

HAZARDOUS MATERIALS SURVEY

640 Central Avenue
Saint Paul, Minnesota

Prepared For:

Ramsey County Tax Forfeited Lands

December 29, 2014

HAZARDOUS MATERIALS SURVEY
640 CENTRAL AVENUE
SAINT PAUL, MINNESOTA

Prepared For:

Ramsey County Tax Forfeited Lands
90 West Plato Boulevard
Saint Paul, Minnesota 55107

Prepared by:

Peer Engineering, Inc.
7615 Golden Triangle Drive, Suite N
Eden Prairie, Minnesota 55344
(952) 831-3341

December 29, 2014

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	SURVEY INFORMATION.....	1
2.1	ASBESTOS.....	2
2.1.1	General Information and Definitions.....	2
2.1.2	Sampling and Analytical Testing.....	2
2.1.3	Results.....	4
2.1.4	Limitations	4
2.2	HAZARDOUS MATERIALS.....	4
2.2.1	General Information	4
2.2.3	Limitations	5
2.3	LEAD-BASED PAINT.....	5
2.3.1	General Information and Definitions.....	5
2.3.2	Observations & Results	5
2.3.3	Limitations	5
3.0	CONCLUSIONS AND RECOMMENDATIONS.....	6
4.0	STANDARD OF CARE & QUALIFICATIONS	6

LIST OF TABLES

Table 1 – Room-by-Room Material Inventory
Table 2 – Asbestos Sample Summary
Table 3 – Hazardous Materials Inventory
Table 4 – Room-by-Room Bulbs and Ballasts Inventory
Table 5 – Lead-Based Paint Sample Results

LIST OF APPENDICES

Appendix A – Laboratory Analytical Results
Appendix B – Sample Location Diagrams
Appendix C – Summary of Qualifications

1.0 INTRODUCTION

Peer Engineering, Inc. (Peer) was retained by the Ramsey County Tax Forfeited Lands (the County) to perform a hazardous materials survey of the property located at 640 Central Avenue in Saint Paul, Minnesota (the Site). Peer understands that the County is planning to renovate the current structure for residential use.

Site Structure(s) Description	
Date of Construction:	1904
Description of Structure(s):	The site building is a two-story non-conforming residential duplex with a basement. The structure includes a shingled roof with wood siding behind aluminum siding. The interior finishes include: gypsum and joint compound walls and ceilings, plaster walls and ceilings, multiple layers of sheet flooring and vinyl floor tile floors.

The work performed as part of this project was completed to meet the following objectives:

1. Identify friable and non-friable asbestos-containing materials (ACM) at the Site as defined by the Environmental Protection Agency (EPA), Minnesota Pollution Control Agency (MPCA), and the Minnesota Department of Health (MDH).
2. Identify regulated ACM (friable or non-friable) at the Site that could become friable during renovation activities, and according to current State and Federal regulations, would require abatement prior to initiating renovation activities.
3. Inventory potentially hazardous materials that should be removed and properly disposed prior to initiating renovation activities.
4. Identify lead-based paint (LBP) surfaces that have the potential to be disturbed during renovation activities, and if classified as lead-based paint, require abatement and/or special management prior to renovation activities.

This report summarizes the findings of our hazardous materials survey.

2.0 SURVEY INFORMATION

Mr. Steve Luth and Mr. Jeff Arndt, MDH Certified Asbestos Inspectors and Lead Risk Assessor, completed the building survey and associated sampling activities on December 12 and 15, 2014. Destructive survey procedures were not utilized at the time of the survey.

2.1 ASBESTOS

2.1.1 General Information and Definitions

For the purpose of this assessment, the structure was considered one functional area as defined by the Asbestos Hazard Emergency Response Act (AHERA). Upon completion of the reconnaissance, the suspect ACM was assessed, inventoried, and sampled for laboratory analysis.

The following definitions apply to this report:

- ♦ The EPA defines ACM as any material that contains greater than one percent asbestos. Materials found to contain one percent or less asbestos are not regulated as ACM.
- ♦ Friable ACM is defined as any material that contains greater than one percent asbestos, and which can be crumbled, pulverized, or reduced to powder by hand pressure.
- ♦ Category I non-friable ACM means asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than one percent asbestos. Category I non-friable ACM is not allowed to remain in place during renovation if it is in a condition where the renovation activities might cause it to become friable.
- ♦ Category II non-friable ACM means any material, excluding Category I non-friable ACM, containing more than one percent asbestos that, when dry, cannot be crumbled, pulverized, or reduced to a powder by hand pressure. Category II non-friable ACM is not allowed to remain in place during renovation if it has a high probability of becoming crumbled, pulverized, or reduced to a powder during renovation, transport, or disposal.

2.1.2 Sampling and Analytical Testing

Suspect asbestos-containing materials (ACMs) were surveyed and grouped by homogeneous area (HA), which is characterized as surfacing material, thermal system insulation (TSI), or miscellaneous material that is uniform in use, colors, appearance, pattern, texture, and date of installation.

Non-Suspect Material

The following materials were determined to be non-suspect ACM and were not targeted for sampling during this inventory:

- ♦ Wood floors and ceilings
- ♦ Concrete floors and walls

- ♦ Foam pipe insulation
- ♦ Glass
- ♦ Metal
- ♦ Fiberglass insulation

Suspect ACM Targeted for Sampling

Suspect ACM inventoried and subsequently sampled are listed in **Table 1** (Room-by-Room Material Inventory) and **Table 2** (Asbestos Sample Summary).

Sample Analysis

	Collected	Analyzed (including layers)	Held
Number of Samples:	45	57	0
Analytical Protocol:	EPA 600 R-93/116		
Laboratory:	SanAir Technologies Laboratory, Inc. Powhatan, VA		
Number of Samples Submitted for Point Count Analysis:	0		

SanAir maintains an in-house Quality Assurance (QA) Program and third party accreditation including the American Industrial Hygiene Association (AIHA) and the EPA's National Voluntary Laboratory Approval Program (NVLAP) [accreditation number 200870-0].

Materials that were analyzed and found to contain **one percent or less** asbestos are considered “non-asbestos” per current State and Federal regulations. Materials that were found to contain **greater than one percent** asbestos are considered to be ACM.

Under current Federal regulations, if the PLM results detect asbestos at a concentration of less than 10% in one or more of the samples from any sample unit, the owner or operator of the building may (1) elect to assume the amount to be greater than 1% and treat the material as ACM or (2) require verification of the amount by utilizing the Point-Count Method. If the Point-Count Method analysis determines that the concentration of asbestos is greater than one percent, the material will be determined to be regulated ACM. If the Point-Count Method analysis determines that the concentration of asbestos is one percent or less, the material will be determined to be unregulated and non-asbestos containing.

Copies of the analytical laboratory report are included as **Appendix A**.

2.1.3 Results

ACM (Confirmed by Sampling and Analysis)

The following building materials sampled from the structure were determined to be ACM based on the definitions provided in current State and Federal regulations:

- ♦ Siding, transite (sample 26).
- ♦ Sheet flooring, tan cobble (sample 30).

Assumed ACM

- ♦ Ceramic wall tile, grout and adhesive.

Specific details regarding locations and quantities of identified ACM and suspect ACM are provided in **Table 1** and **Table 2**. Sample location diagrams are included in **Appendix B**.

2.1.4 Limitations

There is a potential for encountering unidentified suspect ACM in interstitial spaces, behind walls and ceilings, and/or beneath slabs during renovation activities. Peer did not disassemble furnaces, water heaters, or household equipment or appliances. There is a potential for ACM components (in addition to those sampled) to be present inside of these components.

Based on these limitations, the quantities listed in this survey reflect the visibility available at the time of the survey. All quantities in this survey are estimations and should not be considered exact measurements when used for obtaining abatement bids.

2.2 HAZARDOUS MATERIALS

2.2.1 General Information

A walk-through reconnaissance of the structure was conducted to identify and inventory potential hazardous materials or materials that have special disposal requirements that should be removed prior to renovation activities. These materials include, but are not limited to, hazardous substances, petroleum products, PCB-containing light ballasts, mercury-containing lights and switches, and refrigerants.

2.2.2 Observations & Results

The potential hazardous equipment and materials and potential environmental concerns are identified in **Table 3** (Hazardous Material Inventory Table) and **Table 4** (Room-by-Room Bulbs and Ballast Inventory).

2.2.3 Limitations

The method of the hazardous materials inventory consisted of walking through all areas of the structure and making observations for components that typically contain hazardous substances that are incidental to the structure. Peer recommends that these materials and any associated containers for these materials be removed prior to initiating renovation activities. As previously discussed, Peer did not disassemble furnaces, water heaters, other appliances, electrical equipment, or operational equipment. There is a potential for mercury switches to be part of this equipment.

2.3 LEAD-BASED PAINT

2.3.1 General Information and Definitions

Peer conducted LBP testing of representative painted/coated interior and exterior surfaces in poor/damaged condition that are expected to be disturbed by the potential future renovation/demolition activities. The results of the targeted LBP testing may be used by the renovation/demolition contractor to develop options for disposal, recycling, or re-use of building materials with LBP. The data will also be used to determine the degree to which lead-safety construction practices under the new U.S. Environmental Protection Agency (EPA) Lead Renovation, Repair, and Painting Rule will potentially apply to the project.

Based on current regulatory definitions, LBP is defined as paint containing lead concentrations equal to or greater than 1.0 milligrams per square centimeter (mg/cm²) when using a Niton XL X-ray fluorescence (XRF) analyzer. The XRF provides the measured lead concentration in weight of lead per unit area. Calibration checks of the XRF were frequently conducted and are recorded with the data on file at Peer.

2.3.2 Observations & Results

Painted surfaces in intact, poor or damaged condition were identified and tested. LBP was identified at the time of the survey and is summarized in the XRF testing results included in **Table 5** (Lead-Based Paint Sample Results). Sample location diagrams are included in **Appendix C**.

2.3.3 Limitations

The testing conducted was not intended to represent a lead-based paint inspection as defined in accordance with the U.S. Department of Housing and Urban Development (HUD) document entitled “Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing – Chapter 7: Lead-Based Paint Inspection, 1997 Revision”. In addition, the observations and testing conducted were not intended to represent a comprehensive survey of all painted surfaces and was not intended to represent regulated lead work as defined by the MDH.

3.0 CONCLUSIONS AND RECOMMENDATIONS

The following recommendations are provided based on the results of this hazardous materials inventory:

- ♦ ACM was identified at the Site as listed in Section 2.1.4 and as summarized in **Table 1** and **Table 2**.
- ♦ Friable and Non-Friable Category II ACM must be removed by a licensed asbestos abatement contractor prior to initiating building renovation.
- ♦ Any unidentified suspect ACM encountered during renovation activities should be assumed to be asbestos-containing until they are sampled and tested to determine the asbestos content.
- ♦ Prior to renovation activities, all hazardous materials and regulated wastes as summarized in **Table 3** and **Table 4** need to be removed and properly disposed.
- ♦ Surfaces determined to be LBP as listed in Section 2.3.2 and summarized in **Table 5** should be stabilized and managed appropriately prior to building renovation.

4.0 STANDARD OF CARE & QUALIFICATIONS

Services performed by Peer have been conducted in accordance with generally recognized industry standards and current MPCA and MDH guidelines, where applicable. The services performed by Peer have been conducted with the level of care and skill ordinarily exercised by reputable members of the profession, practicing in the same locality under similar budget and time constraints. No other warranty is made or intended.


A summary of corporate and individual qualifications for Peer and the individuals associated with this project is included in **Appendix C**.

Prepared by:

A blue ink signature of Stephen A. Luth, written in a cursive style.

Stephen A. Luth
Environmental Professional
MDH Asbestos Inspector No.: AI10702
MDH Lead Risk Assessor No.: LRA3835

Reviewed by:

A blue ink signature of Derek M. Schilling, written in a cursive style.

