June 4, 2021

CITY OF COQUITLAM
Finance, Lands & Police
3000 Guildford Way
Coquitlam, BC V3B 7N2

Attention: Mr. Sandeep Minhas, BA, RI
Property Negotiator

Ref: CONTRACTOR VERSION - PRE-PROJECT HAZARDOUS BUILDING MATERIALS SURVEY FOR THE PLANNED DEMOLITION OF THE RESIDENTIAL DWELLING LOCATED AT 500 JEFFERSON AVENUE, COQUITLAM, BC

1.0 INTRODUCTION

Astech Consultants Ltd. (Astech) was retained by the City of Coquitlam to conduct a Pre-Project Hazardous Building Materials Survey and compile a detailed report on the presence and location of asbestos containing building materials, lead, polychlorinated biphenyls (PCBs), mercury, stored chemicals, and silica to be impacted by the planned demolition of the Residential Dwelling located at 500 Jefferson Avenue, Coquitlam, BC.

Astech's survey and report format is designed specifically to satisfy the current applicable regulation from the Workers' Compensation Board of British Columbia (WCB) Occupational Health and Safety Regulation 20.112 regarding hazardous building material assessments by a Qualified Person for buildings and structures.

This survey was conducted on May 6, 7, 31, and June 1, 2021 by Scott Price assisted by Jesse James and Brian Tang of Astech. It must be emphasized that this survey was concerned exclusively with the subject building. The site survey was destructive in nature and thorough in investigating layered floor, wall, and ceiling systems. However, inaccessible areas which would require the actual dismantling of substantial portions of the building in order to gain access were not investigated. No attempt was made to investigate underground services or the surrounding property. Therefore, if during work activities, other hazardous materials, asbestos containing materials, or potential asbestos containing materials not included in this report are discovered, work should immediately cease in the affected area. At that time, Astech should be contacted so that they can initiate immediate appropriate action so that there are no undue delays.

2.0 BUILDING DESCRIPTION

The subject building on site is described as a two-storey residential dwelling with attached garage and faced with stucco and vinyl siding. According to BC Assessment, the building was originally constructed in 1961. The building has had a few renovations and an addition over the years. The building is heated by a forced air natural gas furnace and ductwork. At the time of survey, the interior and exterior of the building were in good condition.

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3.0 METHODOLOGY

3.1 ASBESTOS CONTAINING MATERIALS

A visual inspection was undertaken in order to determine the type, location, and homogeneous nature of asbestos and potential asbestos containing building materials located at the subject building. During this inspection, two hundred (200) bulk samples of potential asbestos containing materials were collected from specific locations of the building, however, two (2) samples did not require analysis. The number of samples collected during this survey are in accordance with the guidelines established by the WCB in their 2020 publication Safe Work Practices for Handling Asbestos, and as indicated by actual site conditions. The samples collected were submitted for analysis at our in-house laboratory in accordance with the WCB Occupational Health and Safety Regulation, utilizing polarized light microscopy, and dispersion staining techniques. Results of laboratory analysis of the samples collected during this survey are attached.

3.2 LEAD FINISHES

A visual inspection was undertaken in order to determine the type and location of paints, primers, coatings, and/or glazing finishes suspected of containing lead at the subject building. During this inspection, thirty (30) potential lead finishes were analyzed from specific locations of the building. The finishes were analyzed in accordance with US EPA methods and the requirements of the WCB Occupational Health and Safety Regulation. Results of the finishes analyzed during this survey are attached.

During this inspection, ten (10) bulk samples of intact lead containing paint on wood and cementitious substrates were collected from the subject building. The bulk samples were submitted for Toxicity Characteristic Leachate Procedure for lead (TCLP lead) laboratory analysis in accordance with US EPA methods and the requirements of the WCB Occupational Health and Safety Regulation. Results of laboratory analysis of the samples collected during this survey are attached.

3.3 LEAD CONSTRUCTION MATERIALS, SOLID PCBs, MERCURY, STORED CHEMICALS, AND SILICA

A visual inspection was undertaken at the subject building in order to determine the presence of:

- construction materials suspected of containing lead and other heavy metals,
- fluorescent and high intensity discharge (HID) light fixtures suspected of containing PCB ballasts or capacitors,
- thermostats, light tubes/bulbs, and associated equipment suspected of containing mercury,
- stored chemicals suspected of being toxic, flammable, or explosive, and
- building materials suspected of containing silica in crystalline and non-crystalline forms.

4.0 INSPECTION RESULTS

4.1 ASBESTOS CONTAINING MATERIALS

GENERAL NOTES

#1 Acoustical Adhesive: As listed below, there is **asbestos** containing acoustical adhesive located behind gypsum board, polyethylene sheeting, and other building materials. Due to the fact that the **asbestos** containing acoustical adhesive is concealed and inaccessible behind other building materials, it is not possible to accurately determine the amount present within the subject building until such time as the building materials which are concealing the adhesive have been removed.

#2 Potential Asbestos Containing Skylights: The potential **asbestos** containing skylights listed below must be considered **asbestos** containing until laboratory results determine otherwise. In order to test the skylights destructive testing is required.

The visual inspection and/or analytical results determined that asbestos containing materials and/or potential asbestos containing materials are located at the following specific locations:

Lower Floor

Stairwell Landing,
Northeast Living Room, and
Southeast Bedroom
- **Asbestos** containing floor tiles (concealed beneath a layer of carpet and other building materials).

South Kitchen
- **Asbestos** containing paper backed sheet flooring and paper backing residue (concealed beneath a layer of ceramic tiles, **asbestos** contaminated ceramic tile grout and mortar, and other building materials).

Furnace Closet (within South Kitchen)
- **Asbestos** containing floor tiles (some concealed).
- **Asbestos** containing paper and/or paper tape on ductwork.
- **Asbestos** containing paper insulation lining interior of metal exhaust vents to rooftop.

West Bathroom
- **Asbestos** containing paper backed sheet flooring and paper backing residue (concealed beneath a layer of ceramic tiles, **asbestos** contaminated ceramic tile grout and mortar, and other building materials).

Stairwell to Upper Floor including Front Entrance Landing,
Storage Area beneath Stairwell,
West Storage Room (adjoining West Bathroom),
Southwest Entrance Vestibule, and
Northwest Garage
- No asbestos materials observed.

Wall Cavities
- **Asbestos** containing floor tiles (concealed beneath some newer partition walls).
- **Asbestos** containing acoustical adhesive (see General Note #1 above).
- **Asbestos** containing paper and/or paper tape on ductwork, wood, registers, and debris.
- **Asbestos** containing paper insulation lining interior of metal exhaust vents to rooftop.

Ceiling Spaces
- **Asbestos** containing paper and/or paper tape on ductwork, wood, registers, and debris.
- **Asbestos** containing paper insulation lining interior of metal exhaust vents to rooftop.

Upper Floor

Northeast Living Room, and
Southeast Dining Room
- **Asbestos** containing paper backed sheet flooring (concealed beneath a layer of carpet and other building materials).

South Kitchen, and
South Bathroom
- **Asbestos** containing paper backed sheet flooring and paper backing residue (concealed beneath a layer of ceramic tiles, **asbestos** contaminated ceramic tile grout and mortar, and other building materials).

South Laundry Room (former exterior South Deck)
- **Asbestos** containing sealant in former exterior metal-framed windows (mostly concealed).

Centre Hallway including Closets,
Southwest Bedroom including Closet,
North Bedroom including Closet,
Northwest Master Bedroom including Closets, and
Southwest En Suite Bathroom
- No asbestos materials observed.

Floor Cavities
- **Asbestos** containing paper and/or paper tape on ductwork, wood, registers, and debris.
- **Asbestos** containing paper insulation lining interior of metal exhaust vents to rooftop.

