	2.19
436 C 437 W	OOOR case	WOOD	С	INTACT	stain	1022	FIRST	KITCHEN	Negative	< LOD	0.26	< LOD	0.26	< LOD	1.71
437 W	DOOR j	WOOD	С	INTACT	WHITE	1022	FIRST	KITCHEN	Positive	1.8	0.8	1.8	0.8	< LOD	2.1
	CEILING	WOOD	С	INTACT	WHITE	1022	FIRST	GARAGE	Positive	< LOD	8.85	< LOD	3.6	< LOD	8.85
438 W	WALL	WOOD	С	INTACT	WHITE	1022	FIRST	GARAGE	Negative	0.5	0.3	0.5	0.3	< LOD	2.25
+30 V	WALL	WOOD	D	INTACT	WHITE	1022	FIRST	GARAGE	Negative	< LOD	0.45	< LOD	0.45	< LOD	2.7
439 W	WALL	PLASTER	Α	INTACT	WHITE	1022	FIRST	GARAGE	Negative	< LOD	0.05	< LOD	0.05	< LOD	3.48
440 W	WALL	PLASTER	В	INTACT	WHITE	1022	FIRST	GARAGE	Negative	< LOD	0.04	< LOD	0.04	< LOD	3.26
441 W	WALL	PLASTER	С	INTACT	WHITE	1022	FIRST	GARAGE	Negative	< LOD	0.03	< LOD	0.03	< LOD	2.08
442 W	WALL	PLASTER	D	INTACT	WHITE	1022	FIRST	GARAGE	Negative	< LOD	0.05	< LOD	0.05	< LOD	2.35
443 C	CEILING	PLASTER	D	INTACT	WHITE	1022	FIRST	GARAGE	Negative	< LOD	0.03	< LOD	0.03	< LOD	2.29
444 W	WINDOW	WOOD	D	POOR	WHITE	1022	FIRST	GARAGE	Negative	< LOD	0.03	< LOD	0.03	< LOD	1.72
445 W	WINDOW	WOOD	D	POOR	WHITE	1022	FIRST	GARAGE	Negative	0.4	0.2	0.4	0.2	< LOD	2.25
446 D	DOOR	WOOD	Α	INTACT	WHITE	1022	FIRST	GARAGE	Positive	2.4	1.4	1.6	0.7	2.4	1.4
447 D	OOOR thres	WOOD	Α	POOR	BROWN	1022	FIRST	GARAGE	Negative	0.8	0.2	0.8	0.2	< LOD	0.75
448 W	WALL	DRYWALL	Α	INTACT	WHITE	1022	FIRST	LIVING ROOM	Negative	< LOD	0.03	< LOD	0.03	< LOD	1.68
449 W	A/A11	DRYWALL	В	INTACT	WHITE	1022	FIRST	LIVING ROOM	Negative	< LOD	1.24	< LOD	0.4	< LOD	1.24



Client: Ramsey County

Location: 1022 Fremont Avenue East, St. Paul, MN.