Derek M. Schilling, P.G., CHMM
Operations Manager
MDH Asbestos Inspector No.: AI8539

TABLES

Table 1 - Room-by-Room Material Inventory



Project No.: 24048.12
 Project Name: 640 Central
 Address: 640 Central Avenue W.
St. Paul, Minnesota
 Date of Survey: 12/12/14-12/15/14

LOCATION	ROOM	MATERIAL	CONDITION	SAMPLE REFERENCE	QUANTITY	UNIT
Basement	All rooms	Gypsum and joint compound	G	17	1,000	SF
	Living Room	12x12 Floor tile, beige cobbles / self-stick	G	18	50	SF
	Bathroom	12x12 Floor tile, beige cobbles / self-stick	G	18	25	SF
		Wall panel adhesive	G	19	50	SF
	SE Room	Stone mortar	G	20	1,350	SF
		Concrete over stone	G	21	2	SF
		Chimney plaster	G	22-24	100	SF
		Brick and mortar	G	25	100	SF
1st	Porch	Siding, transite	G	26	100	SF
		Siding backing, black	G	27	100	SF
		Window glass caulk, white	G	28	2 @ 6	LF
	Foyer	Ceiling texture, 1st floor	G	8-10	120	SF
		Plaster	G	1-7	600	SF
		Gypsum and joint compound	G	17	600	SF
		12x12 floor tile, wood 5" cubes / Self-stick	G	29	120	SF
		Sheet flooring, tan cobble	G	30	120	SF
	Living Room	Plaster	G	1-7	500	SF
		Gypsum and joint compound	G	17	500	SF
		Sheet flooring, tan cobble	G	30	130	SF

Table 1 - Room-by-Room Material Inventory



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St. Paul, Minnesota
 Date of Survey: 12/12/14-12/15/14

LOCATION	ROOM	MATERIAL	CONDITION	SAMPLE REFERENCE	QUANTITY	UNIT
1st	Living Room	Ceiling texture, 1st floor	G	8-10	130	SF
	Kitchen	Plaster	G	1-7	100	SF
		Gypsum and joint compound	G	17	550	SF
		12x12 floor tile, wood 5" cubes / Self-stick	G	29	120	SF
		Flooring under kitchen 12x12	G	31	120	SF
		Ceiling texture, 1st floor	G	8-10	120	SF
	Bedrooms	Plaster	G	1-7	300	SF
		Gypsum and joint compound	G	17	1,100	SF
		Ceiling texture, 1st floor	G	8-10	500	SF
	Bathroom	Gypsum and joint compound	G	17	300	SF
		Ceramic wall tile, grout and adhesive	G	A1	30	SF
		Sheet flooring, 12x12 gray marble	G	32	18	SF
	Stairs to basement	Plaster	G	1-7	100	SF
		Gypsum and joint compound	G	17	200	SF
		Ceiling texture, 1st floor	G	8-10	100	SF
		Sheet flooring, tan cobble	G	30	50	SF
2nd	Living Room	Plaster	G	1-7	200	SF
		Gypsum and joint compound	G	17	550	SF

Table 1 - Room-by-Room Material Inventory



Project No.: 24048.12
Project Name: 640 Central
Address: 640 Central Avenue W.
 St. Paul, Minnesota
Date of Survey: 12/12/14-12/15/14

LOCATION	ROOM	MATERIAL	CONDITION	SAMPLE REFERENCE	QUANTITY	UNIT
2nd	Living Room	Ceiling texture, 2nd floor	G	11-13	200	SF
	Kitchen	Plaster	G	1-7	300	SF
		Gypsum and joint compound	G	17	420	SF
		Ceiling texture, 2nd floor	G	11-13	100	SF
		12x12 floor tile, wood 5" cubes / Self-stick	G	29	90	SF
		12x12 Floor tile, gray rose / self-stick	G	33	20	SF
		Back splash adhesive, yellow	G	34	30	SF
	Hallway	Plaster	G	1-7	100	SF
		Gypsum and joint compound	G	17	320	SF
		Ceiling texture, 2nd floor	G	11-13	75	SF
		12x12 Floor tile, wood diamond / self-stick	G	35	75	SF
	All Bedrooms	Plaster	G	1-7	500	SF
		Gypsum and joint compound	G	17	1,100	SF
		Ceiling texture, 2nd floor	G	11-13	400	SF
		12x12 Floor tile, wood diamond / self-stick	G	35	100	SF
	Bathroom	Plaster	G	1-7	50	SF
		Gypsum and joint compound	G	17	700	SF
		Ceiling texture, 2nd floor	G	11-13	25	SF
		Sheet flooring, 12x12 gray marble	G	32	35	SF

Table 1 - Room-by-Room Material Inventory



Project No.: 24048.12
 Project Name: 640 Central
 Address: 640 Central Avenue W.
 St. Paul, Minnesota
 Date of Survey: 12/12/14-12/15/14

LOCATION	ROOM	MATERIAL	CONDITION	SAMPLE REFERENCE	QUANTITY	UNIT
3rd	Main	Plaster	D	1-7	100	SF
		Gypsum and joint compound	D	17	1,000	SF
		Ceiling texture, 3rd floor	D	14-16	800	SF
		Wall texture	D	36-38	200	SF
	Bathroom	Plaster	G	1-7	100	SF
		Gypsum and joint compound	G	17	300	SF
		Ceiling texture, 3rd floor	G	14-16	100	SF
		Sheet flooring, 6x6 gray	G	39	15	SF
		Wall panel adhesive	G	19	20	SF
Exterior	Exterior	Window glaze, white	G	43	10 @ 15, 1 @ 16	LF
		Siding, transite	G	26	1,800	SF
		Shingles	G	44	1,500	SF

Table 2 - Asbestos Sample Summary



Project No.: 24048.12
Project Name: 640 Central
Address: 640 Central Avenue W.
 St. Paul, Minnesota
Date of Survey: 12/12/14-12/15/14

SAMPLE NUMBER	MATERIAL DESCRIPTION	MATERIAL	LOCATION	% ASBESTOS	CATEGORY	TOTAL QUANTITY	UNIT
		TSI/Surfacing/ Misc	(All locations where the material was observed)		Friable, Non-Friable Cat. I or II		
1-7	Plaster	Surfacing	Throughout	ND	NA	NA	NA
8-10	Ceiling texture, 1st floor	Surfacing	Throughout 1st floor	ND	NA	NA	NA
11-13	Ceiling texture, 2nd floor	Surfacing	Throughout 2nd floor	ND	NA	NA	NA
14-16	Ceiling texture, 3rd floor	Surfacing	Throughout 3rd floor	ND	NA	NA	NA
17	Gypsum and joint compound	Misc.	Throughout	ND	NA	NA	NA
18	12x12 Floor tile, beige cobbles / self-stick	Misc.	Basement	ND	NA	NA	NA
19	Wall panel adhesive	Misc.	Basement, 3rd bath	ND	NA	NA	NA
20	Stone mortar	Misc.	Basement	ND	NA	NA	NA
21	Concrete over stone	Misc.	Basement	ND	NA	NA	NA
22-24	Chimney plaster	Surfacing	Basement	ND	NA	NA	NA
25	Brick and mortar	Misc.	Basement	ND	NA	NA	NA
26	Siding, transite	Misc.	Exterior, porch	40% Chysotile	NF Cat. II	1,900	SF
27	Siding backing, black	Misc.	Exterior, porch	ND	NA	NA	NA
28	Window glass caulk, white	Misc.	Exterior, porch	ND	NA	NA	NA
29	12x12 floor tile, wood 5" cubes / Self-stick	Misc.	Foyer, 1st-Kitchen, 2nd-Kitchen	ND	NA	NA	NA

Table 2 - Asbestos Sample Summary



Project No.: 24048.12
Project Name: 640 Central
Address: 640 Central Avenue W.
 St. Paul, Minnesota
Date of Survey: 12/12/14-12/15/14

SAMPLE NUMBER	MATERIAL DESCRIPTION	MATERIAL	LOCATION	% ASBESTOS	CATEGORY	TOTAL QUANTITY	UNIT
		TSI/Surfacing/ Misc	(All locations where the material was observed)		Friable, Non-Friable Cat. I or II		
30	Sheet flooring, tan cobble	Misc.	Foyer, 1st-Living Room	20 % Chrysotile, <1 % Adhesive	Friable	300	SF
31	Flooring under kitchen 12x12	Misc.	1st-Kitchen	ND	NA	NA	NA
32	Sheet flooring, 12x12 gray marble	Misc.	1st-Bathroom, 2nd -Bathroom	ND	NA	NA	NA
33	12x12 Floor tile, gray rose / self-stick	Misc.	2nd-Kitchen	ND	NA	NA	NA
34	Back splash adhesive, yellow	Misc.	2nd-Kitchen	ND	NA	NA	NA
35	12x12 Floor tile, wood diamond / self-stick	Misc.	2nd-Hall, Bedroom 2	ND	NA	NA	NA
36-38	Wall texture	Surfacing	3rd-Main	ND	NA	NA	NA
39	Sheet flooring, 6x6 gray	Misc.	3rd-Bathroom	ND	NA	NA	NA
40-42	Blown-in insulation	Misc.	Attic	ND	NA	NA	NA
43	Window glaze, white	Misc.	Exterior	ND	NA	NA	NA
44	Shingles	Misc.	Roof	ND	NA	NA	NA
45	Roof caulk black	Misc.	Roof	ND	NA	NA	NA
A1	Ceramic wall tile, grout and adhesive	Misc.	1st, 2nd -Bathroom	Assumed	NF Cat. II	30	SF

Table 3 - Hazardous Material Summary



Project No.: 24048.12
Project Name: 640 Central
Address: 640 Central Avenue W.
 St. Paul, Minnesota
Date of Survey: 12/12/14-12/15/14

LOCATION	ROOM	EQUIPMENT OR MATERIAL	HAZARD	QUANTITY	UNIT
Basement	Living Room	Smoke Detector	Circuitry	1	EA
	Bathroom	Exhaust Fan	Circuitry	1	EA
		Bag of Charcoal	Petroleum	Mostly empty 10 LB bag	
	Back Stairs	Smoke Detector	Circuitry	1	EA
	Furnace Room	Furnace	Mercury	1	EA
		Water Heater	Mercury	1	EA
		Central system humidifier	Chemical	1	EA
1st	Foyer	Smoke Detector	Circuitry	1	EA
		Door Bell	Circuitry	1	EA
	Living Room	Thermostat	Mercury	1	EA
	Bedroom 1	Roof Cement	Chemical	10	OZ
		Wall Base Adhesive	Chemical	10.5	OZ
	Bedroom 2	Smoke Detector	Circuitry	1	EA
	Bedroom 3	Smoke Detector	Circuitry	1	EA
		Baseboard Radiator	Circuitry	1	EA
	Bedroom 4	Smoke Detector	Circuitry	1	EA
		Baseboard Radiator	Circuitry	1	EA
	Hallway	Carbon Monoxide Detector	Circuitry	1	EA

Table 3 - Hazardous Material Summary



Project No.: 24048.12
Project Name: 640 Central
Address: 640 Central Avenue W.
 St. Paul, Minnesota
Date of Survey: 12/12/14-12/15/14

LOCATION	ROOM	EQUIPMENT OR MATERIAL	HAZARD	QUANTITY	UNIT
2nd	Living Room	Thermostat	Mercury	1	EA
		Baseboard Radiator	Circuitry	1	EA
	Kitchen	Smoke Detector	Circuitry	1	EA
		Soft Scrub with Bleach	Chemical	24	OZ
		Baseboard Radiator	Circuitry	1	EA
	Hallway	Smoke Detector	Circuitry	1	EA
		Carbon Monoxide Detector	Circuitry	1	EA
	Bedroom 1	Baseboard Radiator	Circuitry	1	EA
		Smoke Detector	Circuitry	1	EA
	Bedroom 2	Baseboard Radiator	Circuitry	1	EA
		Smoke Detector	Circuitry	1	EA
	Bedroom 3	Baseboard Radiator	Circuitry	1	EA
		Smoke Detector	Circuitry	1	EA
	Bedroom 4	Baseboard Radiator	Circuitry	1	EA
		Smoke Detector	Circuitry	1	EA
		Circuit Breaker	Circuitry	1	EA
3rd	Bathroom	Baseboard Radiator	Circuitry	1	EA
3rd	Main	Vacuum	Circuitry	1	EA