Wall Cavities
- **Asbestos** containing paper backed sheet flooring and/or paper backing residue (concealed beneath some newer partition walls).
- **Asbestos** containing acoustical adhesive (see General Note #1 above).
- **Asbestos** containing paper insulation lining interior of metal exhaust vents to rooftop.

Ceiling Spaces
- **Asbestos** containing acoustical adhesive (see General Note #1 above).
- **Asbestos** containing paper insulation lining interior of metal exhaust vents to rooftop.

East Attic
- Non-asbestos kraft-faced fibreglass batt insulation.
- Non-asbestos loose fill fibreglass insulation.
- No asbestos materials observed.

West Attic
- Non-asbestos fibreglass batt insulation.
- No asbestos materials observed.

EXTERIOR

Walls
- No asbestos materials observed.

Doors, Windows, and Skylights
- **Asbestos** containing sealant in exterior metal-framed windows (mostly concealed).
- Potential **asbestos** containing sealants/putties in and/or around exterior skylights (see General Note #2 above).

Main Rooftop
- **Asbestos** containing paper insulation lining interior of metal exhaust vent.
- **Asbestos** containing mastic on metal chimney flashing (some concealed and some on adjoining building materials).
- Potential **asbestos** containing sealants/putties in and/or around exterior skylights (see General Note #2 above).

East Deck Canopy
- No asbestos materials observed.

4.2 LEAD

The visual inspection and/or laboratory analytical results determined the following at the subject building (some of which is in a deteriorated condition and flaking):

Interior
- beige glazing finish containing 15,800 parts per million (PPM) of **lead** was used on ceramic tiles,
- light grey glazing finish containing 11,000 PPM of **lead** was used on ceramic tiles,
- white glazing finish containing 5,955 PPM of **lead** was used on ceramic tiles,
- off-white glazing finish containing 2,018 PPM of **lead** was used on ceramic tiles,
- light beige glazing finish containing 1,993 PPM of **lead** was used on ceramic tiles,
- non-leachable grey paint containing 633 PPM of **lead** was used on plaster surfaces,
- non-leachable pink paint containing 570 PPM of **lead** was used on wood surfaces,
- non-leachable white paint containing 492 PPM of **lead** was used on wood wall panels,
- non-leachable white paint containing 229 PPM of **lead** was used on other wood surfaces,
- non-leachable light blue paint containing 214 PPM of **lead** was used on plaster surfaces,
- non-leachable dark purple paint containing 196 PPM of **lead** was used on plaster and wood surfaces,
- non-leachable cream paint containing 196 PPM of **lead** was used on plaster and wood surfaces,
- non-leachable light beige paint containing 185 PPM of **lead** was used on plaster surfaces,
- non-leachable beige paint containing 158 PPM of **lead** was used on plaster surfaces,
- non-leachable dark blue paint containing 110 PPM of **lead** was used on plaster and wood surfaces,
- light purple paint containing 19 PPM of **lead** was used on plaster surfaces,
- white paint containing 17 PPM of **lead** was used on gypsum board surfaces,
- white paint containing 12 PPM of **lead** was used on plaster surfaces,
- dark purple paint containing 10 PPM of **lead** was used on gypsum board surfaces,
- pink paint containing 9 PPM of **lead** was used on stucco surfaces,
- beige paint containing less than (<) 7 PPM of **lead** was used on gypsum board surfaces,
- light purple paint containing <7 PPM of **lead** was used on gypsum board surfaces, and
- there may be cast iron drain pipes with a **lead** packing material at the connection bells and there may be **lead** sleeves at the toilets.

Exterior
- white paint containing 1,929 PPM of **lead** was used on exterior metal clad wood doors,
- white paint containing 29 PPM of **lead** was used on metal railings,
- pink paint containing 10 PPM of **lead** was used on stucco surfaces,
- white paint containing <6 PPM of **lead** was used on wood surfaces,
- dark brown coating containing <6 PPM of **lead** was used on concrete steps,
- grey paint containing <6 PPM of **lead** was used on wood stairs, and
- black paint considered to be **lead** containing was used on metal stairs, and
- white paint considered to be **lead** containing was used on metal soffits, gutters, rain water leaders, garage doors, and deck canopy.

4.3 PCBs

The visual inspection determined that there are thirteen (13) fluorescent light fixtures at the subject building suspected of having one or more PCB containing ballasts. PCB ballast identification requires the disassembly of the light fixture in order to locate the manufacturer's identification code.

4.4 MERCURY

The visual inspection determined that there are no wall mounted thermostats at the subject building that contain mercury. However, there are numerous fluorescent light tubes/bulbs at the subject building that contain mercury.

4.5 STORED CHEMICALS AND OTHER HAZARDOUS MATERIALS

The following list of materials were present in and around the subject building at time of inspection:

- a few containers of rodent poison,
- batteries in alarm system,
- compressors and piping with suspect ozone depleting substances (CFC's) in two refrigerators,
- smoke detector(s) with a radioactive component within,
- a few areas with rodent droppings,
- a few areas with visible mould on gypsum board, wood, and other building materials, and
- piping containing natural gas leading to heating equipment.

4.6 SILICA

All concrete, cement, ceramic tile, gypsum board, plaster, stucco, grout, mortar, and any other cementitious building materials located at the subject building are suspected of containing silica in crystalline and non-crystalline forms.

4.7 GYPSUM BOARD

The visual inspection and/or laboratory analytical results determined the following at the subject building:

- there is non-asbestos filling compound on gypsum board and gypsum board lath behind non-asbestos plaster located throughout the subject building, and
- there is unfinished gypsum board in a few areas of the subject building (including some in storage).

5.0 RECOMMENDATIONS

5.1 ASBESTOS CONTAINING MATERIALS

Prior to demolition of a building, the asbestos containing materials (or potential asbestos containing materials) must first be removed and disposed of as asbestos waste by a qualified hazardous materials abatement contractor in accordance with the WCB Occupational Health and Safety Regulation. Disposal of asbestos containing materials must be performed in accordance with the BC Ministry of Environment and Climate Change Strategy - *Environmental Management Act* - Hazardous Waste Regulation.

5.2 LEAD

Paints/Primers
Where lead (or potential lead) based paints and/or primers are affected by a project, the work must be performed by a qualified contractor in accordance with the WCB Occupational Health and Safety Regulation and their 2020 publication entitled Safe Work Practices For Handling Lead.

Where the base substrate material is to be removed in conjunction with lead paint removal, the base substrate and lead based paints and/or primers should be removed intact by the contractor, in accordance with the contractor's risk assessment and site specific work procedures. The workers conducting the work and workers in close proximity to the work being performed, should be protected with personal protective equipment as determined by the contractor's risk assessment and site specific work procedures.

Lead containing paints which remain attached to wood and/or other building materials must be labelled as lead based paints (LBP) for transporting to a licensed/approved disposal site or recycling facility. A licensed/approved facility receiving the waste must be informed of the lead content of these materials and be agreeable to receiving these materials. Prior to acceptance of waste with lead paints at a licensed/ approved disposal facility, the contractor generating the waste must ensure that all waste materials containing LBP's are sampled intact, fastened directly to the base substrate, and representative of the waste stream created by demolition. Astech has submitted ten (10) samples for analysis utilizing a Toxicity Characteristic Leachate Procedure for lead (TCLP lead) test to determine the potential for soil and/or groundwater contamination. The contractor shall have any additional samples analyzed utilizing a TCLP lead test to determine the potential for soil and/or groundwater contamination, if deemed necessary by the site receiving the waste.

If the lead paints are to be separated or removed from the building materials by means of sanding, scraping, abrading, blasting, etc., more stringent work procedures would apply. The removed lead paints, depending on lead concentrations and leachate results, may become a Hazardous Waste and therefore must be disposed of in accordance with the BC Ministry of Environment and Climate Change Strategy - *Environmental Management Act* - Hazardous Waste Regulation.