Date of Ins 13-Apr-16
Project #: B1602097.02

	Component WALL	Substrate	Side	Condition	Color	Cita Flagu	Doom	Results	Dh.C	PbC		PbL		PbK
	\Λ/ΔΙΙ				COIOI	Site Floor	Room	Results	PbC	Error	PbL	Error	PbK	Error
450	VVALL	PLASTER	С	INTACT	WHITE	1022 FIRST	LIVING ROOM	Negative	< LOD	1.15	0.6	0.3	< LOD	1.15
451	WALL	PLASTER	D	INTACT	WHITE	1022 FIRST	LIVING ROOM	Negative	0.6	0.3	0.6	0.3	< LOD	1.26
452	CEILING	PLASTER	D	INTACT	WHITE	1022 FIRST	LIVING ROOM	Negative	< LOD	0.18	< LOD	0.18	< LOD	2.6
453	FLOOR	WOOD	D	INTACT	stain	1022 FIRST	LIVING ROOM	Negative	< LOD	0.04	< LOD	0.04	< LOD	2.22
454	BASEBOARD	WOOD	D	INTACT	stain	1022 FIRST	LIVING ROOM	Negative	< LOD	0.17	< LOD	0.17	< LOD	2.59
455	WINDOW	WOOD	D	INTACT	stain	1022 FIRST	LIVING ROOM	Negative	< LOD	0.08	< LOD	0.08	< LOD	2.42
456	WINDOW	WOOD	D	INTACT	stain	1022 FIRST	LIVING ROOM	Negative	< LOD	0.1	< LOD	0.1	< LOD	2.23
457	WINDOW	WOOD	D	INTACT	stain	1022 FIRST	LIVING ROOM	Negative	< LOD	0.12	< LOD	0.12	< LOD	1.95
458	WINDOW j	WOOD	D	INTACT	WHITE	1022 FIRST	LIVING ROOM	Positive	< LOD	3.9	2.2	1.3	< LOD	3.9
459	WINDOW t	METAL	D	INTACT	WHITE	1022 FIRST	LIVING ROOM	Positive	2.3	1.3	< LOD	1.35	2.3	1.3
460	DOOR	WOOD	Α	INTACT	stain	1022 FIRST	LIVING ROOM	Negative	< LOD	0.03	< LOD	0.03	< LOD	2.26
461	DOOR	WOOD	Α	INTACT	stain	1022 FIRST	LIVING ROOM	Negative	< LOD	0.13	< LOD	0.13	< LOD	2.45
462	DOOR J	WOOD	Α	POOR	WHITE	1022 FIRST	LIVING ROOM	Positive	1.8	0.7	1.8	0.7	< LOD	2.7
463	WINDOW	WOOD	Α	INTACT	BROWN	1022 FIRST	LIVING ROOM	Negative	< LOD	0.08	< LOD	0.08	< LOD	1.77
464	WALL	PLASTER	Α	INTACT	BLUE	1022 FIRST	BEDROOM	Negative	< LOD	2.05	< LOD	0.3	< LOD	2.05
465	WALL	PLASTER	В	INTACT	BLUE	1022 FIRST	BEDROOM	Negative	< LOD	0.06	< LOD	0.06	< LOD	2.34
466	WALL	PLASTER	С	INTACT	BLUE	1022 FIRST	BEDROOM	Negative	< LOD	1.18	< LOD	0.13	< LOD	1.18
467	WALL	PLASTER	D	INTACT	BLUE	1022 FIRST	BEDROOM	Negative	< LOD	0.05	< LOD	0.05	< LOD	2.74
468	WALL	PLASTER	D	INTACT	WHITE	1022 FIRST	BEDROOM	Negative	< LOD	2.26	< LOD	0.26	< LOD	2.26
469	CEILING	PLASTER	D	INTACT	WHITE	1022 FIRST	BEDROOM	Negative	< LOD	1.91	< LOD	0.22	< LOD	1.91
470	BASEBOARD	WOOD	Α	INTACT	WHITE	1022 FIRST	BEDROOM	Negative	< LOD	0.18	< LOD	0.18	< LOD	2.25
471	WINDOW	WOOD	Α	INTACT	WHITE	1022 FIRST	BEDROOM	Negative	< LOD	0.57	< LOD	0.57	< LOD	1.48
472	WINDOW	WOOD	Α	INTACT	WHITE	1022 FIRST	BEDROOM	Negative	< LOD	0.17	< LOD	0.17	< LOD	2.2
473	WINDOW	WOOD	Α	INTACT	WHITE	1022 FIRST	BEDROOM	Negative	< LOD	0.18	< LOD	0.18	< LOD	2.29
474	WINDOW J	WOOD	Α	INTACT	WHITE	1022 FIRST	BEDROOM	Negative	< LOD	0.6	< LOD	0.6	< LOD	2.7
475	WINDOW J	WOOD	Α	INTACT	WHITE	1022 FIRST	BEDROOM	Positive	3.3	2.1	1	0.4	3.3	2.1
476	WINDOW t	METAL	Α	INTACT	WHITE	1022 FIRST	BEDROOM	Negative	< LOD	0.23	< LOD	0.23	< LOD	1.65



Client: Ramsey County

Location: 1022 Fremont Avenue East, St. Paul, MN.

Date of Ins 13-Apr-16 Project #: B1602097.02

Project #.	B1602097.02													
Reading No	Component	Substrate	Side	Condition	Color	Site Floor	Room	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
477	DOOR	WOOD	С	INTACT	WHITE	1022 FIRST	BEDROOM	Negative	< LOD	0.1	< LOD	0.1	< LOD	2.28
478	DOOR	WOOD	С	INTACT	WHITE	1022 FIRST	BEDROOM	Negative	< LOD	0.38	< LOD	0.38	< LOD	2.06
479	WALL	PLASTER	С	INTACT	WHITE	1022 FIRST	BEDROOM	Negative	< LOD	2.26	< LOD	0.44	< LOD	2.26
480	WALL	PLASTER	В	INTACT	WHITE	1022 FIRST	BEDROOM	Negative	< LOD	0.32	< LOD	0.32	< LOD	2.47
481	WALL	PLASTER	С	INTACT	WHITE	1022 FIRST	BEDROOM	Negative	< LOD	1.95	< LOD	0.58	< LOD	1.95
482	WALL	PLASTER	С	INTACT	WHITE	1022 FIRST	BEDROOM	Negative	< LOD	1.31	< LOD	0.33	< LOD	1.31
483	WALL	PLASTER	С	INTACT	BLUE	1022 FIRST	BEDROOM	Negative	< LOD	1.07	< LOD	0.11	< LOD	1.07
484	BASEBOARD	WOOD	С	INTACT	WHITE	1022 FIRST	BEDROOM	Negative	< LOD	0.04	< LOD	0.04	< LOD	2.4
485	WINDOW	WOOD	С	INTACT	WHITE	1022 FIRST	BEDROOM	Negative	< LOD	0.42	< LOD	0.42	< LOD	2.15
486	WINDOW	WOOD	С	INTACT	WHITE	1022 FIRST	BEDROOM	Negative	< LOD	0.23	< LOD	0.23	< LOD	2.15
487	WINDOW	WOOD	С	INTACT	WHITE	1022 FIRST	BEDROOM	Negative	< LOD	0.57	< LOD	0.57	< LOD	2.21
488	WINDOW j	WOOD	С	POOR	WHITE	1022 FIRST	BEDROOM	Positive	2	0.7	2	0.7	< LOD	2.85
489	WINDOW t	METAL	С	POOR	WHITE	1022 FIRST	BEDROOM	Positive	2.5	1.5	< LOD	1.05	2.5	1.5
490	WALL	PLASTER	В	INTACT	WHITE	1022 FIRST	STAIR	Negative	< LOD	0.35	< LOD	0.35	< LOD	2.71
491	WALL	PLASTER	D	INTACT	WHITE	1022 FIRST	STAIR	Negative	< LOD	0.42	< LOD	0.42	< LOD	2.69
492	TREAD	WOOD	D	INTACT	BEIGE	1022 FIRST	STAIR	Negative	< LOD	0.1	< LOD	0.1	< LOD	1.71
493	RISER	WOOD	D	INTACT	BEIGE	1022 FIRST	STAIR	Negative	< LOD	0.25	< LOD	0.25	< LOD	1.65
494	FLOOR	WOOD	D	INTACT	BEIGE	1022 FIRST	STAIR	Negative	< LOD	0.08	< LOD	0.08	< LOD	1.93
495	FLOOR	WOOD	D	INTACT	BROWN	1022 SECON	D BEDROOM	Negative	< LOD	0.12	< LOD	0.12	< LOD	2.09
496	WALL	WOOD	Α	INTACT	WHITE	1022 SECON	D BEDROOM	Negative	< LOD	0.17	< LOD	0.17	< LOD	1.67
497	WALL	WOOD	В	INTACT	WHITE	1022 SECON	D BEDROOM	Negative	< LOD	0.05	< LOD	0.05	< LOD	1.77
498	WALL	WOOD	С	INTACT	WHITE	1022 SECON	D BEDROOM	Negative	< LOD	0.19	< LOD	0.19	< LOD	1.87
499	WALL	WOOD	С	INTACT	WHITE	1022 SECON	D BEDROOM	Negative	< LOD	0.08	< LOD	0.08	< LOD	2.35
500	CEILING	WOOD	С	INTACT	WHITE	1022 SECON	D BEDROOM	Negative	< LOD	0.06	< LOD	0.06	< LOD	1.9
501	WINDOW	WOOD	В	INTACT	BLUE	1022 SECON	D BEDROOM	Negative	< LOD	0.05	< LOD	0.05	< LOD	1.75
502	WINDOW	WOOD	В	INTACT	BLUE	1022 SECON	D BEDROOM	Negative	< LOD	0.14	< LOD	0.14	< LOD	1.87
503	WINDOW	WOOD	В	INTACT	BLUE	1022 SECON	D BEDROOM	Negative	0.4	0.2	0.4	0.2	< LOD	2.4