Table 4 - Bulbs and Ballast Summary



Project No.: 24048.12
Project Name: 640 Central
Address: 640 Central Avenue W.
St. Paul, Minnesota
Date of Survey: 12/12/14-12/15/14

LOCATION	ROOM	FIXTURES	BALLAST	FLUORESCENT BULBS					HALOGEN	Incandescent
				CFL	< 4'	4 Foot	8 Foot	U/Circ.		
Basement	Living Room	2								2
	Bathroom	2								1
	Main Stairs	1								1
	Back Stairs	2								1
1st	Porch	1								2
	Foyer	1								2
	Living Room	2								2
	Bedroom 1	1								1
	Bedroom 2	1								2
	Bedroom 3	1								2
	Bedroom 4	1								2
	Bathroom	1								3
	Hallway	1								1
2nd	Living Room	2								4
	Kitchen	1								1
	Hallway	1								1
	Bedroom 1	1								2
	Bedroom 2	1								2

Table 4 - Bulbs and Ballast Summary



Project No.: 24048.12
 Project Name: 640 Central
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 St. Paul, Minnesota
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				FLUORESCENT BULBS						
LOCATION	ROOM	FIXTURES	BALLAST	CFL	< 4'	4 Foot	8 Foot	U/Circ.	HALOGEN	Incandescent
2nd	Bedroom 3	1								2
	Bedroom 4	1								2
	Bathroom	1								2
3rd	Main	3								2
	Bathroom	1								1
	Stairs	1								1
TOTAL		31	0	0	0	0	0	0	0	42

Project No.: 24048.12

Project Name: 640 Central

Address: 640 Central Avenue W.
St. Paul, Minnesota

Date of Survey: 12/12/14-12/15/14

Reading No	Time	Component	Substrate	Side	Condition	Color	Site	Inspector	Floor	Room	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
166	12/12/2014 13:45											5.46	0	0.87	0	0	0
		cal									e a i e					D	
		cal									e a i e					D	
		cal									e a i e					D	
170	12/12/2014 13:53	WALL	DRYWALL	A	INTACT	BEIGE	640 CENTRAL	SAL	BASEMENT	BEDROOM	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		1.79
171	12/12/2014 13:53	WALL	DRYWALL	B	INTACT	BEIGE	640 CENTRAL	SAL	BASEMENT	BEDROOM	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		2.3
172	12/12/2014 13:53	WALL	DRYWALL	C	INTACT	BEIGE	640 CENTRAL	SAL	BASEMENT	BEDROOM	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		1.87
173	12/12/2014 13:54	WALL	DRYWALL	D	INTACT	BEIGE	640 CENTRAL	SAL	BASEMENT	BEDROOM	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		1.84
174	12/12/2014 13:54	WINDOW SILL	WOOD	B	POOR	BEIGE	640 CENTRAL	SAL	BASEMENT	BEDROOM	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		2.05
175	12/12/2014 13:55	WALL	DRYWALL	A	INTACT	WHITE	640 CENTRAL	SAL	BASEMENT	LIVING ROOM	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		2.25
176	12/12/2014 13:55	WALL	DRYWALL	B	INTACT	WHITE	640 CENTRAL	SAL	BASEMENT	LIVING ROOM	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		1.01
177	12/12/2014 13:56	WALL	DRYWALL	A	INTACT	BEIGE	640 CENTRAL	SAL	BASEMENT	BATHROOM	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		2.44
178	12/12/2014 13:56	WALL	DRYWALL	C	INTACT	BEIGE	640 CENTRAL	SAL	BASEMENT	BATHROOM	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		2.42
179	12/12/2014 13:57	WALL	PLASTER	A	INTACT	BEIGE	640 CENTRAL	SAL	BASEMENT	SE	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		1.35
180	12/12/2014 13:58	WINDOW SASH	WOOD	B	INTACT	WHITE	640 CENTRAL	SAL	BASEMENT	SE	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		2.05
181	12/12/2014 14:03	WALL	WOOD	A	INTACT	WHITE	640 CENTRAL	SAL	FIRST	PORCH	Negative	< LOD	0.04 < LOD	0.04 < LOD	0.04 < LOD		2.2
182	12/12/2014 14:03	WALL	WOOD	B	INTACT	WHITE	640 CENTRAL	SAL	FIRST	PORCH	Negative	< LOD	0.04 < LOD	0.04 < LOD	0.04 < LOD		2.4
		D	D								si i e			D			
184	12/12/2014 14:04	WALL	WOOD	D	INTACT	WHITE	640 CENTRAL	SAL	FIRST	PORCH	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		2.45
185	12/12/2014 14:04	WINDOW CASE	WOOD	B	INTACT	WHITE	640 CENTRAL	SAL	FIRST	PORCH	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		2.1
186	12/12/2014 14:05	WINDOW SILL	WOOD	B	POOR	WHITE	640 CENTRAL	SAL	FIRST	PORCH	Negative	< LOD	0.12 < LOD	0.12 < LOD	0.12 < LOD		2.03
		D	D								si i e	D		D		D	
		D	D								si i e			D			
		D	D								si i e			D			
			D								si i e			D			
191	12/12/2014 14:08	WALL	DRYWALL	A	INTACT	WHITE	640 CENTRAL	SAL	FIRST	FOYER	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		1.89
192	12/12/2014 14:08	WALL	DRYWALL	B	INTACT	WHITE	640 CENTRAL	SAL	FIRST	FOYER	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		2.65
193	12/12/2014 14:08	WALL	PLASTER	C	INTACT	WHITE	640 CENTRAL	SAL	FIRST	FOYER	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		2.4
194	12/12/2014 14:08	WALL	PLASTER	D	INTACT	WHITE	640 CENTRAL	SAL	FIRST	FOYER	Negative	< LOD	0.09 < LOD	0.09 < LOD	0.09 < LOD		2.52
195	12/12/2014 14:09	WINDOW SASH	PLASTER	A	POOR	WHITE	640 CENTRAL	SAL	FIRST	FOYER	Negative	< LOD	0.37 < LOD	0.37 < LOD	0.37 < LOD		2.1
196	12/12/2014 14:09	WINDOW SASH	PLASTER	A	POOR	WHITE	640 CENTRAL	SAL	FIRST	FOYER	Negative	< LOD	0.52 < LOD	0.52 < LOD	0.52 < LOD		1.96
197	12/12/2014 14:09	WINDOW SASH	PLASTER	A	POOR	WHITE	640 CENTRAL	SAL	FIRST	FOYER	Negative	< LOD	0.84 < LOD	0.84 < LOD	0.84 < LOD		2.7
198	12/12/2014 14:10	WINDOW CASE	PLASTER	A	POOR	WHITE	640 CENTRAL	SAL	FIRST	FOYER	Negative	< LOD	0.43 < LOD	0.43 < LOD	0.43 < LOD		2.28
199	12/12/2014 14:10	WINDOW CASE	PLASTER	A	POOR	WHITE	640 CENTRAL	SAL	FIRST	FOYER	Negative	< LOD	0.08 < LOD	0.08 < LOD	0.08 < LOD		2.39
200	12/12/2014 14:10	WINDOW SILL	PLASTER	A	POOR	WHITE	640 CENTRAL	SAL	FIRST	FOYER	Negative	< LOD	0.08 < LOD	0.08 < LOD	0.08 < LOD		2.08
201	12/12/2014 14:11	CLOSET	DRYWALL	A	INTACT	WHITE	640 CENTRAL	SAL	FIRST	FOYER	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		1.93
202	12/12/2014 14:11	WALL	DRYWALL	A	INTACT	WHITE	640 CENTRAL	SAL	FIRST	FOYER	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		1.93

Project No.: 24048.12

Project Name: 640 Central

Address: 640 Central Avenue W.
St. Paul, Minnesota

Date of Survey: 12/12/14-12/15/14

Reading No	Time	Component	Substrate	Side	Condition	Color	Site	Inspector	Floor	Room	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
203	12/12/2014 14:11	WALL	DRYWALL	B	INTACT	WHITE	640 CENTRAL	SAL	FIRST	FOYER	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD	2.15	
204	12/12/2014 14:12	WALL	DRYWALL	C	INTACT	WHITE	640 CENTRAL	SAL	FIRST	FOYER	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD	2.36	
205	12/12/2014 14:12	WINDOW CASE	WOOD	A	INTACT	WHITE	640 CENTRAL	SAL	FIRST	LIVING ROOM	Negative	< LOD	0.21 < LOD	0.21 < LOD	0.21 < LOD	2.3	
206	12/12/2014 14:13	WINDOW SILL	WOOD	A	INTACT	WHITE	640 CENTRAL	SAL	FIRST	LIVING ROOM	Negative	< LOD	0.25 < LOD	0.25 < LOD	0.25 < LOD	2.56	
207	12/12/2014 14:13	WINDOW SASH	WOOD	A	INTACT	WHITE	640 CENTRAL	SAL	FIRST	LIVING ROOM	Negative	< LOD	0.61 < LOD	0.61 < LOD	0.61 < LOD	2.4	
208	12/12/2014 14:13	WINDOW SASH	WOOD	A	INTACT	WHITE	640 CENTRAL	SAL	FIRST	LIVING ROOM	Negative	< LOD	0.51 < LOD	0.51 < LOD	0.51 < LOD	2.19	
												si i e		D			
												si i e		D			
211	12/12/2014 14:15	CEILING	DRYWALL	A	INTACT	WHITE	640 CENTRAL	SAL	FIRST	LIVING ROOM	Negative	< LOD	0.05 < LOD	0.05 < LOD	0.05 < LOD	1.95	
212	12/12/2014 14:16	BASEBOARD	WOOD	A	INTACT	WHITE	640 CENTRAL	SAL	FIRST	LIVING ROOM	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD	2.28	
213	12/12/2014 14:16	TRIM	WOOD	D	INTACT	WHITE	640 CENTRAL	SAL	FIRST	LIVING ROOM	Negative	< LOD	0.75 < LOD	0.75 < LOD	0.75 < LOD	1.88	
214	12/12/2014 14:17	WALL	DRYWALL	A	INTACT	WHITE	640 CENTRAL	SAL	FIRST	KITCHEN	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD	2.12	
215	12/12/2014 14:17	WALL	DRYWALL	B	INTACT	WHITE	640 CENTRAL	SAL	FIRST	KITCHEN	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD	1.72	
216	12/12/2014 14:17	WALL	DRYWALL	C	INTACT	WHITE	640 CENTRAL	SAL	FIRST	KITCHEN	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD	2.06	
217	12/12/2014 14:18	WALL	DRYWALL	D	INTACT	WHITE	640 CENTRAL	SAL	FIRST	KITCHEN	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD	1.7	
218	12/12/2014 14:18	CEILING	DRYWALL	D	INTACT	WHITE	640 CENTRAL	SAL	FIRST	KITCHEN	Null	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD	1.5	
219	12/12/2014 14:18	CEILING	DRYWALL	D	INTACT	WHITE	640 CENTRAL	SAL	FIRST	KITCHEN	Negative	< LOD	0.03 < LOD	0.03	0.8	0.5	
220	12/12/2014 14:19	WINDOW sill	WOOD	D	INTACT	WHITE	640 CENTRAL	SAL	FIRST	KITCHEN	Negative	< LOD	0.04 < LOD	0.04 < LOD	0.04 < LOD	2.2	
221	12/12/2014 14:19	WINDOW sash	WOOD	D	INTACT	stain	640 CENTRAL	SAL	FIRST	KITCHEN	Negative	< LOD	0.04 < LOD	0.04 < LOD	0.04 < LOD	1.96	
222	12/12/2014 14:20	trim	WOOD	A	INTACT	WHITE	640 CENTRAL	SAL	FIRST	KITCHEN	Negative	< LOD	0.4 < LOD	0.4 < LOD	0.4 < LOD	2.67	
												si i e		D			
												si i e		D			
												si i e		D			
226	12/12/2014 15:20											5.72	0	0.84	0	0.01	0
												si i e		D			
												e a i e		D			
												si i e		D			
230	12/12/2014 15:27	WALL	DRYWALL	A	INTACT	WHITE	640 CENTRAL	SAL	FIRST	BEDROOM 2	Negative	< LOD	0.05 < LOD	0.05 < LOD	0.05 < LOD	1.64	
231	12/12/2014 15:28	WALL	DRYWALL	B	INTACT	WHITE	640 CENTRAL	SAL	FIRST	BEDROOM 2	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD	1.59	
232	12/12/2014 15:28	WALL	DRYWALL	C	INTACT	WHITE	640 CENTRAL	SAL	FIRST	BEDROOM 2	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD	1.9	
233	12/12/2014 15:28	WALL	DRYWALL	D	INTACT	WHITE	640 CENTRAL	SAL	FIRST	BEDROOM 2	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD	2.24	
234	12/12/2014 15:28	CEILING	DRYWALL	D	INTACT	WHITE	640 CENTRAL	SAL	FIRST	BEDROOM 2	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD	1.5	
235	12/12/2014 15:29	WALL	DRYWALL	A	INTACT	WHITE	640 CENTRAL	SAL	FIRST	BATHROOM	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD	1.86	
236	12/12/2014 15:29	WALL	DRYWALL	B	INTACT	WHITE	640 CENTRAL	SAL	FIRST	BATHROOM	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD	2	
237	12/12/2014 15:30	WALL	DRYWALL	D	INTACT	WHITE	640 CENTRAL	SAL	FIRST	BATHROOM	Negative	< LOD	0.32 < LOD	0.32 < LOD	0.32 < LOD	1.48	
238	12/12/2014 15:30	CEILING	DRYWALL	D	INTACT	WHITE	640 CENTRAL	SAL	FIRST	BATHROOM	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD	2.11	
239	12/12/2014 15:30	WALL	ceramic	D	INTACT	WHITE	640 CENTRAL	SAL	FIRST	BATHROOM	Negative	< LOD	0.05 < LOD	0.05 < LOD	0.05 < LOD	3.62	