Glazing Finishes
Where ceramic tiles with lead (or potential lead) glazing finishes are to be removed, the ceramic tile and glazing finish should be removed intact. The workers conducting the work and workers in close proximity to the work being performed, should be protected with personal protective equipment as determined by the removal contractor's risk assessment and site specific work procedures. Ceramic tiles and glazing finishes that are removed intact may be disposed of as normal construction waste.

If the lead glazing finishes are to be separated or removed from the ceramic tiles by means of sanding, scraping, abrading, blasting, etc., more stringent work procedures by a qualified abatement contractor would apply in order to satisfy the WCB Occupational Health and Safety Regulation and their 2020 publication entitled Safe Work Practices For Handling Lead.

Lead Construction Materials
Prior to demolition of a building, the lead in bells of drain pipe and lead sleeves at toilets must first be removed, and be recycled or disposed of in accordance with the BC Ministry of Environment and Climate Change Strategy - *Environmental Management Act* - Hazardous Waste Regulation.

5.3 PCB CONTAINING BALLASTS

It is recommended that the identification of PCB ballasts be performed by qualified personnel prior to or in conjunction with the demolition of a building, at a time when it becomes feasible to isolate electrical power and disassemble/disconnect the light fixtures. The ballasts that are identified as PCB containing must be removed in accordance with the WCB Occupational Health and Safety Regulation and disposed of in accordance with the BC Ministry of Environment and Climate Change Strategy - *Environmental Management Act* - Hazardous Waste Regulation.

5.4 MERCURY

Prior to demolition of a building, the mercury containing light tubes/bulbs must first be removed, and be salvaged, recycled or disposed of, in accordance with the BC Ministry of Environment and Climate Change Strategy - *Environmental Management Act* - Hazardous Waste Regulation.

5.5 STORED CHEMICALS AND OTHER HAZARDOUS MATERIALS

Stored Chemicals
Prior to demolition of a building, stored chemicals, ozone depleting substances within refrigeration equipment, and radioactive equipment must first be removed, and be recycled or disposed of, in accordance with the BC Ministry of Environment and Climate Change Strategy - *Environmental Management Act* - Hazardous Waste Regulation.

Rodent Droppings
Rodent droppings which can cause infectious disease and/or respiratory disease in humans should be removed as biohazardous waste by a qualified abatement contractor in accordance with the WCB Occupational Health and Safety Regulation, prior to unprotected trades performing work in or conducting selective demolition of a building. In lieu of removing droppings, workers shall wear respirators and protective clothing while in contaminated areas of a building, and while conducting selective demolition of a building.

Mould
The differing types of moulds and/or fungi which can cause infectious disease and/or respiratory disease in humans should be removed as biohazardous waste by a qualified abatement contractor in accordance with the WCB Occupational Health and Safety Regulation, prior to unprotected trades performing work in affected areas of a building. In lieu of removing moulds and fungi, workers shall wear respirators and protective clothing while in contaminated areas of a building.

Prior to the demolition of a building, mould which is attached to gypsum board to be recycled, should be removed by a qualified abatement contractor in accordance with the WCB Occupational Health and Safety Regulation. During the removal process and prior to the gypsum board being transported to the recycling facility, the gypsum board and mould must be treated with an approved bleaching agent (or equivalent) to destroy the mould. Mould which remains attached to building materials such as wood, metal and concrete may be disposed of in a manner applicable to normal demolition waste. Workers conducting selective demolition of a building shall wear respirators and protective clothing while in contaminated areas of a building.

Natural Gas
The natural gas must be shut off and purged by Fortis BC or a qualified trades person prior to work that would affect the gas, and prior to building demolition.

5.6 SILICA

Where cementitious building materials that are suspected of containing silica in crystalline form are directly impacted by the project (i.e. drilling, cutting, abrading, etc.), the work should be performed in a controlled manner to avoid the release of crystalline silica dust. Cutting, drilling, or otherwise disturbing these building materials must be performed by a qualified contractor's trained personnel in accordance with the WCB Occupational Health and Safety Regulation.

5.7 RECYCLABLE GYPSUM BOARD

Once decontaminated (where applicable), and prior to the demolition of a building, the gypsum board with no asbestos finishes (a provincially regulated construction waste) must first be removed by a qualified contractor, and be recycled or disposed of in accordance with the BC Ministry of Environment and Climate Change Strategy - *Environmental Management Act* - Hazardous Waste Regulation. Landfills are issued operational certificates from the BC Ministry of Environment, and for local landfills and others their certificate specifies that gypsum board cannot be accepted for disposal, and therefore local depots offer recycling services.

6.0 OWNER'S AND ABATEMENT CONTRACTOR'S RESPONSIBILITIES

Owner's Responsibilities
For the remediation of hazardous building materials, contract specifications, quality control, and final acceptance of the work remain the responsibility of the Owner. In order to ensure that the Owner has acted in a responsible manner, and to ensure regulatory board compliance, it is recommended that the work and project air monitoring be performed by a qualified and properly insured (with proof of necessary asbestos inclusion rider) Hazardous Materials Abatement Contractor.

Abatement Contractor's Responsibilities
The Abatement Contractor upon completing the work shall have their "Qualified Person" inspect the worksite in its entirety to confirm that asbestos and other hazardous building materials have been properly removed, then promptly provide the Owner with a signed Letter of Completion.

As well, prior to transport of hazardous waste, the Abatement Contractor shall assist the Owner by completing and submitting the BC Ministry of Environment and Climate Change Strategy Waste Generator Number Registration Form (Schedule 5 Form 1), once signed by the Owner, if no BC Generator number exists. If a BC Generator number exists and requires updating for this specific project, the Abatement Contractor shall assist with completing and submitting the update.

Project Documentation should also be provided to the Owner including, but not necessarily limited to, a Notice of Project for work involving Asbestos and/or Lead Paint, Risk Assessment, Exposure Control Plan, and Site Specific Work Procedures, Worker Respirator Fit Test Forms/Logs and Training Acknowledgement Forms, Certification of DOP Testing of HEPA Filtered Equipment used on site, Air Sample Results, Material Safety Data Sheets (MSDS) for products used on site, Transportation Waybills, and Waste Manifest Forms.

7.0 APPROXIMATE QUANTITIES FOR HAZARDOUS MATERIALS

The following approximate quantities for hazardous materials are provided as a means to satisfy the requirements of the WCB, and are provided for reference only. Contractors shall be responsible for verifying exact quantities for the purpose of bidding the work.

ASBESTOS CONTAINING MATERIALS	APPROXIMATE QUANTITIES
Confirmed Asbestos Containing Materials	
Asbestos Floorings (floor tiles, paper backed sheet flooring, and paper residue) and Contaminated Building Materials (paper backed sheet flooring and paper residue to be removed intact with base wood substrate remaining attached, where applicable)	950 square feet
Asbestos Acoustical Adhesive and Contaminated Building Materials (**Note:** The adhesive is concealed behind gypsum board, polyethylene sheeting, and/or other building materials, therefore accurate quantification is not possible until gypsum board removal has taken place)	3,950 square feet
Asbestos Mastic on Metal Chimney Flashing and Contaminated Building Materials	10 lineal feet
Asbestos Paper and/or Paper Tape on Ductwork, Wood, Registers, and Debris	120 lineal feet
Asbestos Sealant in Exterior Metal-Framed Windows	21 windows
Potential Asbestos Containing Materials	
Potential Asbestos Sealants/Putties in and/or around Exterior Skylights	2 skylights
OTHER HAZARDOUS MATERIALS	
Non-Leachable Lead Paint Remaining Attached to Building Materials for Recycle/Disposal	Not Determined
Lead Products for Recycle (lead in bells of drain pipe and lead sleeves)	Not Determined
Potential PCB Containing Ballasts	13 fixtures
Mercury Containing Light Tubes/Bulbs	15 tubes / 20 bulbs

We hope you have found the above information useful. If you have any questions, or require clarification please contact this office.