Client: Ramsey County

Location: 1022 Fremont Avenue East, St. Paul, MN.

Date of Ins 13-Apr-16 Project #: B1602097.02

rrojecem Bi	002037.02														
Reading No Con	mponent	Substrate	Side	Condition	Color	Site	Floor	Room	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
504 WI	INDOW j	WOOD	В	POOR	WHITE	1022	SECOND	BEDROOM	Positive	2.5	1.4	2.5	1.4	< LOD	5.
505 WI	INDOW t	METAL	В	POOR	WHITE	1022	SECOND	BEDROOM	Positive	4.6	2.9	0.9	0.5	4.6	2.
506 W	ALL	CONCRETE	В	POOR	GREEN	1022	BASEME	NT	Negative	< LOD	0.03	< LOD	0.03	< LOD	2.5
507 W	ALL	CONCRETE	С	POOR	GREEN	1022	BASEME	NT	Negative	< LOD	0.11	< LOD	0.11	< LOD	2.0
508 WI	INDOW	WOOD	В	POOR	GREEN	1022	BASEME	NT	Positive	1.3	0.2	1.3	0.2	1.5	0.
509 WI	INDOW	WOOD	D	INTACT	BEIGE	1022	BASEME	NT	Positive	1.6	0.5	1.6	0.5	< LOD	1.9
510 W	ALL	CONCRETE	D	INTACT	WHITE	1022	BASEME	NT	Negative	< LOD	0.08	< LOD	0.08	< LOD	1.3
511 W	ALL	WOOD	Α	INTACT	GREEN	1022	BASEME	NT	Positive	1.5	0.5	1.5	0.5	< LOD	1.9
512 po:	st	WOOD	Α	INTACT	GREEN	1022	BASEME	NT	Negative	0.25	0.17	0.25	0.17	< LOD	2.1
513 bea	am	WOOD	Α	INTACT	GREEN	1022	BASEME	NT	Negative	0.3	0.18	0.3	0.18	< LOD	2.5
514 chi	imney	brick	С	INTACT	GREEN	1022	BASEME	NT	Negative	< LOD	0.26	< LOD	0.26	< LOD	2.1
515 pip	ре	METAL	С	INTACT	silver	1022	BASEME	NT	Negative	< LOD	0.1	< LOD	0.1	< LOD	3.8
516 W	ALL	METAL	Α	INTACT	YELLOW	1022	FIRST	OUTSIDE	Negative	< LOD	0.03	< LOD	0.03	< LOD	1.
517 WI	INDOW	METAL	Α	INTACT	WHITE	1022	FIRST	OUTSIDE	Positive	2	0.8	< LOD	0.5	2	0.
518 WI	INDOW	METAL	Α	INTACT	WHITE	1022	FIRST	OUTSIDE	Positive	1.3	0.3	0.3	0.16	1.3	0.
519 W	ALL	METAL	В	INTACT	YELLOW	1022	FIRST	OUTSIDE	Negative	< LOD	0.03	< LOD	0.03	< LOD	1.
520 WI	INDOW basebsa:	WOOD	В	POOR	WHITE	1022	FIRST	OUTSIDE	Positive	2.8	1.2	2.8	1.2	< LOD	4.3
521 DO	OOR kickplate	WOOD	Α	POOR	WHITE	1022	FIRST	OUTSIDE	Negative	< LOD	0.49	< LOD	0.49	< LOD	1.9
522 DO	OOR kickplate	WOOD	Α	POOR	WHITE	1022	FIRST	OUTSIDE	Negative	0.8	0.2	0.8	0.2	1.3	0.
523 W	ALL	METAL	D	INTACT	YELLOW	1022	FIRST	OUTSIDE	Negative	< LOD	0.03	< LOD	0.03	< LOD	1.2
524 WI	INDOW	METAL	D	INTACT	WHITE	1022	FIRST	OUTSIDE	Positive	2.5	1.5	< LOD	1.2	2.5	1.5
525 WI	INDOW	METAL	D	INTACT	WHITE	1022	FIRST	OUTSIDE	Positive	1.7	0.6	< LOD	0.45	1.7	0.
526 WI	INDOW	WOOD	D	POOR	WHITE	1022	FIRST	OUTSIDE	Positive	2.1	0.9	2.1	0.9	< LOD	3.
527 WI	INDOW	WOOD	D	POOR	WHITE	1022	FIRST	OUTSIDE	Positive	2.8	1.7	1.3	0.5	2.8	1.
528 W	ALL	METAL	С	INTACT	YELLOW	1022	FIRST	OUTSIDE	Negative	< LOD	0.03	< LOD	0.03	< LOD	1.7
529 DO	OOR garage	WOOD	С	POOR	WHITE	1022	FIRST	OUTSIDE	Negative	< LOD	0.13	< LOD	0.13	< LOD	1.9
530 DO	OOR garage	WOOD	С	POOR	WHITE	1022	FIRST	OUTSIDE	Positive	1.1	0.1	1.1	0.1	< LOD	0.4