Project No.: 24048.12

Project Name: 640 Central

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St. Paul, Minnesota

Date of Survey: 12/12/14-12/15/14

Reading No	Time	Component	Substrate	Side	Condition	Color	Site	Inspector	Floor	Room	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
240	12/12/2014 15:31	WINDOW CASE	WOOD	D	INTACT	WHITE	640 CENTRAL	SAL	FIRST	BATHROOM	Negative	< LOD	0.43	< LOD	0.43	< LOD	1.65
241	12/12/2014 15:32	WINDOW SILL	WOOD	D	INTACT	WHITE	640 CENTRAL	SAL	FIRST	BATHROOM	Negative	< LOD	0.45	< LOD	0.45	< LOD	1.72
242	12/12/2014 15:33	WALL	DRYWALL	A	INTACT	WHITE	640 CENTRAL	SAL	FIRST	BEDROOM 4	Negative	< LOD	0.03	< LOD	0.03	< LOD	1.65
243	12/12/2014 15:33	WALL	DRYWALL	A	INTACT	WHITE	640 CENTRAL	SAL	FIRST	BEDROOM 4	Negative	< LOD	0.03	< LOD	0.03	< LOD	1.66
244	12/12/2014 15:33	WALL	DRYWALL	D	INTACT	WHITE	640 CENTRAL	SAL	FIRST	BEDROOM 4	Negative	< LOD	0.03	< LOD	0.03	< LOD	1.44
245	12/12/2014 15:34	CEILING	DRYWALL	D	INTACT	WHITE	640 CENTRAL	SAL	FIRST	BEDROOM 4	Negative	< LOD	0.03	< LOD	0.03	< LOD	0.8
246	12/12/2014 15:36	WALL	DRYWALL	A	INTACT	WHITE	640 CENTRAL	SAL	FIRST	stairs	Negative	< LOD	0.03	< LOD	0.03	< LOD	2.18
247	12/12/2014 15:36	WALL	DRYWALL	C	INTACT	WHITE	640 CENTRAL	SAL	FIRST	stairs	Negative	< LOD	0.03	< LOD	0.03	< LOD	2.45
248	12/12/2014 15:36	CEILING	DRYWALL	C	INTACT	WHITE	640 CENTRAL	SAL	FIRST	stairs	Negative	< LOD	0.04	< LOD	0.04	< LOD	2.22
249	12/12/2014 15:37	tvim	WOOD	B	INTACT	WHITE	640 CENTRAL	SAL	FIRST	stairs	Negative	< LOD	0.21	< LOD	0.21	< LOD	1.95
250	12/12/2014 15:59	WALL	DRYWALL	A	INTACT	WHITE	640 CENTRAL	SAL	SECOND	KITCHEN	Negative	< LOD	0.03	< LOD	0.03	< LOD	2.54
251	12/12/2014 15:59	WALL	DRYWALL	B	INTACT	WHITE	640 CENTRAL	SAL	SECOND	KITCHEN	Negative	< LOD	0.03	< LOD	0.03	< LOD	1.98
252	12/12/2014 16:02	WALL	DRYWALL	C	INTACT	WHITE	640 CENTRAL	SAL	SECOND	KITCHEN	Negative	< LOD	0.03	< LOD	0.03	< LOD	2.73
253	12/12/2014 16:02	WALL	DRYWALL	D	INTACT	WHITE	640 CENTRAL	SAL	SECOND	KITCHEN	Negative	< LOD	0.07	< LOD	0.07	< LOD	2.37
254	12/12/2014 16:02	CEILING	DRYWALL	D	INTACT	WHITE	640 CENTRAL	SAL	SECOND	KITCHEN	Negative	< LOD	0.03	< LOD	0.03	< LOD	1.89
		D case	D	D					D		si i e	D		D		D	
		D sill	D	D					D		si i e	D		D		D	
		D sas	D	D					D		si i e	D		D		D	
258	12/12/2014 16:05	BASEBOARD	WOOD	D	INTACT	WHITE	640 CENTRAL	SAL	SECOND	KITCHEN	Negative	< LOD	0.03	< LOD	0.03	< LOD	1.88
			D						D		si i e	D		D		D	
260	12/12/2014 16:06	BASEBOARD	WOOD	B	INTACT	WHITE	640 CENTRAL	SAL	SECOND	KITCHEN	Negative	< LOD	0.03	< LOD	0.03	< LOD	2.23
261	12/12/2014 16:06	WALL	DRYWALL	A	INTACT	WHITE	640 CENTRAL	SAL	SECOND	LIVING ROOM	Negative	< LOD	0.04	< LOD	0.04	< LOD	1.16
262	12/12/2014 16:07	WALL	DRYWALL	B	INTACT	WHITE	640 CENTRAL	SAL	SECOND	LIVING ROOM	Negative	< LOD	0.03	< LOD	0.03	< LOD	2.1
263	12/12/2014 16:07	WALL	DRYWALL	C	INTACT	WHITE	640 CENTRAL	SAL	SECOND	LIVING ROOM	Negative	< LOD	0.03	< LOD	0.03	< LOD	2.38
264	12/12/2014 16:07	WALL	DRYWALL	D	INTACT	WHITE	640 CENTRAL	SAL	SECOND	LIVING ROOM	Negative	< LOD	0.03	< LOD	0.03	< LOD	0.89
265	12/12/2014 16:07	CEILING	DRYWALL	D	INTACT	WHITE	640 CENTRAL	SAL	SECOND	LIVING ROOM	Negative	< LOD	0.03	< LOD	0.03	< LOD	1.65
		D	D						D		si i e	D		D		D	
		D	D						D		si i e	D		D		D	
		D	D						D		si i e	D		D		D	
		D	D						D		si i e	D		D		D	
		D	D						D		si i e	D		D		D	
			D	D					D		si i e	D		D		D	
		D	D	D					D		si i e	D		D		D	
273	12/12/2014 16:11	FLOOR	WOOD	D	POOR	GRAY	640 CENTRAL	SAL	SECOND	LIVING ROOM	Negative	0.5	0.3	0.5	0.3	< LOD	1.05
274	12/12/2014 16:11	FLOOR	WOOD	D	POOR	GRAY	640 CENTRAL	SAL	SECOND	LIVING ROOM	Negative	0.6	0.2	0.6	0.2	< LOD	1.05
275	12/12/2014 16:11	FLOOR	WOOD	D	POOR	GRAY	640 CENTRAL	SAL	SECOND	LIVING ROOM	Negative	0.3	0.17	0.3	0.17	< LOD	1.5
276	12/12/2014 16:12	FLOOR	WOOD	D	POOR	GRAY	640 CENTRAL	SAL	SECOND	BEDROOM 1	Negative	< LOD	0.25	< LOD	0.25	< LOD	1.95

Project No.: 24048.12

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Date of Survey: 12/12/14-12/15/14

Reading No	Time	Component	Substrate	Side	Condition	Color	Site	Inspector	Floor	Room	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
277	12/12/2014 16:13	WALL	DRYWALL	A	INTACT	WHITE	640 CENTRAL	SAL	SECOND	BEDROOM 1	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		1.66
278	12/12/2014 16:13	WALL	DRYWALL	B	INTACT	WHITE	640 CENTRAL	SAL	SECOND	BEDROOM 1	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		2.05
279	12/12/2014 16:13	WALL	DRYWALL	C	INTACT	WHITE	640 CENTRAL	SAL	SECOND	BEDROOM 1	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		1.95
280	12/12/2014 16:13	WALL	DRYWALL	D	INTACT	WHITE	640 CENTRAL	SAL	SECOND	BEDROOM 1	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		2.74
281	12/12/2014 16:14	CEILING	DRYWALL	D	INTACT	WHITE	640 CENTRAL	SAL	SECOND	BEDROOM 1	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		1.5
		D	D						D	D	si i e	D		D		D	
		D	D						D	D	si i e	D		D		D	
		D	D						D	D	si i e			D			
			D	D					D	D	si i e	D		D		D	
		D	D	D					D	D	si i e	D		D		D	
		D	D	D					D	D	si i e	D		D		D	
			D	D					D	D	si i e	D		D		D	
288	12/12/2014 16:17	WALL	DRYWALL	A	INTACT	WHITE	640 CENTRAL	SAL	SECOND	BATHROOM	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		2.11
289	12/12/2014 16:17	WALL	DRYWALL	B	INTACT	WHITE	640 CENTRAL	SAL	SECOND	BATHROOM	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		2.68
290	12/12/2014 16:17	WALL	DRYWALL	C	INTACT	WHITE	640 CENTRAL	SAL	SECOND	BATHROOM	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		2.56
291	12/12/2014 16:18	WALL	DRYWALL	D	INTACT	WHITE	640 CENTRAL	SAL	SECOND	BATHROOM	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		1.29
292	12/12/2014 16:18	CEILING	DRYWALL	D	INTACT	WHITE	640 CENTRAL	SAL	SECOND	BATHROOM	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		1.2
293	12/12/2014 16:19	WINDOW CASE	WOOD	D	INTACT	WHITE	640 CENTRAL	SAL	SECOND	BATHROOM	Negative	< LOD	0.53 < LOD	0.53 < LOD	0.53 < LOD		1.85
		D	D	D					D		e a i e						
		D	D	D					D		ll			D			
296	12/12/2014 16:20	WINDOW SILL	WOOD	D	INTACT	WHITE	640 CENTRAL	SAL	SECOND	BATHROOM	Negative	< LOD	0.04 < LOD	0.04 < LOD	0.04 < LOD		2.1
297	12/12/2014 16:21	WINDOW SSH	WOOD	D	POOR	WHITE	640 CENTRAL	SAL	SECOND	BATHROOM	Null	1.2	0.2	0.5	0.1	1.2	0.2
298	12/12/2014 16:22	WINDOW SSH	WOOD	D	POOR	WHITE	640 CENTRAL	SAL	SECOND	BATHROOM	Null	0.6	0.3	0.6	0.3	0.8	0.5
		D	D	D					D		si i e						
300	12/12/2014 16:23	WAINSCLTT	WOOD	C	INTACT	WHITE	640 CENTRAL	SAL	SECOND	BATHROOM	Null	1	0.2	0.3	0.11	1	0.2
301	12/12/2014 16:24	WAINSCLTT	WOOD	C	INTACT	WHITE	640 CENTRAL	SAL	SECOND	BATHROOM	Null	0.8	0.2	0.17	0.08	0.8	0.2
			D						D		si i e						
303	12/12/2014 16:25	TRIM	WOOD	B	INTACT	WHITE	640 CENTRAL	SAL	SECOND	BATHROOM	Negative	0.6	0.3	0.6	0.3 < LOD		0.9
304	12/12/2014 16:25	TRIM	WOOD	B	INTACT	WHITE	640 CENTRAL	SAL	SECOND	BATHROOM	Negative	0.7	0.3	0.25	0.13	0.7	0.3
		D	D						D		si i e	D		D		D	
306	12/12/2014 16:26	WALL	DRYWALL	B	INTACT	WHITE	640 CENTRAL	SAL	SECOND	HALL	Negative	< LOD	0.11 < LOD	0.11 < LOD	0.11 < LOD		1.97
307	12/12/2014 16:27	WALL	DRYWALL	D	INTACT	WHITE	640 CENTRAL	SAL	SECOND	HALL	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		1.86
		D	D	D					D		si i e	D		D		D	
309	12/12/2014 16:28	WALL	DRYWALL	A	INTACT	WHITE	640 CENTRAL	SAL	SECOND	BEDROOM 3	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		1.43
310	12/12/2014 16:28	WALL	DRYWALL	C	INTACT	WHITE	640 CENTRAL	SAL	SECOND	BEDROOM 3	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		1.47
311	12/12/2014 16:28	CEILING	DRYWALL	C	INTACT	WHITE	640 CENTRAL	SAL	SECOND	BEDROOM 3	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		2.27
312	12/12/2014 16:29	WINDOW case	WOOD	C	INTACT	WHITE	640 CENTRAL	SAL	SECOND	BEDROOM 3	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		1.92
313	12/12/2014 16:30	WALL	DRYWALL	A	INTACT	WHITE	640 CENTRAL	SAL	THIRD	MAIN	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD		1.73