Scott Price, Principal
Astech Consultants Ltd.
Ref: 24223HE01C.SP

ASBESTOS BULK SAMPLE REPORT

Date: June 4, 2021

Client: **CITY OF COQUITLAM**

Location: **Residential Dwelling**
500 Jefferson Avenue
Coquitlam, BC

Comments:
1) Asbestos (bulk) by PLM analyzed as per NIOSH 9002 Issue 2.
2) Workers' Compensation Board of British Columbia (WCB) defines asbestos containing material as 0.5% or more asbestos, with the exception of Vermiculite Insulation which is defined as “any asbestos”.
3) Samples will be disposed of after 90 days, unless the Client requests otherwise.

Sample(s) Collected on May 7, 2021

				Non-Asbestos	Asbestos
Sample	**Location**	**Description**	**Layer: Colour**	**% Type**	**% Type**
24223 BS01	Lower Floor - Front Entrance Landing	Ceramic Floor Tile Grout	1: Grey	100% Non-Fibrous	None Detected
24223 BS02	Lower Floor - Front Entrance Landing	Ceramic Floor Tile Mortar	2: Grey	100% Non-Fibrous	None Detected
24223 BS03	Lower Floor - Front Entrance Landing	Ceramic Floor Tile Mortar	2: Grey	100% Non-Fibrous	None Detected
24223 BS04	Lower Floor - Front Entrance Landing	Ceramic Floor Tile Mortar	2: Grey	100% Non-Fibrous	None Detected
24223 BS05a	Lower Floor - Front Entrance Landing	Paint Filling Compound on Plaster (East Wall)	1: Beige 2: White	100% Non-Fibrous	None Detected
24223 BS05b	Lower Floor - Front Entrance Landing	Paint Plaster (Outer Layer, East Wall)	3: Beige 4: White	100% Non-Fibrous	None Detected
24223 BS05c	Lower Floor - Front Entrance Landing	Plaster (Inner Layer, East Wall)	5: Grey	100% Non-Fibrous	None Detected
24223 BS06	Lower Floor - Front Entrance Landing	Sealant (in Exterior Wood-Framed Window)	1: Black	100% Non-Fibrous	None Detected
24223 BS07	Lower Floor - Stairwell to Upper Floor	Paint Spray Applied Texture Coat (Ceiling)	1: White 2: White	100% Non-Fibrous	None Detected

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Sample	Location	Description	Layer: Colour	Non-Asbestos % Type	Asbestos % Type
24223 BS08	Lower Floor - Stairwell to Upper Floor	Filling Compound on Gypsum Board (Ceiling)	3: White	100% Non-Fibrous	None Detected
24223 BS09	Upper Floor - Northeast Living Room	Floor Construction Paper	1: Brown	98% Cellulose 2% Non-Fibrous	None Detected
24223 BS10	Upper Floor - Northeast Living Room	Paper Tape (at Floor Register)	1: Off-White	5% Cellulose 10% Non-Fibrous	**85% Chrysotile**
24223 BS11a	Upper Floor - Northeast Living Room	Paint Filling Compound Patch on Plaster (East Wall)	1: Beige 2: White	100% Non-Fibrous	None Detected
24223 BS11b	Upper Floor - Northeast Living Room	Paint Plaster (Outer Layer, East Wall)	3: Beige 4: White	100% Non-Fibrous	None Detected
24223 BS11c	Upper Floor - Northeast Living Room	Plaster (Inner Layer, East Wall)	5: Grey	100% Non-Fibrous	None Detected
24223 BS12	Upper Floor - Northeast Living Room	Paint Filling Compound on Gypsum Board (South Wall)	1: Beige 2: White	100% Non-Fibrous	None Detected
24223 BS13	Upper Floor - Northeast Living Room	Paint Trowel Applied Textured Coat (on Ceiling Plaster)	1: White 2: Grey	100% Non-Fibrous	None Detected
24223 BS14a	Upper Floor - Northeast Living Room	Ceiling Plaster (Outer Layer)	3: White	100% Non-Fibrous	None Detected
24223 BS14b	Upper Floor - Northeast Living Room	Ceiling Plaster (Inner Layer)	4: Grey	100% Non-Fibrous	None Detected
24223 BS15	Upper Floor - Northeast Living Room	Paint Trowel Applied Textured Coat (on Ceiling Plaster)	1: White 2: Grey	100% Non-Fibrous	None Detected
24223 BS16	Upper Floor - Northeast Living Room	Paint Trowel Applied Textured Coat (on Ceiling Plaster)	1: White 2: Grey	100% Non-Fibrous	None Detected
24223 BS17	Upper Floor - Northeast Living Room	Flooring Adhesive (at Fireplace Hearth)	1: White	100% Non-Fibrous	None Detected
24223 BS18	Upper Floor - Northeast Living Room	Sealant (in Exterior Metal-Framed Window)	1: Black	99% Non-Fibrous	**1% Chrysotile**
24223 BS19	Upper Floor - Northeast Living Room	Caulking (where Fireplace Hearth abuts Wall)	1: White & Off-White	100% Non-Fibrous	None Detected
24223 BS20	Upper Floor - Southeast Dining Room	Sheet Flooring Wear Surface	1: Brown & Tan	100% Non-Fibrous	None Detected
		Paper Backing	2: Grey	5% Cellulose 10% Non-Fibrous	**80% Chrysotile**
24223 BS21	Upper Floor - Southeast Dining Room	Paint Filling Compound on Gypsum Board (South Wall)	1: Beige 2: White	100% Non-Fibrous	None Detected

Sample	Location	Description	Layer: Colour	Non-Asbestos % Type	Asbestos % Type
24223 BS22	Upper Floor - Southeast Dining Room	Paint Filling Compound on Gypsum Board (West Wall)	1: Beige 2: White	100% Non-Fibrous	None Detected
24223 BS23	Upper Floor - Southeast Dining Room	Paint Spray Applied Texture Coat (Ceiling)	1: White 2: White	2% Cellulose 98% Non-Fibrous	None Detected
24223 BS24	Upper Floor - Southeast Dining Room	Sealant (in Exterior Metal-Framed Window)	1: Black	98% Non-Fibrous	**2% Chrysotile**
24223 BS25	Upper Floor - South Kitchen	Ceramic Floor Tile Grout	1: Beige	100% Non-Fibrous	None Detected
24223 BS26	Upper Floor - South Kitchen	Ceramic Floor Tile Mortar	1: Grey	100% Non-Fibrous	None Detected
24223 BS27	Upper Floor - South Kitchen	Ceramic Floor Tile Mortar	1: Grey	100% Non-Fibrous	None Detected
24223 BS27	Upper Floor - South Kitchen	Ceramic Floor Tile Mortar	1: Grey	100% Non-Fibrous	None Detected
24223 BS29	Upper Floor - South Kitchen	Floor Levelling Compound	1: Grey	100% Non-Fibrous	None Detected
24223 BS30	Upper Floor - South Kitchen	Floor Levelling Compound	1: Grey	100% Non-Fibrous	None Detected
24223 BS31	Upper Floor - South Kitchen	Floor Levelling Compound	1: Grey	100% Non-Fibrous	None Detected
24223 BS32	Upper Floor - South Kitchen	Floor Construction Paper	1: Dark Brown	98% Cellulose 2% Non-Fibrous	None Detected
24223 BS33a	Upper Floor - South Kitchen	Paint Plaster (Outer Layer, North Wall)	1: Off-White 2: White	100% Non-Fibrous	None Detected
24223 BS33b	Upper Floor - South Kitchen	Plaster (Inner Layer, North Wall)	3: Grey	1% Cellulose 99% Non-Fibrous	None Detected
24223 BS34	Upper Floor - South Kitchen	Ceramic Wall Tile Grout	1: Off-White	100% Non-Fibrous	None Detected
24223 BS35	Upper Floor - South Kitchen	Ceramic Wall Tile Adhesive	2: Beige	100% Non-Fibrous	None Detected
24223 BS36a	Upper Floor - South Kitchen	Paint Spray Applied Texture Coat (Ceiling)	1: White 2: White	1% Cellulose 99% Non-Fibrous	None Detected
24223 BS36b	Upper Floor - South Kitchen	Filling Compound on Gypsum Board (Ceiling)	3: White	100% Non-Fibrous	None Detected
24223 BS37	Upper Floor - South Kitchen	Coating (on underside of Metal Sink)	1: Off-White	100% Non-Fibrous	None Detected
24223 BS38	Upper Floor - South Kitchen	Sealant (in Window of Interior Wood Door)	1: Off-White	100% Non-Fibrous	None Detected
24223 BS39a	Upper Floor - Centre Hallway	Paint Plaster (Outer Layer, North Wall)	1: Beige 2: White	100% Non-Fibrous	None Detected