Client: Ramsey County

Location: 1022 Fremont Avenue East, St. Paul, MN.

Date of Ins 13-Apr-16 Project #: B1602097.02

Reading I	No Component	Substrate	Side	Condition	Color	Site	Floor	Room	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
5	31 DOOR garage case	WOOD	С	POOR	WHITE	1022	FIRST	OUTSIDE	Positive	1.9	0.7	< LOD	0.6	1.9	0.7
5	32 fascia	METAL	С	INTACT	WHITE	1022	FIRST	OUTSIDE	Null	1	0.2	0.3	0.09	1	0.2
5	33 fascia	METAL	С	INTACT	WHITE	1022	FIRST	OUTSIDE	Null	< LOD	0.45	< LOD	0.45	1	0.5
5	34 rail	METAL	Α	INTACT	blqck	1022	FIRST	OUTSIDE	Negative	< LOD	0.13	< LOD	0.13	< LOD	3.97
5	35 cal		Α	INTACT	blqck	1022	FIRST	OUTSIDE	Positive	1.1	0.1	1.1	0.1	< LOD	0.69
5	36 cal		Α	INTACT	blqck	1022	FIRST	OUTSIDE	Positive	1.1	0.1	1.1	0.1	< LOD	0.4
5	37 cal		Α	INTACT	blqck	1022	FIRST	OUTSIDE	Positive	1.2	0.2	1.2	0.2	< LOD	1.05

Appendix D Bulk Asbestos Analysis Reports



Mr. Steve Luth Braun Intertec-Bloomington 11001 Hampshire Ave. South Bloomington, MN 55438

April 20, 2016

Work Order #: 1600957

Pace Analytical Services, Inc. 1800 Elm St. SE - Suite 1830

> Minneapolis, MN 55414 (612) 607-6457

> > Page 1 of 8

RE: B1602097.02-1022 Freemont Avenue East

B1602097.02

Dear Steve Luth:

Bulk Asbestos Analysis Report

The microscopy department of Pace Analytical Services, Inc. received your analytical request on April 15, 2016. The sample(s) were analyzed in the Pace Industrial Hygiene laboratory unless otherwise noted. The objective of this analysis was to determine the presence of asbestos using polarized light microscopy (PLM) and to determine the percent of asbestos and non-asbestos fibrous components by calibrated visual area estimation. Analytical results are summarized on the following laboratory report.

Methodology

Bulk asbestos analysis is conducted in accordance with the Environmental Protection Agency's (EPA) methods 40 CFR, Part 763, Ch. 1, Subpart F, Appendix A (7-1-87 Edition) and EPA/600/R-93/116. All analyses are in compliance with the quality control procedures specified by the methods. All samples are examined for homogeneity. If a sample contains more than one layer, each layer is analyzed individually. Total fibrous content is calculated for joint compound/wallboard systems by combining layer results according to their percentages of the total sample. All routine quality assurance procedures were followed, unless otherwise noted.

Remarks

This test report relates only to the items submitted for analysis.

Samples are retained at our laboratory for a period of 30 days and will be disposed of unless otherwise instructed by the client.

This report can not be copied, except in its entirety, without prior written permission from Pace Analytical Services, Inc.

We appreciate your decision to use Pace Analytical Services, Inc. for this project. We are committed to being your vendor of choice to meet your analytical needs.

If you have any questions please contact me at 612-607-6457.