Project No.: 24048.12

Project Name: 640 Central

Address: 640 Central Avenue W.
St. Paul, Minnesota

Date of Survey: 12/12/14-12/15/14

Reading No	Time	Component	Substrate	Side	Condition	Color	Site	Inspector	Floor	Room	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
314	12/12/2014 16:30	WALL	DRYWALL	B	INTACT	WHITE	640 CENTRAL	SAL	THIRD	MAIN	Negative	< LOD	0.18 < LOD	0.18 < LOD	0.18 < LOD	1.78	
315	12/12/2014 16:31	WALL	PLASTER	C	INTACT	WHITE	640 CENTRAL	SAL	THIRD	MAIN	Negative	< LOD	0.96 < LOD	0.16 < LOD	0.16 < LOD	0.96	
316	12/12/2014 16:31	WALL	PLASTER	D	INTACT	WHITE	640 CENTRAL	SAL	THIRD	MAIN	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD	0.99	
317	12/12/2014 16:31	CEILING	DRYWALL	D	INTACT	WHITE	640 CENTRAL	SAL	THIRD	MAIN	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD	1.69	
318	12/12/2014 16:32	WINDOW CASE	WOOD	A	INTACT	WHITE	640 CENTRAL	SAL	THIRD	MAIN	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD	2.64	
319	12/12/2014 16:32	WINDOW SILL	WOOD	A	POOR	WHITE	640 CENTRAL	SAL	THIRD	MAIN	Negative	< LOD	0.16 < LOD	0.16 < LOD	0.16 < LOD	3.55	
320	12/12/2014 16:33	WALL	DRYWALL	A	INTACT	WHITE	640 CENTRAL	SAL	THIRD	BATHROOM	Negative	< LOD	0.06 < LOD	0.06 < LOD	0.06 < LOD	2.06	
321	12/12/2014 16:33	WALL	DRYWALL	B	INTACT	WHITE	640 CENTRAL	SAL	THIRD	BATHROOM	Negative	< LOD	0.11 < LOD	0.11 < LOD	0.11 < LOD	2.38	
322	12/12/2014 16:34	WALL	DRYWALL	C	INTACT	WHITE	640 CENTRAL	SAL	THIRD	BATHROOM	Negative	< LOD	0.17 < LOD	0.17 < LOD	0.17 < LOD	2.52	
323	12/12/2014 16:34	WALL	DRYWALL	D	INTACT	WHITE	640 CENTRAL	SAL	THIRD	BATHROOM	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD	1.65	
324	12/12/2014 16:34	CEILING	DRYWALL	D	INTACT	WHITE	640 CENTRAL	SAL	THIRD	BATHROOM	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD	2.45	
										D	si i e			D			
										D	si i e			D			
327	12/12/2014 16:38	WINDOW	WOOD	B	POOR	WHITE	640 CENTRAL	SAL	FIRST	OUTSIDE	Negative	< LOD	0.29 < LOD	0.29 < LOD	0.29 < LOD	2.4	
328	12/12/2014 16:40	WALL	VINYL	C	INTACT	BROWN	640 CENTRAL	SAL	FIRST	OUTSIDE	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD	2.55	
										D	si i e			D			
330	12/12/2014 16:41	WALL_BASE	CONCRETE	D	POOR	BROWN	640 CENTRAL	SAL	FIRST	OUTSIDE	Negative	< LOD	0.07 < LOD	0.07 < LOD	0.07 < LOD	2.44	
331	12/12/2014 16:41	WINDOW	WOOD	D	POOR	BROWN	640 CENTRAL	SAL	FIRST	OUTSIDE	Negative	< LOD	0.05 < LOD	0.05 < LOD	0.05 < LOD	1.95	
332	12/12/2014 16:42	HAND RAIL	WOOD	A	POOR	WHITE	640 CENTRAL	SAL	FIRST	OUTSIDE	Negative	< LOD	0.03 < LOD	0.03 < LOD	0.03 < LOD	2.28	
										D	e a i e					D	
										D	si i e					D	
										D	si i e					D	

APPENDIX A

SanAir Technologies Laboratory

Analysis Report

prepared for

Peer Engineering, Inc

Report Date: 12/19/2014
Project Name: 640 Central
Project #: 24048.12
SanAir ID#: 14034385



NVLAP LAB CODE 200870-0



Certification # 652931



License # LAB0166



804.897.1177

www.sanair.com



SanAir Technologies Laboratory, Inc.

1551 Oakbridge Drive, Suite B, Powhatan, VA 23139
804.897.1177 Toll Free: 888.895.1177 Fax: 804.897.0070
Web: <http://www.sanair.com> E-mail: iaq@sanair.com

Peer Engineering, Inc
7615 Golden Triangle Drive
Suite N
Eden Prairie, MN 55344

December 19, 2014

SanAir ID # 14034385
Project Name: 640 Central
Project Number: 24048.12

Dear Steve Luth,

We at SanAir would like to thank you for the work you recently submitted. The 45 sample(s) were received on Tuesday, December 16, 2014 via FedEx. The final report(s) is enclosed for the following sample(s): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45.

These results only pertain to this job and should not be used in the interpretation of any other job. This report is only complete in its entirety. Refer to the listing below of the pages included in a complete final report.

Sincerely,

Sandra Sobrino
Asbestos & Materials Laboratory Manager
SanAir Technologies Laboratory

Final Report Includes:

- Cover Letter
- Analysis Pages
- Disclaimers and Additional Information

sample conditions:

45 sample(s) in Good condition



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1551 Oakbridge Drive, Suite B, Powhatan, VA 23139
804.897.1177 Toll Free: 888.895.1177 Fax: 804.897.0070
Web: <http://www.sanair.com> E-mail: iaq@sanair.com

SanAir ID Number

14034385

FINAL REPORT

Name: Peer Engineering, Inc
Address: 7615 Golden Triangle Drive
Suite N
Eden Prairie, MN 55344

Project Number: 24048.12
P.O. Number:
Project Name: 640 Central

Collected Date: 12/15/2014
Received Date: 12/16/2014 9:30:00 AM
Report Date: 12/19/2014 12:39:32 PM
Analyst: Childress, Christopher

Asbestos Bulk PLM EPA 600/R-93/116

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
1 / 14034385-001 Plaster Throughout	Tan Non-Fibrous Homogeneous	3% Cellulose 3% Hair	94% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
2 / 14034385-002 Plaster Throughout	Tan Non-Fibrous Homogeneous	3% Cellulose 3% Hair	94% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
3 / 14034385-003 Plaster Throughout, Plaster	Tan Non-Fibrous Homogeneous	3% Cellulose 3% Hair	94% Other	None Detected
3 / 14034385-003 Plaster Throughout, Skim Coat	White Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
4 / 14034385-004 Plaster Throughout	White Non-Fibrous Homogeneous	3% Cellulose 3% Hair	94% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
5 / 14034385-005 Plaster Throughout, Plaster	Tan Non-Fibrous Homogeneous	3% Cellulose 3% Hair	94% Other	None Detected
5 / 14034385-005 Plaster Throughout, Skim Coat	White Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
6 / 14034385-006 Plaster Throughout, Plaster	Tan Non-Fibrous Homogeneous		100% Other	None Detected
6 / 14034385-006 Plaster Throughout, Skim Coat	White Non-Fibrous Homogeneous		100% Other	None Detected

Certification

Signature: *Chris Childress*
Date: 12/19/2014

Reviewed: *[Signature]*
Date: 12/19/2014



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804.897.1177 Toll Free: 888.895.1177 Fax: 804.897.0070
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Asbestos Bulk PLM EPA 600/R-93/116

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
7 / 14034385-007 Plaster Throughout, Plaster	Tan Non-Fibrous Homogeneous		100% Other	None Detected
7 / 14034385-007 Plaster Throughout, Skim Coat	White Non-Fibrous Homogeneous		100% Other	None Detected
7 / 14034385-007 Plaster Throughout, Texture	White Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
8 / 14034385-008 Ceiling Texture, 1st Floor Throughout 1st Floor	White Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
9 / 14034385-009 Ceiling Texture, 1st Floor Throughout 1st Floor	White Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
10 / 14034385-010 Ceiling Texture, 1st Floor Throughout 1st Floor	White Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
11 / 14034385-011 Ceiling Texture, 2nd Floor Throughout 2nd Floor	White Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
12 / 14034385-012 Ceiling Texture, 2nd Floor Throughout 2nd Floor	White Non-Fibrous Homogeneous		100% Other	None Detected

Certification

Signature: *Chris Childress*
Date: 12/19/2014

Reviewed: *[Signature]*
Date: 12/19/2014



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 804.897.1177 Toll Free: 888.895.1177 Fax: 804.897.0070
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Collected Date: 12/15/2014
Received Date: 12/16/2014 9:30:00 AM
Report Date: 12/19/2014 12:39:32 PM
Analyst: Childress, Christopher

Asbestos Bulk PLM EPA 600/R-93/116

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
13 / 14034385-013 Ceiling Texture, 2nd Floor Throughout 2nd Floor	White Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
14 / 14034385-014 Ceiling Texture, 3rd Floor Throughout 3rd Floor	White Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
15 / 14034385-015 Ceiling Texture, 3rd Floor Throughout 3rd Floor	White Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
16 / 14034385-016 Ceiling Texture, 3rd Floor Throughout 3rd Floor	White Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
17 / 14034385-017 Gypsum And Joint Compound Throughout, Gypsum Board	White Non-Fibrous Heterogeneous	7% Cellulose	93% Other	None Detected
17 / 14034385-017 Gypsum And Joint Compound Throughout, Joint Compound	White Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
18 / 14034385-018 12x12 Floor Tile Basement	Beige Non-Fibrous Homogeneous		100% Other	None Detected

Certification

Signature: *Chris Childress*

Date: 12/19/2014

Reviewed: *[Signature]*

Date: 12/19/2014

Page 3 of 8



SanAir Technologies Laboratory, Inc.