Sample	Location	Description	Layer: Colour	Non-Asbestos % Type	Asbestos % Type
24223 BS39b	Upper Floor - Centre Hallway	Plaster (Inner Layer, North Wall)	3: Grey	3% Cellulose 97% Non-Fibrous	None Detected
24223 BS40	Upper Floor - Centre Hallway	Paint Spray Applied Texture Coat (Ceiling)	1: White 2: White	1% Cellulose 99% Non-Fibrous	None Detected
24223 BS41	Upper Floor - South Bathroom	Ceramic Floor Tile Grout	1: Grey	100% Non-Fibrous	None Detected
24223 BS42	Upper Floor - South Bathroom	Ceramic Floor Tile Mortar and Paper Backing (Mixed)	2: Grey	99% Non-Fibrous	**1% Chrysotile**
24223 BS43	Upper Floor - South Bathroom	Sheet Flooring Wear Surface	3: Tan	100% Non-Fibrous	None Detected
		Paper Backing	4: Grey	5% Cellulose 10% Non-Fibrous	**80% Chrysotile**
24223 BS44	Upper Floor - South Bathroom	Sheet Flooring Wear Surface	5: Green	100% Non-Fibrous	None Detected
		Felt Backing	6: Black	65% Cellulose 5% Synthetic 30% Non-Fibrous	None Detected
24223 BS45	Upper Floor - South Bathroom	Ceramic Wall Tile Grout	1: Off-White	100% Non-Fibrous	None Detected
24223 BS46	Upper Floor - South Bathroom	Ceramic Wall Tile Adhesive	2: White	100% Non-Fibrous	None Detected
24223 BS47	Upper Floor - South Bathroom	Ceramic Wall Tile Grout	1: White	100% Non-Fibrous	None Detected
24223 BS48	Upper Floor - South Bathroom	Ceramic Wall Tile Adhesive	2: Off-White	100% Non-Fibrous	None Detected
24223 BS49a	Upper Floor - South Bathroom	Paint Plaster (Outer Layer, South Wall)	1: Grey 2: White	100% Non-Fibrous	None Detected
24223 BS49b	Upper Floor - South Bathroom	Plaster (Inner Layer, South Wall)	3: Grey	2% Cellulose 98% Non-Fibrous	None Detected
24223 BS50	Upper Floor - South Bathroom	Paint Filling Compound on Gypsum Board (West Wall)	1: Grey 2: White	100% Non-Fibrous	None Detected
24223 BS51a	Upper Floor - South Bathroom	Paint Plaster (Outer Layer, South Wall)	1: Off-White 2: White	100% Non-Fibrous	None Detected
24223 BS51b	Upper Floor - South Bathroom	Plaster (Inner Layer, South Wall)	3: Grey	100% Non-Fibrous	None Detected
24223 BS52a	Upper Floor - Southwest Bedroom	Paint Plaster (Outer Layer, South Wall)	1: Grey 2: White	100% Non-Fibrous	None Detected
24223 BS52b	Upper Floor - Southwest Bedroom	Plaster (Inner Layer, South Wall)	3: Grey	100% Non-Fibrous	None Detected

				Non-Asbestos	Asbestos
Sample	**Location**	**Description**	**Layer: Colour**	**% Type**	**% Type**
24223 BS53	Upper Floor - Southwest Bedroom	Paint Trowel Applied Textured Coat (on Ceiling Plaster)	1: White 2: White	3% Cellulose 97% Non-Fibrous	None Detected
24223 BS54	Upper Floor - Southwest Bedroom	Paint Trowel Applied Textured Coat (on Ceiling Plaster)	1: White 2: White	3% Cellulose 97% Non-Fibrous	None Detected
24223 BS55	Upper Floor - Southwest Bedroom	Paint Trowel Applied Textured Coat (on Ceiling Plaster)	1: White 2: White	3% Cellulose 97% Non-Fibrous	None Detected
24223 BS56	Upper Floor - Southwest Bedroom	Sealant (in Interior Metal-Framed Window)	1: Black	97% Non-Fibrous	**3% Chrysotile**
24223 BS57	Upper Floor - Northwest Master Bedroom	Floor Construction Paper	1: Brown	98% Cellulose 2% Non-Fibrous	None Detected
24223 BS58	Upper Floor - Northwest Master Bedroom	Paint Filling Compound on Gypsum Board (West Wall)	1: Grey 2: White	100% Non-Fibrous	None Detected
24223 BS59	Upper Floor - Northwest Master Bedroom	Acoustical Adhesive (on North Metal Stud behind Gypsum Board and Polyethylene Sheeting)	1: Black	98% Non-Fibrous	**2% Chrysotile**
24223 BS60	Upper Floor - Northwest Master Bedroom	Paint Spray Applied Texture Coat (Ceiling)	1: White 2: White	2% Cellulose 98% Non-Fibrous	None Detected
24223 BS61	Upper Floor - Northwest Master Bedroom	Filling Compound on Gypsum Board (West Wall)	3: White	1% Glass 99% Non-Fibrous	None Detected
24223 BS62	Upper Floor - Northwest Master Bedroom	Paint Spray Applied Texture Coat (Ceiling)	1: White 2: White	1% Cellulose 99% Non-Fibrous	None Detected
24223 BS63	Upper Floor - Northwest Master Bedroom	Paint Spray Applied Texture Coat (Ceiling)	1: White 2: White	1% Cellulose 99% Non-Fibrous	None Detected
24223 BS64	Upper Floor - Northwest Master Bedroom	Paint Spray Applied Texture Coat (Ceiling)	1: White 2: White	1% Cellulose 99% Non-Fibrous	None Detected
24223 BS65	Upper Floor - En Suite Bathroom	6" Ceramic Floor Tile Grout	1: Beige	100% Non-Fibrous	None Detected
24223 BS66	Upper Floor - En Suite Bathroom	6" Ceramic Floor Tile Mortar	2: Grey	2% Cellulose 98% Non-Fibrous	None Detected
24223 BS67	Upper Floor - En Suite Bathroom	6" Ceramic Floor Tile Mortar	2: Grey	2% Cellulose 98% Non-Fibrous	None Detected
24223 BS68	Upper Floor - En Suite Bathroom	6" Ceramic Floor Tile Mortar	2: Grey	2% Cellulose 98% Non-Fibrous	None Detected
24223 BS69	Upper Floor - En Suite Bathroom	Ceramic Wall Tile Grout	1: White	2% Cellulose 98% Non-Fibrous	None Detected
24223 BS70	Upper Floor - En Suite Bathroom	Ceramic Wall Tile Adhesive	2: Off-White	100% Non-Fibrous	None Detected