Mulle Pin

Sincerely,

Michelle Pivec For Steven D. Felton

Project Manager

Steven D. Felton

Steven D. Lilton

Microscopist

Client: Braun Intertec-Bloomington Laboratory: Pace Analytical Services, Inc. (IH Laboratory) Date Reported: 4/20/2016

Page 2 of 8

Log-In: 04/15/16 Lab Contact: Michelle Pivec For Steven D. Felton

Client Reference: B1602097.02-1022 Freemont Avenue East PO Number: B1602097.02

Client ID: 1A	Sample No: 160	00957-01				
Macroscopic Description	No. of Layers and Layer Designator	Percent of Total Sample	Non-Fibrous Components*	Other Fibrous Non- Asbestos Content Total or Layer %	Asbestos Content Total or Layer %	Analytical Date
Tan plaster with paint	1	100	1,3,11	Cellulose <1	None Detected	04/20/16
Client ID: 1B	Sample No: 160	00957-02				
Macroscopic Description	No. of Layers and Layer Designator	Percent of Total Sample	Non-Fibrous Components*	Other Fibrous Non- Asbestos Content Total or Layer %	Asbestos Content Total or Layer %	Analytical Date
Tan plaster with paint	1	100	1,3,11	None Detected	None Detected	04/20/16
Client ID: 1C	Sample No: 160	00957-03				
Macroscopic Description	No. of Layers and Layer Designator	Percent of Total Sample	Non-Fibrous Components*	Other Fibrous Non- Asbestos Content Total or Layer %	Asbestos Content Total or Layer %	Analytical Date
Tan plaster with paint	1	100	1,3,11	None Detected	None Detected	04/20/16
Client ID: 1D	Sample No: 160	00957-04				
Macroscopic Description	No. of Layers and Layer Designator	Percent of Total Sample	Non-Fibrous Components*	Other Fibrous Non- Asbestos Content Total or Layer %	Asbestos Content Total or Layer %	Analytical Date
Tan plaster with paint	1	100	1,3,11	Cellulose <1	None Detected	04/20/16
Client ID: 1E	Sample No: 160	00957-05				
Macroscopic Description	No. of Layers and Layer Designator	Percent of Total Sample	Non-Fibrous Components*	Other Fibrous Non- Asbestos Content Total or Layer %	Asbestos Content Total or Layer %	Analytical Date
Tan plaster with paint	1	100	1,3,11	None Detected	None Detected	04/20/16
Client ID: 2A	Sample No: 160	00957-06				
Macroscopic Description	No. of Layers and Layer Designator	Percent of Total Sample	Non-Fibrous Components*	Other Fibrous Non- Asbestos Content Total or Layer %	Asbestos Content Total or Layer %	Analytical Date
White granular texture	1	100	1,3,11	None Detected	None Detected	04/20/16
Client ID: 2B	Sample No: 160	00957-07				
Macroscopic Description	No. of Layers and Layer Designator	Percent of Total Sample	Non-Fibrous Components*	Other Fibrous Non- Asbestos Content Total or Layer %	Asbestos Content Total or Layer %	Analytical Date
Tan plaster with paint	1	100	1,3,11	None Detected	None Detected	04/20/16

Client: Braun Intertec-Bloomington Laboratory: Pace Analytical Services, Inc. (IH Laboratory) Date Reported: 4/20/2016

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Log-In: 04/15/16 Lab Contact: Michelle Pivec For Steven D. Felton