1551 Oakbridge Drive, Suite B, Powhatan, VA 23139
 804.897.1177 Toll Free: 888.895.1177 Fax: 804.897.0070
 Web: <http://www.sanair.com> E-mail: iaq@sanair.com

SanAir ID Number

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FINAL REPORT

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 Suite N
 Eden Prairie, MN 55344

Project Number: 24048.12
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Project Name: 640 Central

Collected Date: 12/15/2014
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Report Date: 12/19/2014 12:39:32 PM
Analyst: Childress, Christopher

Asbestos Bulk PLM EPA 600/R-93/116

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
19 / 14034385-019 Wall Panel Adhesive Basement, 3rd Bath	Tan Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
20 / 14034385-020 Stone Mortar Basement	Tan Non-Fibrous Homogeneous	2% Cellulose 2% Wollastonite	96% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
21 / 14034385-021 Concrete Over Stone Basement	Grey Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
22 / 14034385-022 Chimney Plaster Basement	Beige Non-Fibrous Homogeneous	< 1% Glass	100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
23 / 14034385-023 Chimney Plaster Basement	Beige Non-Fibrous Homogeneous	< 1% Glass	100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
24 / 14034385-024 Chimney Plaster Basement	Beige Non-Fibrous Homogeneous	< 1% Glass	100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
25 / 14034385-025 Brick And Mortar Basement, Brick	Red Non-Fibrous Homogeneous		100% Other	None Detected
25 / 14034385-025 Brick And Mortar Basement, Mortar	Beige Non-Fibrous Homogeneous		100% Other	None Detected

Certification

Signature: *Chris Childress*
 Date: 12/19/2014

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804.897.1177 Toll Free: 888.895.1177 Fax: 804.897.0070
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FINAL REPORT

Name: Peer Engineering, Inc
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Eden Prairie, MN 55344

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Received Date: 12/16/2014 9:30:00 AM
Report Date: 12/19/2014 12:39:32 PM
Analyst: Childress, Christopher

Asbestos Bulk PLM EPA 600/R-93/116

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
26 / 14034385-026 Siding, Transite Exterior, Porch	Grey Non-Fibrous Homogeneous		60% Other	40% Chrysotile

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
27 / 14034385-027 Siding Backing Exterior, Porch, Backing	Beige Fibrous Homogeneous	90% Cellulose 2% Hair	8% Other	None Detected
27 / 14034385-027 Siding Backing Exterior, Porch, Tar	Black Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
28 / 14034385-028 Window Glass Caulk Exterior, Porch	White Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
29 / 14034385-029 12x12 Floor Tile Foyer, 1st-Kitchen, 2nd-Kitchen	Brown Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
30 / 14034385-030 Sheet Flooring Foyer, 1st-Living Room, Sheet Flooring	Tan Non-Fibrous Homogeneous		80% Other	20% Chrysotile
30 / 14034385-030 Sheet Flooring Foyer, 1st-Living Room, Mastic	Yellow Non-Fibrous Homogeneous		100% Other	< 1% Chrysotile

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
31 / 14034385-031 Flooring Under Kitchen 12x12 1st-Kitchen, Flooring	White Non-Fibrous Homogeneous		100% Other	None Detected
31 / 14034385-031 Flooring Under Kitchen 12x12 1st-Kitchen, Flooring	Tan Non-Fibrous Homogeneous		100% Other	None Detected

Certification

Signature: *Chris Childress*
Date: 12/19/2014

Reviewed: *[Signature]*
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804.897.1177 Toll Free: 888.895.1177 Fax: 804.897.0070
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Received Date: 12/16/2014 9:30:00 AM
Report Date: 12/19/2014 12:39:32 PM
Analyst: Childress, Christopher

Asbestos Bulk PLM EPA 600/R-93/116

SanAir ID / Description	Stereoscopic Appearance	% Fibrous	Components % Non-Fibrous	Asbestos Fibers
32 / 14034385-032 Sheet Flooring, 12x12 1st-Bathroom, 2nd-Bathroom	Grey Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	% Fibrous	Components % Non-Fibrous	Asbestos Fibers
33 / 14034385-033 12x12 Floor Tile 2nd-Kitchen	Grey Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	% Fibrous	Components % Non-Fibrous	Asbestos Fibers
34 / 14034385-034 Back Splash Adhesive 2nd-Kitchen	Yellow Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	% Fibrous	Components % Non-Fibrous	Asbestos Fibers
35 / 14034385-035 12x12 Floor Tile, 2nd-Hall, Bedroom 2, Floor Tile	Brown Non-Fibrous Homogeneous		100% Other	None Detected
35 / 14034385-035 12x12 Floor Tile, 2nd-Hall, Bedroom 2, Mastic	Yellow Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	% Fibrous	Components % Non-Fibrous	Asbestos Fibers
36 / 14034385-036 Wall Texture 3rd-Main	White Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	% Fibrous	Components % Non-Fibrous	Asbestos Fibers
37 / 14034385-037 Wall Texture 3rd-Main	White Non-Fibrous Homogeneous		100% Other	None Detected

Certification

Signature: *Chris Childress*
Date: 12/19/2014

Reviewed: *[Signature]*
Date: 12/19/2014



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804.897.1177 Toll Free: 888.895.1177 Fax: 804.897.0070
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SanAir ID Number

14034385

FINAL REPORT

Name: Peer Engineering, Inc
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Suite N
Eden Prairie, MN 55344

Project Number: 24048.12
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Project Name: 640 Central

Collected Date: 12/15/2014
Received Date: 12/16/2014 9:30:00 AM
Report Date: 12/19/2014 12:39:32 PM
Analyst: Childress, Christopher

Asbestos Bulk PLM EPA 600/R-93/116

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
38 / 14034385-038 Wall Texture 3rd-Main	White Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
39 / 14034385-039 Sheet Flooring, 6x6 3rd-Bathroom, Sheet Flooring	Grey Non-Fibrous Homogeneous	15% Cellulose 2% Glass	83% Other	None Detected
39 / 14034385-039 Sheet Flooring, 6x6 3rd-Bathroom, Mastic	Yellow Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
40 / 14034385-040 Blown-In Insulation Attic	Brown Fibrous Homogeneous	98% Cellulose	2% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
41 / 14034385-041 Blown-In Insulation Attic	Brown Fibrous Homogeneous	98% Cellulose	2% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
42 / 14034385-042 Blown-In Insulation Attic	Brown Fibrous Homogeneous	98% Cellulose	2% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
43 / 14034385-043 Window Glaze, Exterior	White Non-Fibrous Homogeneous		100% Other	None Detected

Certification

Signature: *Chris Childress*
Date: 12/19/2014

Reviewed: *[Signature]*
Date: 12/19/2014



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804.897.1177 Toll Free: 888.895.1177 Fax: 804.897.0070
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SanAir ID Number

14034385

FINAL REPORT

Name: Peer Engineering, Inc
Address: 7615 Golden Triangle Drive
Suite N
Eden Prairie, MN 55344

Project Number: 24048.12
P.O. Number:
Project Name: 640 Central

Collected Date: 12/15/2014
Received Date: 12/16/2014 9:30:00 AM
Report Date: 12/19/2014 12:39:32 PM
Analyst: Childress, Christopher

Asbestos Bulk PLM EPA 600/R-93/116

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
44 / 14034385-044 Shingles Roof	Black Non-Fibrous Homogeneous	10% Glass	90% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
45 / 14034385-045 Roof Caulk Roof	Black Non-Fibrous Homogeneous	5% Cellulose	95% Other	None Detected

Certification

Signature: *Chris Childress*
Date: 12/19/2014

Reviewed: *[Signature]*
Date: 12/19/2014

Disclaimer

The final report cannot be reproduced, except in full, without written authorization from SanAir. Fibers smaller than 5 microns cannot be seen with this method due to scope limitations. The accuracy of the results is dependent upon the client's sampling procedure and information provided to the laboratory by the client. SanAir assumes no responsibility for the sampling procedure and will provide evaluation reports based solely on the sample and information provided by the client. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government.

For NY state samples, method EPA 600/M4-82-020 is performed.

Polarized- light microscopy is not consistently reliable in detecting asbestos in floor covering and similar non-friable organically bound materials. Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

NY ELAP lab ID 11983



1551 Oakbridge Drive Suite B
Powhatan, VA 23139
804-897-1177 / 888-895-1177
Fax 804-897-0070
www.sanair.com

Asbestos Chain of Custody

SanAir ID Number

14034385

Company: Peer Engineering, Inc.		Project #: 24048.12	Collected by: Steve Luth
Address: 7615 Golden Triangle Dr. Suite N.		Project Name: 640 Central	Phone #: 952-452-3826
City, St., Zip: Eden Prairie, MN., 55124		Date Collected: 12.15.14	Fax #: 952-831-4552
State of Collection: MN	Account#:	P.O. Number:	Email: SLuth@peerengineering.com

Bulk		Air		Soil/Vermiculite	
ABB	PLM EPA 600/R-93/116 <input checked="" type="checkbox"/>	ABA	PCM NIOSH 7400 <input type="checkbox"/>	ABSE	PLM EPA 600/R-93/116 (Qual.) <input type="checkbox"/>
	Positive Stop <input checked="" type="checkbox"/>	ABA-2	OSHA w/ TWA* <input type="checkbox"/>	ABSP	PLM CARB 435 (LOD <1%) <input type="checkbox"/>
ABEPA	PLMEPA 400 Point Count <input type="checkbox"/>	ABTEM	TEM AHERA <input type="checkbox"/>	ABSP1	PLM CARB 435 (LOD 0.25%) <input type="checkbox"/>
ABB1K	PLM EPA 1000 Point Count <input type="checkbox"/>	ABATN	TEM NIOSH 7402 <input type="checkbox"/>	ABSP2	PLM CARB 435 (LOD 0.1%) <input type="checkbox"/>
ABBEN	PLM EPA NOB <input type="checkbox"/>	ABT2	TEM Level II <input type="checkbox"/>		
ABBCH	TEM Chatfield <input type="checkbox"/>				
ABBTM	TEM EPA NOB <input type="checkbox"/>				
Water		New York ELAP		Dust	
ABHE	EPA 100.2 <input type="checkbox"/>	PLM NY	PLM EPA 600/M4-82-020 <input type="checkbox"/>	ABWA	TEM Wipe ASTM D-6480 <input type="checkbox"/>
		ABEPA2	NY ELAP 198.1 <input type="checkbox"/>	ABDMV	TEM Microvac ASTM D-5755 <input type="checkbox"/>
		ABENY	NY ELAP 198.6 PLM NOB <input type="checkbox"/>	Matrix	Other <input type="checkbox"/>
		ABBNY	NY ELAP 198.4 TEM NOB <input type="checkbox"/>		

Turn Around Times	3 HR (4 HR TEM) <input type="checkbox"/>	6 HR (8HR TEM) <input type="checkbox"/>	12 HR <input type="checkbox"/>	24 HR <input type="checkbox"/>
	2 Days <input type="checkbox"/>	3 Days <input checked="" type="checkbox"/>	4 Days <input type="checkbox"/>	5 Days <input type="checkbox"/>

Special Instructions	Use attached table
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Sample #	Sample Identification/Location	Volume or Area	Sample Type	Flow Rate*	Time* Start - Stop
	Use attached table				

Relinquished by	Date	Time	Received by	Date	Time
<i>[Signature]</i>	12-15-14		<i>[Signature]</i>	DEC 16 2014	9:30 AM

Unless scheduled, the turn around time for all samples received after 3 pm EST Friday will begin at 8 am Monday morning. Weekend or Holiday work must be scheduled ahead of time and is charged for rush turn around time. Work with standard turn around time sent Priority Overnight and Billed to Recipient will be charged a \$10 shipping fee.