Sample	Location	Description	Layer: Colour	Non-Asbestos % Type	Asbestos % Type
24223 BS71	Upper Floor - En Suite Bathroom	Paint Filling Compound on Gypsum Board (West Wall)	1: Light Grey 2: White	100% Non-Fibrous	None Detected
24223 BS72	Upper Floor - En Suite Bathroom	Paint Filling Compound on Gypsum Board (Ceiling)	1: White 2: White	100% Non-Fibrous	None Detected
24223 BS73	Upper Floor - En Suite Bathroom	Sealant (in Widow of Interior Wood Door)	1: White	100% Non-Fibrous	None Detected
24223 BS74	Upper Floor - West Attic	Kraft-Faced Fibreglass Batt Insulation	1: Grey	98% Glass 2% Non-Fibrous	None Detected
		Insulation Adhesive	2: Black	2% Cellulose 2% Glass 96% Non-Fibrous	None Detected
		Insulation Paper	3: Brown	98% Cellulose 2% Non-Fibrous	None Detected
24223 BS75	Upper Floor - Laundry Room	Vinyl Deck Coating	1: Grey	60% Synthetic 40% Non-Fibrous	None Detected
24223 BS76	Upper Floor - Laundry Room	2' x 4' Ceiling Tile	1: Beige	98% Cellulose 2% Non-Fibrous	None Detected
24223 BS77	Upper Floor - Laundry Room	2' x 4' Ceiling Tile	1: Yellow	98% Glass 2% Non-Fibrous	None Detected
24223 BS78	Lower Floor - Stairwell to Upper Floor	Flooring Adhesive Residue	1: Brown	100% Non-Fibrous	None Detected
24223 BS79	Lower Floor - Stairwell Landing	9" Floor Tile	1: Beige	95% Non-Fibrous	**5% Chrysotile**
24223 BS80	Lower Floor - Stairwell Landing	9" Floor Tile Adhesive	2: Black	100% Non-Fibrous	None Detected
24223 BS81a	Lower Floor - Storage Beneath Stairs	Plaster (Outer Layer, East Wall)	1: White	100% Non-Fibrous	None Detected
24223 BS81b	Lower Floor - Storage Beneath Stairs	Plaster (Inner Layer, East Wall)	2: Grey	100% Non-Fibrous	None Detected
24223 BS82	Lower Floor - Northeast Living Room	Slate Tile Grout	1: Brown	100% Non-Fibrous	None Detected
24223 BS83	Lower Floor - Northeast Living Room	Brick Mortar (at Fireplace)	1: Grey	100% Non-Fibrous	None Detected
24223 BS84	Lower Floor - Northeast Living Room	Brick Mortar (at Fireplace)	1: Grey	100% Non-Fibrous	None Detected
24223 BS85	Lower Floor - Northeast Living Room	Brick Mortar (at Fireplace)	1: Grey	100% Non-Fibrous	None Detected
24223 BS86	Lower Floor - Northeast Living Room	12" Ceiling Tile	1: Beige	98% Cellulose 2% Non-Fibrous	None Detected
24223 BS87	Lower Floor - Northeast Living Room	12" Floor Tile	1: Brown	97% Non-Fibrous	**3% Chrysotile**
24223 BS88	Lower Floor - Northeast Living Room	Floor Tile Adhesive	2: Brown	100% Non-Fibrous	None Detected

Sample	Location	Description	Layer: Colour	Non-Asbestos % Type	Asbestos % Type
24223 BS89	Lower Floor - Northeast Living Room	12" Floor Tile	1: Beige	97% Non-Fibrous	**3% Chrysotile**
24223 BS90	Lower Floor - Northeast Living Room	Floor Tile Adhesive	2: Brown	100% Non-Fibrous	None Detected
24223 BS91	Lower Floor - Southeast Room	12" Ceiling Tile	1: Beige	98% Cellulose 2% Non-Fibrous	None Detected
24223 BS92	Lower Floor - Southeast Room	12" Ceiling Tile	1: Beige	98% Cellulose 2% Non-Fibrous	None Detected
24223 BS93	Lower Floor - Furnace Closet	12" Floor Tile	1: Grey	97% Non-Fibrous	**3% Chrysotile**
24223 BS94	Lower Floor - Furnace Closet	Floor Tile Adhesive	2: Black	100% Non-Fibrous	None Detected
24223 BS95	Lower Floor - Furnace Closet	Pipe Thread Compound (at Fitting of Natural Gas Piping)	1: Black	100% Non-Fibrous	None Detected
24223 BS96	Lower Floor - South Kitchen	Ceramic Floor Tile Grout	1: Cream	100% Non-Fibrous	None Detected
24223 BS97	Lower Floor - South Kitchen	Ceramic Floor Tile Mortar	2: Grey	100% Non-Fibrous	None Detected
24223 BS98	Lower Floor - South Kitchen	Sheet Flooring Wear Surface	3: Beige	100% Non-Fibrous	None Detected
		Paper Backing	4: Grey	10% Cellulose 20% Non-Fibrous	**70% Chrysotile**
24223 BS99	Lower Floor - South Kitchen	Flooring Adhesive Residue	5: Black	100% Non-Fibrous	None Detected
24223 BS100	Lower Floor - South Kitchen	Paint Filling Compound on Gypsum Board (South Wall)	1: White 2: White	100% Non-Fibrous	None Detected
24223 BS101	Lower Floor - South Kitchen	4" Ceramic Wall Tile Grout	1: White	100% Non-Fibrous	None Detected
24223 BS102	Lower Floor - South Kitchen	4" Ceramic Wall Tile Adhesive	2: Off-White	100% Non-Fibrous	None Detected
24223 BS103	Lower Floor - South Kitchen	Paint Filling Compound on Gypsum Board (Ceiling)	1: White 2: White	100% Non-Fibrous	None Detected
24223 BS104	Lower Floor - South Kitchen	Putty (in Window of Interior Wood Door)	1: Beige	100% Non-Fibrous	None Detected
24223 BS105	Lower Floor - South Kitchen	Putty (in Window of Interior Wood Door)	1: Beige	100% Non-Fibrous	None Detected
24223 BS106	Lower Floor - South Kitchen	Putty (in Window of Interior Wood Door)	1: Beige	100% Non-Fibrous	None Detected
24223 BS107	Lower Floor - West Bathroom	Adhesive (under Plastic Door Threshold)	1: Off-White	100% Non-Fibrous	None Detected
24223 BS108	Lower Floor - West Bathroom	Ceramic Wall Tile Grout	1: White	100% Non-Fibrous	None Detected