Client Reference: B1602097.02-1022 Freemont Avenue East PO Number: B1602097.02

Client ID: 2C	Sample No: 160	00957-08				
	No. of	,,,,,,		od Pil V		
Magragaonia	Layers	Percent of	Non-Fibrous	Other Fibrous Non- Asbestos Content	Asbestos Content	A14:1
Macroscopic Description	and Layer	Total Sample	Components*	Total or Layer %	Total or Layer %	Analytical Date
Description	Designator	Total Sample	Components	Total of Layer 76	Total of Layer 76	Date
Tan plaster with texture	1	100	1,3,11	None Detected	None Detected	04/20/16
Client ID: 3	Sample No: 160	00957-09				
	No. of			Other Fibrous Non-		
Macroscopic	Layers	Percent of	Non-Fibrous	Asbestos Content	Asbestos Content	Analytical
Description	and Layer	Total Sample	Components*	Total or Layer %	Total or Layer %	Date
	Designator	Total Sample	Components	Total of Edger /v		Dute
Gray chalky	1	100	1,3	None Detected	Chrysotile 2	04/20/16
Client ID: 4A	Sample No: 160	00957-10				
	No. of			Other Fibrous Non-		
Macroscopic	Layers	Percent of	Non-Fibrous	Asbestos Content	Asbestos Content	Analytical
Description	and Layer Designator	Total Sample	Components*	Total or Layer %	Total or Layer %	Date
Ceiling texture	2	100		_	_	04/20/16
White powdery compound with paint	(A)	80	1,2,3,11	None Detected	None Detected	
Tan powdery compound with paint	(B)	20	1,2,3,11	None Detected	Chrysotile 3	
Client ID: 4B	Sample No: 160	00957-11				
	No. of			Other Fibrous Non-		
Macroscopic	Layers	Percent of	Non-Fibrous	Asbestos Content	Asbestos Content	Analytical
Description	and Layer					1 11101) 11001
	•	Total Sample	Components*	Total or Layer %	Total or Layer %	Date
	Designator	Total Sample			Total or Layer %	Date
	Designator HIS SAMPLE	Total Sample			Total or Layer %	Date
NO ANALYSIS PERFORMED ON TH	Designator HIS SAMPLE			Total or Layer %	Total or Layer %	Date
NO ANALYSIS PERFORMED ON THE	Designator HIS SAMPLE Sample No: 160	00957-12	Components*	Total or Layer % Other Fibrous Non-	·	
NO ANALYSIS PERFORMED ON THE Client ID: 4C Macroscopic	Designator HIS SAMPLE Sample No: 160 No. of Layers and Layer	00957-12 Percent of	Components* Non-Fibrous	Other Fibrous Non-Asbestos Content	Asbestos Content	Analytical
NO ANALYSIS PERFORMED ON THE Client ID: 4C Macroscopic Description	Designator HIS SAMPLE Sample No: 160 No. of Layers and Layer Designator	00957-12	Components*	Total or Layer % Other Fibrous Non-	·	
NO ANALYSIS PERFORMED ON THE Client ID: 4C Macroscopic Description NO ANALYSIS PERFORMED ON THE	Designator HIS SAMPLE Sample No: 160 No. of Layers and Layer Designator HIS SAMPLE	Percent of Total Sample	Components* Non-Fibrous	Other Fibrous Non-Asbestos Content	Asbestos Content	Analytical
NO ANALYSIS PERFORMED ON THE Client ID: 4C Macroscopic	Designator HIS SAMPLE Sample No: 160 No. of Layers and Layer Designator HIS SAMPLE Sample No: 160	00957-12 Percent of	Components* Non-Fibrous	Other Fibrous Non-Asbestos Content	Asbestos Content	Analytical
NO ANALYSIS PERFORMED ON THE Client ID: 4C Macroscopic Description NO ANALYSIS PERFORMED ON THE	Designator HIS SAMPLE Sample No: 160 No. of Layers and Layer Designator HIS SAMPLE Sample No: 160 No. of	Percent of Total Sample	Components* Non-Fibrous Components*	Other Fibrous Non-Asbestos Content Total or Layer % Other Fibrous Non-	Asbestos Content Total or Layer %	Analytical
NO ANALYSIS PERFORMED ON THE Client ID: 4C Macroscopic Description NO ANALYSIS PERFORMED ON THE Client ID: 5	Designator HIS SAMPLE Sample No: 160 No. of Layers and Layer Designator HIS SAMPLE Sample No: 160 No. of Layers	Percent of Total Sample 00957-13 Percent of	Non-Fibrous Components*	Other Fibrous Non-Asbestos Content Total or Layer % Other Fibrous Non-Asbestos Content	Asbestos Content Total or Layer % Asbestos Content	Analytical
NO ANALYSIS PERFORMED ON THE Client ID: 4C Macroscopic Description NO ANALYSIS PERFORMED ON THE Client ID: 5	Designator HIS SAMPLE Sample No: 160 No. of Layers and Layer Designator HIS SAMPLE Sample No: 160 No. of	Percent of Total Sample	Components* Non-Fibrous Components*	Other Fibrous Non-Asbestos Content Total or Layer % Other Fibrous Non-	Asbestos Content Total or Layer %	Analytical Date
NO ANALYSIS PERFORMED ON THE Client ID: 4C Macroscopic Description NO ANALYSIS PERFORMED ON THE Client ID: 5	Designator HIS SAMPLE Sample No: 160 No. of Layers and Layer Designator HIS SAMPLE Sample No: 160 No. of Layers and Layer and Layer	Percent of Total Sample 00957-13 Percent of	Non-Fibrous Components*	Other Fibrous Non-Asbestos Content Total or Layer % Other Fibrous Non-Asbestos Content	Asbestos Content Total or Layer % Asbestos Content	Analytical Date
NO ANALYSIS PERFORMED ON THE Client ID: 4C Macroscopic Description NO ANALYSIS PERFORMED ON THE Client ID: 5 Macroscopic Description	Designator HIS SAMPLE Sample No: 160 No. of Layers and Layer Designator HIS SAMPLE Sample No: 160 No. of Layers and Layer Designator Designator	Percent of Total Sample	Non-Fibrous Components*	Other Fibrous Non-Asbestos Content Total or Layer % Other Fibrous Non-Asbestos Content Total or Layer %	Asbestos Content Total or Layer % Asbestos Content	Analytical Date Analytical Date
NO ANALYSIS PERFORMED ON THE Client ID: 4C Macroscopic Description NO ANALYSIS PERFORMED ON THE Client ID: 5 Macroscopic Description Linoleum	Designator HIS SAMPLE Sample No: 160 No. of Layers and Layer Designator HIS SAMPLE Sample No: 160 No. of Layers and Layer Designator All Sample No: 160 No. of Layers and Layer Designator	Percent of Total Sample 00957-13 Percent of Total Sample	Non-Fibrous Components* Non-Fibrous Components*	Other Fibrous Non-Asbestos Content Total or Layer % Other Fibrous Non-Asbestos Content Total or Layer %	Asbestos Content Total or Layer % Asbestos Content Total or Layer %	Analytical Date Analytical Date

Client: **Braun Intertec-Bloomington** Laboratory:

Pace Analytical Services, Inc. (IH Laboratory)

Date Reported:

Client Reference:

Log-In:

04/15/16

Lab Contact:

4/20/2016

Michelle Pivec For Steven D. Felton

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ient Reference:	B1602097.02-1022 Freemont Avenue East	PO Number:	B1602097.02
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Client ID: 6	Sample No: 160	00957-14				
Macroscopic Description	No. of Layers and Layer Designator	Percent of Total Sample	Non-Fibrous Components*	Other Fibrous Non- Asbestos Content Total or Layer %	Asbestos Content Total or Layer %	Analytical Date
Flooring	3	100	-	-	-	04/20/16
Brown powdery compound	(A)	20	1,3	Cellulose 30	None Detected	
Black fibrous tarry	(B)	75	8	Cellulose 65	None Detected	
Tan powdery compound	(C)	5	1,3	None Detected	None Detected	
Client ID: 7	Sample No: 160	00957-15				
Macroscopic Description	No. of Layers and Layer Designator	Percent of Total Sample	Non-Fibrous Components*	Other Fibrous Non- Asbestos Content Total or Layer %	Asbestos Content Total or Layer %	Analytical Date
Gray granular texture	1	100	1,3	None Detected	Chrysotile 3	04/20/16
Client ID: 8	Sample No: 160	00957-16				
Macroscopic Description	No. of Layers and Layer Designator	Percent of Total Sample	Non-Fibrous Components*	Other Fibrous Non- Asbestos Content Total or Layer %	Asbestos Content Total or Layer %	Analytical Date
Linoleum	2	100	-	-	-	04/20/16
Brown vinyl	(A)	99	1,9	None Detected	None Detected	
Clear adhesive	(B)	1	1,7	Cellulose <1	None Detected	
Client ID: 9	Sample No: 160	00957-17				
Macroscopic Description	No. of Layers and Layer Designator	Percent of Total Sample	Non-Fibrous Components*	Other Fibrous Non- Asbestos Content Total or Layer %	Asbestos Content Total or Layer %	Analytical Date
Tan rubbery	1	100	1,3,7,10,14	None Detected	None Detected	04/20/16
Client ID: 10	Sample No: 160	00957-18				
Macroscopic Description	No. of Layers and Layer Designator	Percent of Total Sample	Non-Fibrous Components*	Other Fibrous Non- Asbestos Content Total or Layer %	Asbestos Content Total or Layer %	Analytical Date
Sheetrock	3	100	1,3,11	Cellulose 5 Glass Fibers 3	None Detected	04/20/16
White powdery compound with paint	(A)	3	1,3,11	None Detected	None Detected	
Brown paper	(B)	3	3	Cellulose 93	None Detected	
White fibrous chalky	(C)	94	1,3	Cellulose 2 Glass Fibers 3	None Detected	

Client: Braun Intertec-Bloomington Laboratory: Pace Analytical Services, Inc. (IH Laboratory) Date Reported: 4/20/2016

Page 5 of 8

Log-In: 04/15/16 Lab Contact: Michelle Pivec For Steven D. Felton

Client Reference: B1602097.02-1022 Freemont Avenue East PO Number: B1602097.02

Client ID: 11A	Sample No: 16	00957-19				
	No. of					
	Layers			Other Fibrous Non-		
Macroscopic	and Layer	Percent of	Non-Fibrous	Asbestos Content	Asbestos Content	Analytical
Description	Designator	Total Sample	Components*	Total or Layer %	Total or Layer %	Date
Gray granular cementitious	1	100	1,3,11	None Detected	None Detected	04/20/16
Client ID: 11B	Sample No: 16	00957-20				
	No. of			0.1 77 17		
	Layers	D	N E	Other Fibrous Non-		
Macroscopic	and Layer	Percent of	Non-Fibrous	Asbestos Content	Asbestos Content	Analytical
Description	Designator	Total Sample	Components*	Total or Layer %	Total or Layer %	Date
Gray granular cementitious	1	100	1,3	None Detected	None Detected	04/20/16
Client ID: 11C	Sample No: 16	00957-21				
	No. of			Od P3 N		
	Layers	D	N E	Other Fibrous Non-	A.1. (G.)	
Macroscopic	and Layer	Percent of	Non-Fibrous	Asbestos Content	Asbestos Content	Analytica
Description	Designator	Total Sample	Components*	Total or Layer %	Total or Layer %	Date
Gray granular cementitious	1	100	1,3,11	None Detected	None Detected	04/20/16
Client ID: 12	Sample No: 16	00957-22				
	No. of			Other Fibrous Non-		
Macroscopic	Layers	Percent of	Non-Fibrous	Asbestos Content	Asbestos Content	Analytica
Description	and Layer	Total Sample	Components*	Total or Layer %	Total or Layer %	Analytica Date
Description	Designator	Total Sample	Components	Total of Layer 70	Total of Layer 70	Date
Black fibrous tarry with stones	1	100	1,8	Cellulose 40	None Detected	04/20/16
Client ID: 13	Sample No: 16	00957-23				
	No. of			Other Fibrous Non-		
Macroscopic	Layers	Percent of	Non-Fibrous	Asbestos Content	Asbestos Content	A
•	and Layer	Total Sample		Total or Layer %	Total or Layer %	Analytica
Description	Designator	Total Sample	Components*	Total of Layer 76	Total of Layer 76	Date
Black fibrous tarry	1	100	1,8	Cellulose 8	None Detected	04/20/16
Client ID: 14	Sample No: 16	00957-24				
	No. of			Other Eibreus Man		
Magragagnia	Layers	Don	Non-Fibrous	Other Fibrous Non- Asbestos Content	A ab a - + C	
Macroscopic Description	and Layer	Percent of	Non-Fibrous Components*		Asbestos Content Total or Layer %	Analytica
Description	Designator	Total Sample	Components	Total or Layer %	Total of Layer %	Date
Black fibrous tarry	1	100	1,8	Cellulose 8	None Detected	04/20/16
Client ID: 15	Sample No: 16	00957-25				
	No. of			Other Fibrous Non-		
Macroscopio	Layers	Percent of	Non-Fibrous	Asbestos Content	Asbestos Content	A1 - 4"
Macroscopic Description	and Layer					Analytica
Description	Designator	Total Sample	Components*	Total or Layer %	Total or Layer %	Date
Gray chalky	1	100	1,3	None Detected	None Detected	04/20/16
• •						