14034385



Table 2 - Asbestos Sample Summary

Project No.: 24048.12

Project Name: 640 Central

Address: 640 Central Avenue W.
St. Paul, Minnesota

Date of Survey: 12/12/14-12/15/14

SAMPLE NUMBER	MATERIAL DESCRIPTION	MATERIAL	LOCATION
		TSI/Surfacing/ Misc	
1-7	Plaster	Surfacing	Throughout
8-10	Ceiling texture, 1st floor	Surfacing	Throughout 1st floor
11-13	Ceiling texture, 2nd floor	Surfacing	Throughout 2nd floor
14-16	Ceiling texture, 3rd floor	Surfacing	Throughout 3rd floor
17	Gypsum and joint compound	Misc.	Throughout
18	12x12 Floor tile, beige cobbles / self-stick	Misc.	Basement
19	Wall panel adhesive	Misc.	Basement, 3rd bath
20	Stone mortar	Misc.	Basement
21	Concrete over stone	Misc.	Basement
22-24	Chimney plaster	Surfacing	Basement
25	Brick and mortar	Misc.	Basement
26	Siding, transite	Misc.	Exterior, porch
27	Siding backing, black	Misc.	Exterior, porch
28	Window glass caulk, white	Misc.	Exterior, porch
29	12x12 floor tile, wood 5" cubes / Self-stick	Misc.	Foyer, 1st-Kitchen, 2nd-Kitchen
30	Sheet flooring, tan cobble	Misc.	Foyer, 1st-Living Room
31	Flooring under kitchen 12x12	Misc.	1st-Kitchen

test till positive

E

test till positive

Table 2
Page 1 of 2

ND - Non Detect, NA - Not Applicable, EA - Each, SF - Square Feet, LF - Linear Feet, (PC) - Determined by Point-Count Analysis

DEC 16 2014 9:30 AM

Table 2 - Asbestos Sample Summary

Project No.: 24048.12

Project Name: 640 Central

Address: 640 Central Avenue W.
St. Paul, Minnesota

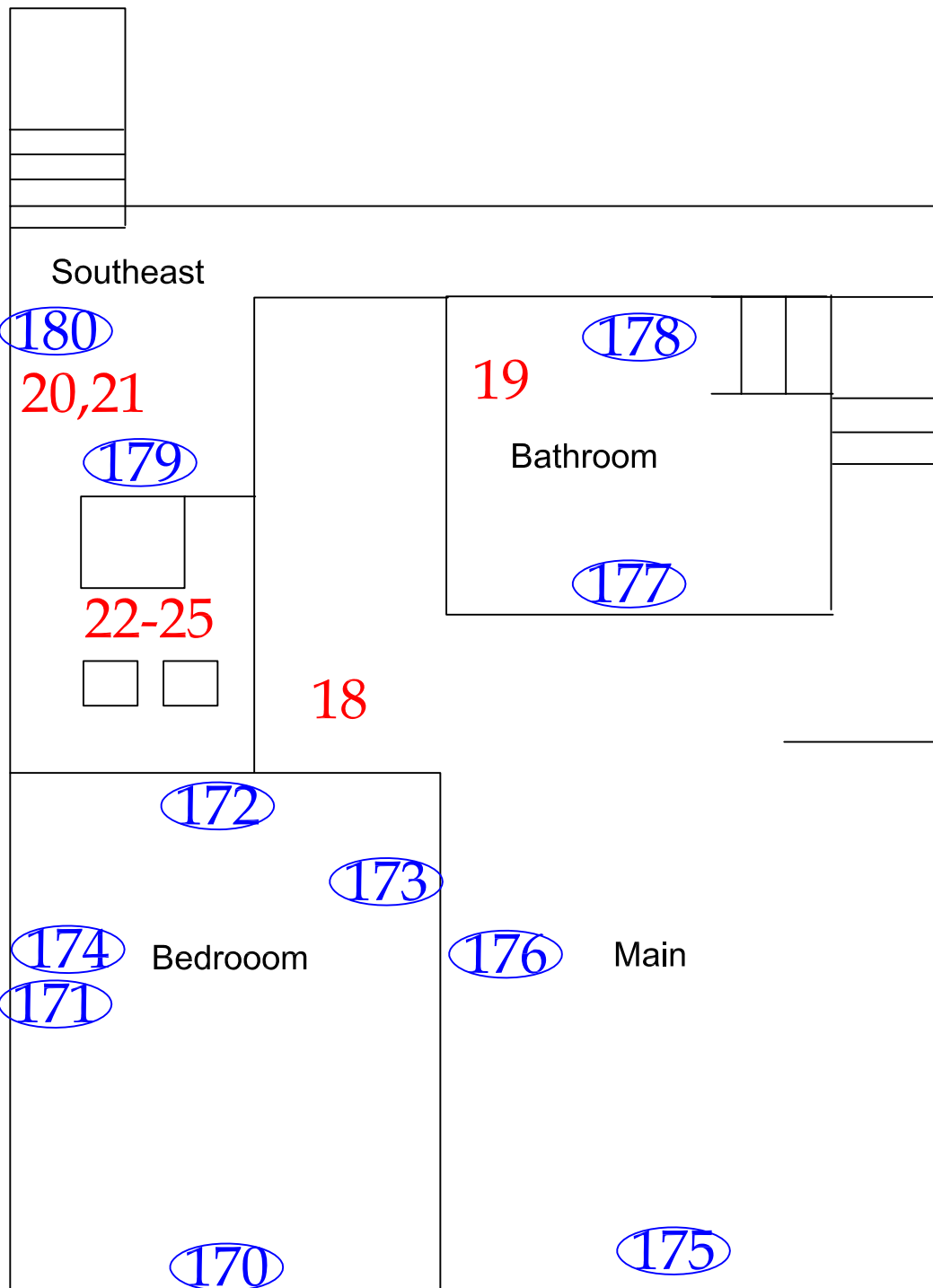
Date of Survey: 12/12/14-12/15/14

SAMPLE NUMBER	MATERIAL DESCRIPTION	MATERIAL TSI/Surfacing/ Misc	LOCATION	
			(All locations where the material was observed)	
32	Sheet flooring, 12x12 gray marble	Misc.	1st-Bathroom, 2nd -Bathroom	
33	12x12 Floor tile, gray rose / self-stick	Misc.	2nd-Kitchen	
34	Back splash adhesive, yellow	Misc.	2nd-Kitchen	
35	12x12 Floor tile, wood diamond / self-stick	Misc.	2nd-Hall, Bedroom 2	
36-38	Wall texture	Surfacing	3rd-Main	
39	Sheet flooring, 6x6 gray	Misc.	3rd-Bathroom	
40-42	Blown-in insulation	Misc.	Attic	
43	Window glaze, white	Misc.	Exterior	
44	Shingles	Misc.	Roof	
45	Roof caulk black	Misc.	Roof	