Sample	Location	Description	Layer: Colour	Non-Asbestos % Type	Asbestos % Type
24223 BS109	Lower Floor - West Bathroom	Ceramic Wall Tile Adhesive	2: Off-White	100% Non-Fibrous	None Detected
24223 BS110	Lower Floor - West Bathroom	Paint Filling Compound on Gypsum Board (South Wall)	1: White 2: White	100% Non-Fibrous	None Detected
24223 BS111	Lower Floor - West Storage Room Adjoining Bathroom	Paint Filling Compound on Gypsum Board (North Wall)	1: White 2: White	100% Non-Fibrous	None Detected
24223 BS112	Lower Floor - West Storage Room Adjoining Bathroom	Sheet Flooring Wear Surface	1: Brown	100% Non-Fibrous	None Detected
		Felt Backing	2: Black	70% Cellulose 10% Synthetic 20% Non-Fibrous	None Detected
24223 BS113	Lower Floor - Southwest Vestibule	Paint Spray Applied Texture Coat (Ceiling)	1: White 2: White	100% Non-Fibrous	None Detected
24223 BS114	Lower Floor - Northwest Garage	Paint Spray Applied Texture Coat (Ceiling)	1: White 2: White	100% Non-Fibrous	None Detected
24223 BS115	Lower Floor - Northwest Garage	Paint Spray Applied Texture Coat (Ceiling)	1: White 2: White	100% Non-Fibrous	None Detected
24223 BS116	Upper Floor - East Attic	Loose Fill Insulation	1: Grey	99% Glass 1% Non-Fibrous	None Detected
		Construction Paper	2: Beige	98% Cellulose 2% Non-Fibrous	None Detected
24223 BS117a	Exterior (North Wall)	Stucco (Outer Layer)	1: Pink	100% Non-Fibrous	None Detected
24223 BS117b	Exterior (North Wall)	Stucco (Inner Layer)	2: Grey	100% Non-Fibrous	None Detected
24223 BS118	Exterior (North Wall)	Wall Construction Paper	3: Brown	98% Cellulose 2% Non-Fibrous	None Detected
24223 BS119	Exterior (East Section)	Floor Construction Paper (on East Deck)	1: Brown	98% Cellulose 2% Non-Fibrous	None Detected
24223 BS120	Exterior (East Section)	Sealant (in Window of Exterior Wood Door)	1: White	100% Non-Fibrous	None Detected
24223 BS121a	Exterior (East Wall)	Stucco (Outer Layer)	1: Pink	100% Non-Fibrous	None Detected
24223 BS121b	Exterior (East Wall)	Stucco (Inner Layer)	2: Grey	100% Non-Fibrous	None Detected
24223 BS121c	Exterior (East Wall)	Wall Construction Paper	3: Brown	98% Cellulose 2% Non-Fibrous	None Detected
24223 BS122	Exterior (East Wall)	Caulking (where Deck abuts Chimney Wall)	1: Off-White	100% Non-Fibrous	None Detected
24223 BS123	Exterior - East Deck	Vinyl Deck Flooring	1: Beige	40% Synthetic 60% Non-Fibrous	None Detected

				Non-Asbestos	Asbestos
Sample	**Location**	**Description**	**Layer: Colour**	**% Type**	**% Type**
24223 BS124	Exterior - East Deck	Flooring Adhesive	2: Beige	100% Non-Fibrous	None Detected
24223 BS125a	Exterior (East Wall)	Stucco (Outer Layer)	1: Pink	100% Non-Fibrous	None Detected
24223 BS125b	Exterior (East Wall)	Stucco (Inner Layer)	2: Grey	100% Non-Fibrous	None Detected
24223 BS126	Exterior (East Section)	Pipe Thread Compound (at Fitting of Natural Gas Piping)	1: Grey	100% Non-Fibrous	None Detected
24223 BS127a	Exterior (South Wall)	Stucco (Outer Layer)	1: Pink	100% Non-Fibrous	None Detected
24223 BS127b	Exterior (South Wall)	Stucco (Inner Layer)	2: Grey	100% Non-Fibrous	None Detected
24223 BS128	Exterior (South Wall)	Wall Construction Paper	3: Brown	98% Cellulose 2% Non-Fibrous	None Detected
24223 BS129a	Exterior (West Wall, North Side)	Stucco (Outer Layer)	1: Pink	100% Non-Fibrous	None Detected
24223 BS129b	Exterior (West Wall, North Side)	Stucco (Inner Layer)	2: Grey	100% Non-Fibrous	None Detected
24223 BS130	Exterior (West Section)	Shingle Debris	1: Black	65% Cellulose 35% Non-Fibrous	None Detected
24223 BS131	Exterior (West Section)	Shingle Debris	1: Black	65% Glass 35% Non-Fibrous	None Detected
24223 BS132	Exterior (North Section)	Adhesive (beneath Concrete Paver at Walkway)	1: Beige	100% Non-Fibrous	None Detected
24223 BS133a	Exterior (West Wall, South Side)	Stucco (Outer Layer)	1: Pink	100% Non-Fibrous	None Detected
24223 BS133b	Exterior (West Wall, South Side)	Stucco (Inner Layer)	2: Grey	100% Non-Fibrous	None Detected
24223 BS134	Exterior - East Deck Canopy	Caulking (on Metal Flashing where Deck Rooftop abuts East Gutter)	1: Off-White	100% Non-Fibrous	None Detected
24223 BS135	Exterior - Main Rooftop	Roofing Shingle	1: Grey	65% Glass 35% Non-Fibrous	None Detected
24223 BS136	Exterior - Main Rooftop	Roofing Adhesive	2: Black	100% Non-Fibrous	None Detected
24223 BS137	Exterior - Main Rooftop	Roofing Paper	3: Black	98% Cellulose 2% Non-Fibrous	None Detected
24223 BS138	Exterior - Main Rooftop	Roofing Shingle	1: Grey	65% Glass 35% Non-Fibrous	None Detected
24223 BS139	Exterior - Main Rooftop	Roofing Adhesive	2: Black	100% Non-Fibrous	None Detected
24223 BS140	Exterior - Main Rooftop	Roofing Paper	3: Black	98% Cellulose 2% Non-Fibrous	None Detected
24223 BS141	Exterior - Main Rooftop	Rolled Roofing Membrane (South Section)	1: Grey	65% Synthetic 35% Non-Fibrous	None Detected
24223 BS142	Exterior - Main Rooftop	Rolled Roofing Mastic (South Section)	2: Black	100% Non-Fibrous	None Detected

Sample	Location	Description	Layer: Colour	Non-Asbestos % Type	Asbestos % Type
24223 BS143	Exterior - Main Rooftop	Roofing Paper (South Section)	3: Black	98% Cellulose 2% Non-Fibrous	None Detected
24223 BS144	Exterior - Main Rooftop	Mastic (on Metal Flashing at Centre Skylight)	1: Black	3% Cellulose 97% Non-Fibrous	None Detected
24223 BS145	Exterior - Main Rooftop	Mastic (on Metal Flashing at West Skylight)	1: Black	3% Cellulose 97% Non-Fibrous	None Detected
24223 BS146	Exterior - Main Rooftop	Caulking (on Joint of Centre Metal Exhaust) Vent)	1: Off-White	100% Non-Fibrous	None Detected
24223 BS147	Exterior - Main Rooftop	Caulking (on Joint of West PVC Roof Jack)	1: Off-White	100% Non-Fibrous	None Detected
24223 BS148	Exterior - Main Rooftop	Caulking (on Metal Gutter Joint)	1: Off-White	100% Non-Fibrous	None Detected
24223 BS149	Upper Floor - West Attic (Concealed Rooftop)	Roofing Shingle	1: Brown	65% Cellulose 35% Non-Fibrous	None Detected
24223 BS150	Upper Floor - West Attic (Concealed Rooftop)	Roofing Adhesive	2: Black	100% Non-Fibrous	None Detected
24223 BS151	Upper Floor - West Attic (Concealed Rooftop)	Roofing Shingle	3: Tan	65% Cellulose 35% Non-Fibrous	None Detected
24223 BS152	Upper Floor - West Attic (Concealed Rooftop)	Roofing Adhesive	4: Black	100% Non-Fibrous	None Detected
24223 BS153	Upper Floor - West Attic (Concealed Rooftop)	Roofing Shingle	5: Green	65% Cellulose 35% Non-Fibrous	None Detected
24223 BS154	Upper Floor - West Attic (Concealed Rooftop)	Roofing Adhesive	6: Black	100% Non-Fibrous	None Detected
24223 BS155a	Lower Floor - Northwest Garage	Stucco Debris (Outer Layer)	1: Pink	100% Non-Fibrous	None Detected
24223 BS155b	Lower Floor - Northwest Garage	Stucco Debris (Inner Layer)	2: Grey	100% Non-Fibrous	None Detected