Client: Braun Intertec-Bloomington Laboratory: Pace Analytical Services, Inc. (IH Laboratory) Date Reported: 4/20/2016

Log-In: 04/15/16 Lab Contact: Michelle Pivec For Steven D. Felton

Client Reference: B1602097.02-1022 Freemont Avenue East PO Number: B1602097.02

Footnotes and Definitions

< Less Than

* Key to Non-Fibrous Components

Page 6 of 8

> Greater Than $1 = \text{Rock/Mineral fragments} \qquad 5 = \text{Diatoms}$

1 = Rock/Mineral fragments5 = Diatoms9 = Vinyl13 = Spores/Pollen2 = Mica/Vermiculite6 = Perlite10 = Foam/Rubber14 = Foil

3 = Binders 7 = Adhesive/Mastic 11 = Paint 4 = Opaques 8 = Tar 12 = Other

Client:

Braun Intertec-Bloomington

B1602097.02-1022 Freemont Avenue East

Laboratory:

Pace Analytical Services, Inc. (IH Laboratory)

Date Reported:

Log-In:

04/15/16

PO Number:

4/20/2016

Client Reference:

Lab Contact:

Michelle Pivec For Steven D. Felton

B1602097.02

Page 7 of 8

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Pace Analytical www.pacelabs.com																					_					
	Section B					Section C										Page: of										
Required Client Information:						Invoice Information:													ſ		,	100	833	Λ		
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Client:

Client Reference:

Braun Intertec-Bloomington

B1602097.02-1022 Freemont Avenue East

Laboratory:

Pace Analytical Services, Inc. (IH Laboratory)

Date Reported:

Log-In:

04/15/16

Lab Contact:

4/20/2016

PO Number:

Michelle Pivec For Steven D. Felton

B1602097.02

Page 8 of 8

1600957



Table II. Bulk Asbestos Analytical Results

Ramsey County Economic Development

Client: Location:

1022 Freemont Avenue East

Date of Inspection: Project:

B1602097.02

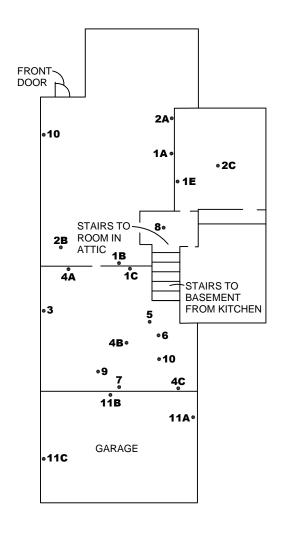
13-Apr-16

01-05
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Sample No.	Sample Locat	tion	Material	Asbestos Content (%) ¹
1A - 1E	Living/Dining		Wall Plaster, Smooth Texture	
	Room Living/Dining		·	
2A - 2C	Room		Splatter Texture Ceiling Plaster	
3	Living/Dining Room		Window Glaze, Gray	
4A - 4C	Kitchen		Light Ripple Ceiling Plaster	
5	Kitchen		12" by 12" Green Floor Tile with Brown Mastic	
6	Kitchen		Brown Underlying Sheet Flooring	
7	Kitchen		Sink Undercoat	
8	Basement		Floor Tile	
9	Basement		Thermal Blanket	
10	Kitchen		Drywall and Plaster	
11A - 11C	Garage		Small Popcorn Texture Plaster	
12	Exterior		Shingle, Gray	
13	Exterior		Flashing, Black	
14-	Exterior		Flashing, Gray	***
15	Exterior		Window Caulk (White)	
	 			
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Table II. Bulk Asbestos Analytical Results

Appendix E
Sample Location Sketch



• SAMPLE LOCATION

NOTE: SAMPLES 8 AND 9 COLLECTED IN THE BASEMENT SAMPLES 12 THROUGH 15 COLLECTED FROM ROOF FROM 2ND LEVEL SOUTH WINDOW

Sheet:	Project No: B1602097	7.02
of	Drawing No: B1602097	7-02
	Scale:	NONE
Fig:	Drawn By:	REJ
	Date Drawn:	4/19/16
	Checked By:	JPM
	Last Modified:	5/5/16



SAMPLE LOCATION SKETCH - MAIN FLOOR
PRE-DEMO HAZMAT
TWO LEVEL SINGLE FAMILY DWELLING
1022 FREMONT AVENUE EAST
ST. PAUL, MINNESOTA

Appendix F Asbestos Inspector Certificate



This is to certify that

Justin Michael

has attended and successfully completed an

ASBESTOS INSPECTOR REFRESHER TRAINING COURSE

permitted by
the State of Minnesota under Minnesota Rules 4620.3702 to 4620.3722
and meets the requirements of
Section 206 of Title II of the Toxic Substances Control Act (TSCA)
conducted by

Lake States Environmental, Ltd.

White Bear Lake, MN on August 5, 2015 Examination Date: August 5, 2015

Lake States Environmental, Ltd P. O. Box 645, Rice Lake, WI 54868 (800) 254-9811 Training Instructor

Certified by:
State of Minnesota
Department of Health
Expires: 08/05/2016
Justin P. Michael
3160 Excelsior Bivd Unit #214
Minneapolis, MN 55416