test tile positive

test shingle positive

APPENDIX B



- ASBESTOS
SAMPLE
LOCATION

- LEAD TESTING
LOCATION



NOT TO SCALE

Fig1.dwg



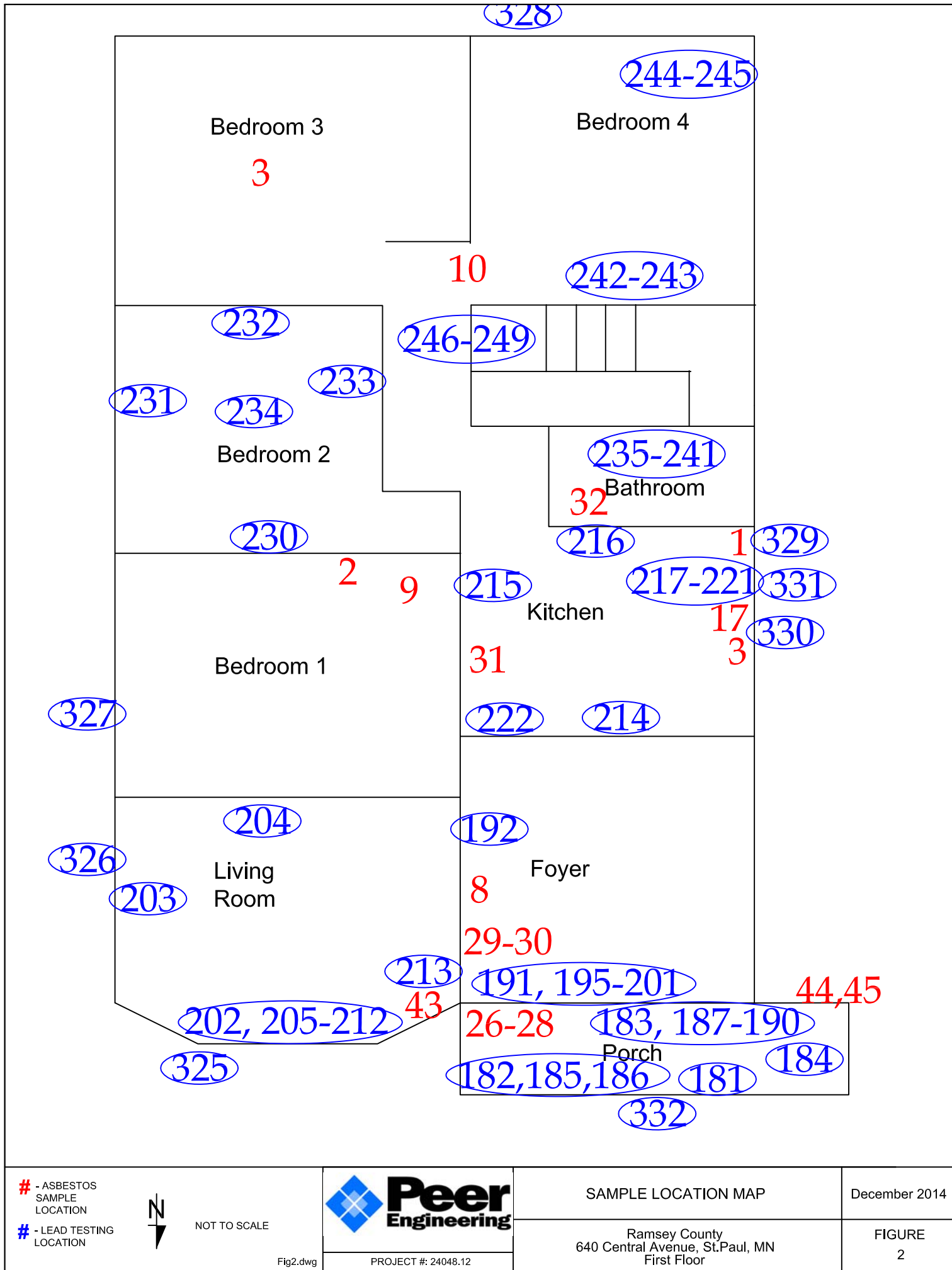
PROJECT #: 24048.12

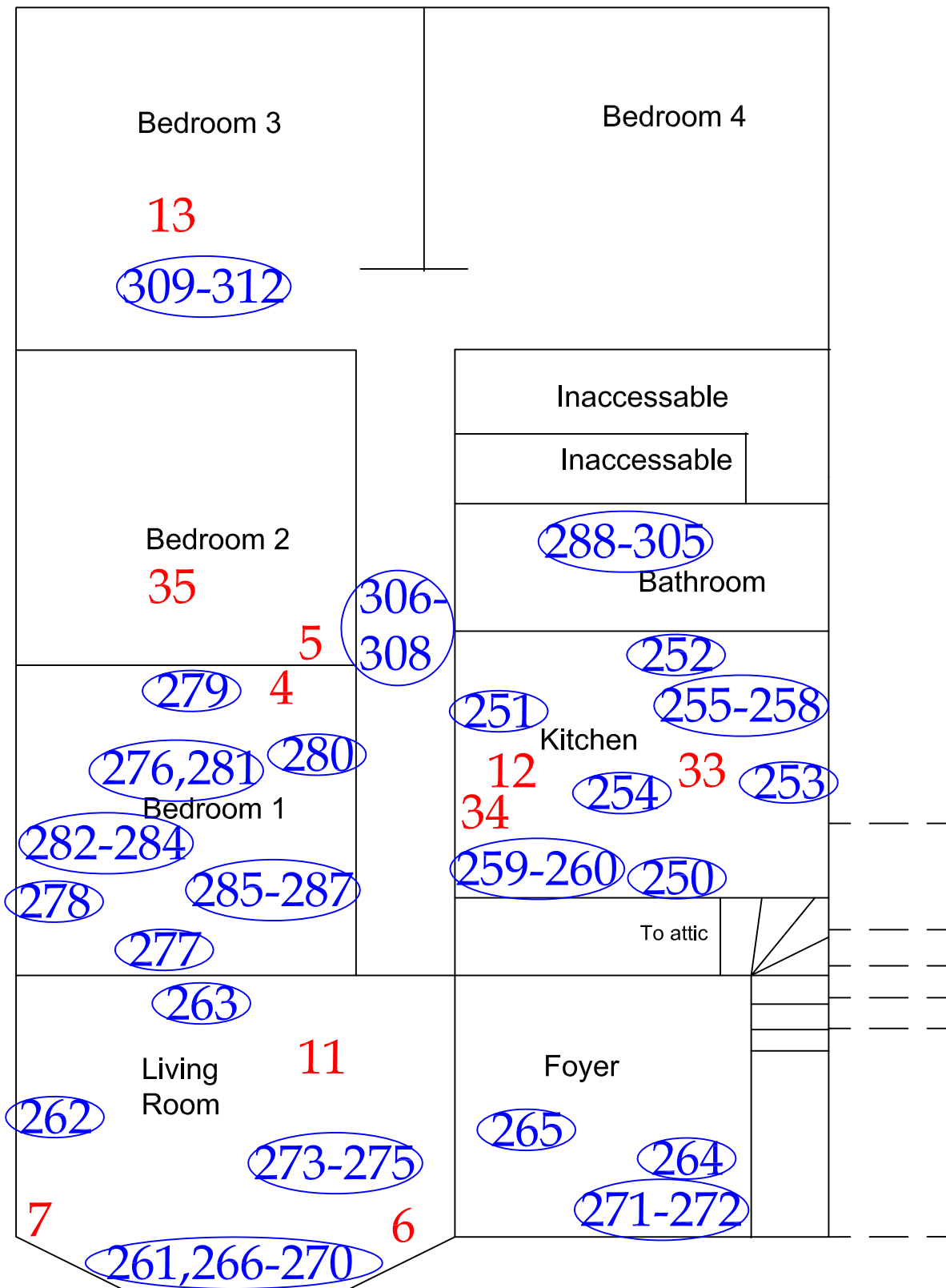
SAMPLE LOCATION MAP

Ramsey County
640 Central Avenue, St. Paul, MN
Basement

December 2014

FIGURE
1





- ASBESTOS
SAMPLE
LOCATION

- LEAD TESTING
LOCATION



NOT TO SCALE

Fig3.dwg



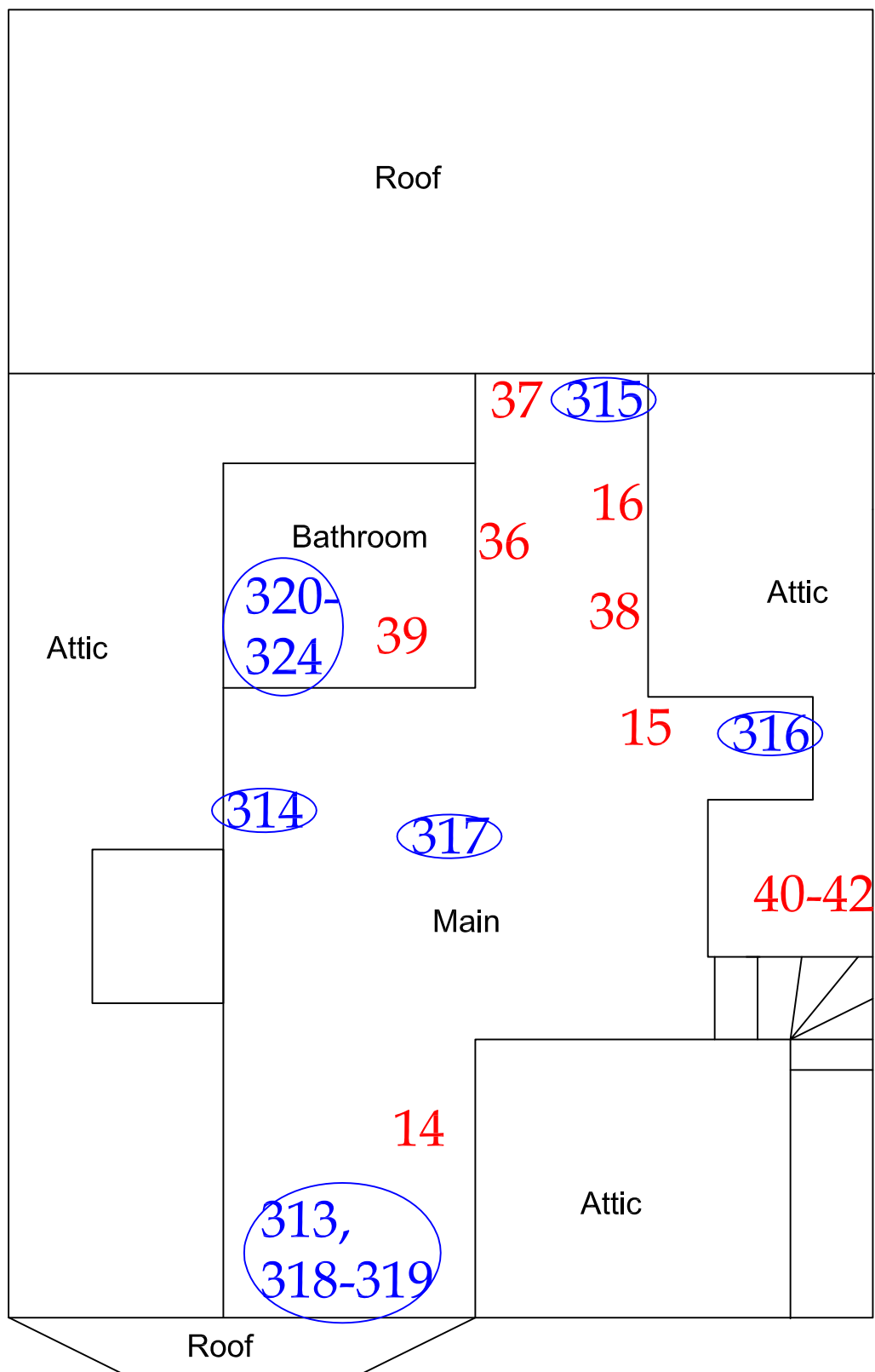
PROJECT #: 24048.12

SAMPLE LOCATION MAP

Ramsey County
640 Central Avenue, St. Paul, MN
Second Floor

December 2014

FIGURE
3



- ASBESTOS
SAMPLE
LOCATION

- LEAD TESTING
LOCATION



NOT TO SCALE

Fig4.dwg



PROJECT #: 24048.12

SAMPLE LOCATION MAP

Ramsey County
640 Central Avenue, St. Paul, MN
Third Floor

December 2014

FIGURE
4

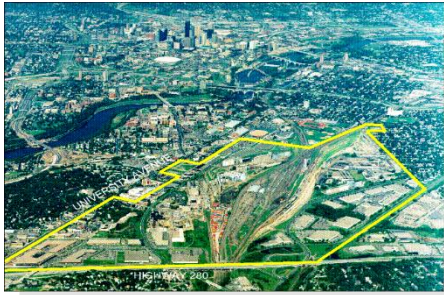
APPENDIX C

QUALIFICATIONS AND EXPERIENCE

Peer Engineering, Inc. (Peer) was incorporated in the State of Minnesota in March 1991. The company is owned and operated by Stephen T. Jansen, M.S., P.G., Kenneth A. Larsen, P.E., P.G., Mark F. Johnson, P.G., and Robert J. Rykken, P.E., P.G. Peer specializes in providing environmental consulting and engineering services to public and private clients for property transaction, redevelopment and construction projects. We provide a full range of environmental services including Phase I and Phase II Environmental Site Assessments (ESA); site investigations; Response Action Plan (RAP) preparation; feasibility and treatability studies; asbestos, lead-based paint and other hazardous materials identification and abatement oversight; operations and maintenance (O&M) program development; radon measurement and mitigation design; underground storage tank identification, abandonment and removal oversight; and environmental monitoring, sampling, testing and documentation related to RAP/construction implementation.

Peer has completed Phase I Environmental Site assessments of all types of properties including undeveloped, agricultural, single family, multi-family, and commercial office, retail and industrial. Peer has conducted hydrogeologic investigations/studies, and soil/water quality assessments at hundreds of sites located in a vast array of geographical and environmental settings.

Peer has a highly integrated, multi-disciplinary staff of professionals with the qualifications and experience needed to complete all required Phase I ESA scopes of work. Peer has completed hundreds of Phase I Environmental Site Assessments of properties using scopes of work designed by HUD, Fannie Mae, Freddie Mac and numerous other lending entities. Our professional staff includes several licensed engineers and geologists, a hydrogeologist and chemist, a soil/materials scientist, a GIS/computer specialist, and sampling technicians who design, perform and directly oversee our projects. Our personnel are licensed as asbestos inspectors, asbestos management planners, lead paint inspectors and lead risk assessors. All technical personnel have completed OSHA 40 hour health and safety training with 8 hour annual refresher courses.



Peer's corporate office is located in Eden Prairie, Minnesota and has a branch office located in Moorhead, Minnesota. We have 23 employees; twenty are professionals with education, post-graduate training and experience directly related to the environmental field. Three employees are administrative support staff. Being relatively smaller in size, Peer is able to respond quickly to our client's site specific individual needs, yet still provide cost-effective "big picture" services. Our clients also receive direct attention/input from Peer's owners and principals, so there are no unforeseen surprises at the end of the project.

QUALIFICATIONS AND EXPERIENCE

■ SERVICES OVERVIEW

Property Transaction

- Phase I & Phase II Environmental Site Assessments
- Regulatory Assurance Letters
- Property Condition Assessments
- Appraisal Support
- Geotechnical Evaluation

Soil and Groundwater Sampling and Remediation

- Risk-Based Cleanup Design
- Cleanup Grant Preparation & Administration
- Petroleum Cleanup Reimbursement
- Regulatory Approvals & Assurance Letters
- Environmental Permits
- Remediation Plans & Specifications
- Remediation & Construction Management
- General Contracting
- Turnkey Remediation

Compliance

- RCRA Permitting & Closure
- Compliance Audits
- Waste Characterization & Disposal
- Petroleum & Chemical Storage Tank System Design
- NPDES Stormwater Permits & Pollution Prevention Plans
- Wastewater Discharge Permits
- Stormwater, Wastewater, & Groundwater Monitoring

Building Demolition & Decontamination

- Asbestos & Lead Paint Surveys
- Hazardous Materials Inventories (electrical equipment, refrigerants)
- Building Contaminant Assessment (PCBs, mercury, mold, radon)
- Abatement Alternative Analysis
- Abatement Plans & Specifications
- Abatement Contractor Management
- Turnkey Abatement



7615 Golden Triangle Dr., Suite N, Eden Prairie, MN 55344



**ASBESTOS
INSPECTOR**

**Certified by:
State of Minnesota
Department of Health**

Expires: 02/04/2015

**Stephen A Luth
6598 154th St W
Apple Valley, MN 55124**

SP Luth
Director, Env. Health Div.

No. A110702

Issued: 02/12/2014



**LEAD
Risk Assessor**

Licensed by:

State of Minnesota
Department of Health

License No. LR3836

Expires 09/18/2015

Stephen A Luth
6598 154th St W
Apple Valley, MN 55124

SP/Luth
Director, Env. Health Div.




**ASBESTOS
INSPECTOR**

Certified by:
State of Minnesota
Department of Health

Expires: 12/02/2015

Jeffrey A. Arndt
332 Pondridge Cir
Wayzata, MN 55391


Director, Env. Health Div.

No. AI12508

Issued: 12/05/2014