Analyst(s): Lillian Fan, Jessica Young

Sample(s) Collected on May 31, 2021

Sample	Location	Description	Layer: Colour	Non-Asbestos % Type	Asbestos % Type
24223 BS156	Upper Floor - Northeast Living Room	Paint Filling Compound Patch on Plaster (North Wall)	1: Beige 2: White	100% Non-Fibrous	None Detected
24223 BS157	Upper Floor - South Bathroom	Paint Filling Compound Patch on Plaster (West Wall)	1: Grey 2: White	100% Non-Fibrous	None Detected
24223 BS158	Upper Floor -Southwest Bedroom	Paint Filling Compound Patch on Plaster (West Wall)	1: Yellow 2: White	100% Non-Fibrous	None Detected

Sample	Location	Description	Layer: Colour	Non-Asbestos % Type	Asbestos % Type
24223 BS159	Upper Floor - Northwest Master Bedroom	Paint Filling Compound Patch on Plaster (East Wall)	1: Grey 2: White	100% Non-Fibrous	None Detected
24223 BS160	Lower Floor - Stairwell Landing	Filling Compound Patch on Plaster (North Wall)	1: White	100% Non-Fibrous	None Detected
24223 BS161a	Lower Floor - Stairwell Landing	Paint Plaster (Outer Layer, South Wall)	1: Pink 2: White	100% Non-Fibrous	None Detected
24223 BS161b	Lower Floor - Stairwell Landing	Plaster (Inner Layer, South Wall)	3: Grey	100% Non-Fibrous	None Detected
24223 BS162	Lower Floor - South Kitchen	Paint Filling Compound on Gypsum Board (North Wall)	1: White 2: White	100% Non-Fibrous	None Detected
24223 BS163	Exterior (North Section)	Coating (on Concrete Step)	1: Brown	100% Non-Fibrous	None Detected

Analyst(s): Jessica Young

Sample(s) Collected on June 1, 2021

Sample	Location	Description	Layer: Colour	Non-Asbestos % Type	Asbestos % Type
24223 BS164	Exterior (North Section)	Coating (on Concrete Step)	1: Brown	100% Non-Fibrous	None Detected
24223 BS165	Exterior (North Section)	Coating (on Concrete Step)	1: Brown	100% Non-Fibrous	None Detected
24223 BS166	Exterior (West Section)	Roofing Shingle (on Ground)	1: Black	65% Cellulose 35% Non-Fibrous	None Detected
24223 BS167	Exterior (West Section)	Roofing Shingle (on Ground)	2: Black	65% Cellulose 35% Non-Fibrous	None Detected
24223 BS168	Exterior (East Section)	Chimney Brick Mortar (behind Stucco on Upper Floor Elevation)	1: Grey	100% Non-Fibrous	None Detected
24223 BS169	Exterior (East Section)	Chimney Brick Mortar (behind Stucco on Upper Floor Elevation)	1: Grey	100% Non-Fibrous	None Detected
24223 BS170	Exterior (East Section)	Chimney Brick Mortar (behind Stucco on Upper Floor Elevation)	1: Grey	100% Non-Fibrous	None Detected
24223 BS171a	Exterior - Main Rooftop	Stucco (Outer Layer, on Brick Chimney)	1: Pink	100% Non-Fibrous	None Detected
24223 BS171b	Exterior - Main Rooftop	Stucco (Inner Layer, on Brick Chimney)	2: Grey	100% Non-Fibrous	None Detected
24223 BS172	Exterior - Main Rooftop	Mastic (on Metal Chimney Flashing)	1: Black	95% Non-Fibrous	**5% Chrysotile**

				Non-Asbestos	Asbestos
Sample	**Location**	**Description**	**Layer: Colour**	**% Type**	**% Type**
24223 BS173	Exterior - Main Rooftop	Mastic (on Metal Chimney Flashing)	1: Black		Analysis Not Required - See Sample BS172
24223 BS174	Exterior - Main Rooftop	Mastic (on Metal Chimney Flashing)	1: Black		Analysis Not Required - See Sample BS172
24223 BS175	Exterior - Main Rooftop	Chimney Brick Mortar	1: Grey	100% Non-Fibrous	None Detected
24223 BS176	Exterior - Main Rooftop	Chimney Brick Mortar	1: Grey	100% Non-Fibrous	None Detected
24223 BS177	Exterior - Main Rooftop	Chimney Brick Mortar	1: Grey	100% Non-Fibrous	None Detected
24223 BS178	Exterior - East Deck Canopy	Sealant (in Glass Panel)	1: Black	1% Cellulose 99% Non-Fibrous	None Detected

Analyst(s): Lillian Fan, Jessica Young

AIHA PAT Programs LLC

American Industrial Hygiene Association (AIHA) Bulk Asbestos Proficiency Analytical Testing (BAPAT)
Astech Consultants Ltd. Laboratory Participant ID# 200542

LEAD BULK SAMPLE REPORT

Date: June 4, 2021

Client: **CITY OF COQUITLAM**

Location: **Residential Dwelling**
500 Jefferson Avenue
Coquitlam, BC

Comments:
1) The Workers' Compensation Board of British Columbia (WCB) no longer allows reference to Health Canada's definition of a lead-containing surface coating material.
2) WCB does not define a safe level for a lead-containing surface coating material.
3) Analyzed by X-Ray Fluorescence with direct read in parts per million (PPM).
4) Sample results report lead only.
5) < means less than, > means more than.

Sample(s) Analyzed on May 31, 2021

Sample	Location	Description	Colour	Lead PPM
24223 LS01	Lower Floor - Front Entrance Landing	Paint (on Wood Stair)	White	**54 PPM**
24223 LS02	Lower Floor - Front Entrance Landing	Paint (on Exterior Metal Clad Wood Door)	White	**1,929 PPM**
24223 LS03	Upper Floor - Centre Hallway	Paint (on Northeast Plaster Wall)	Beige	**158 PPM**
24223 LS04	Upper Floor - Centre Hallway	Paint (on Northeast Gypsum Board Wall)	Beige	**< 7 PPM**
24223 LS05	Lower Floor - Front Entrance Landing	Glazing Finish (on Ceramic Floor Tile)	Light Grey	**11,000 PPM**
24223 LS06	Upper Floor - Northeast Living Room	Paint (on Textured Ceiling Plaster)	White	**12 PPM**
24223 LS07	Upper Floor - South Kitchen	Glazing Finish (on Ceramic Floor Tile)	Off-White	**2,018 PPM**
24223 LS08	Upper Floor - South Kitchen	Glazing Finish (on Ceramic Wall Tile)	Light Beige	**1,993 PPM**
24223 LS09	Upper Floor - Centre Hallway	Paint (on Gypsum Board Ceiling)	White	**17 PPM**
24223 LS10	Upper Floor - Centre Hallway	Paint (on North Wood Door Trim)	White	**229 PPM**
24223 LS11	Upper Floor - Centre Hallway	Paint (on West Wood Door Trim)	Dark Purple	**196 PPM**
24223 LS12	Upper Floor - North Bedroom	Paint (on South Plaster Wall)	Light Blue	**214 PPM**

#101-Bldg.C-17802-66th Avenue
Cloverdale, BC, Canada V3S 7X1
Tel:604-575-1122 Fax:604-575-1152

Sample	Location	Description	Colour	Lead PPM
24223 LS13	Upper Floor - North Bedroom	Paint (on South Wood Door Frame)	Cream	**196 PPM**
24223 LS14	Upper Floor - North Bedroom	Paint (on South Wood Door Trim)	Dark Blue	**110 PPM**
24223 LS15	Upper Floor - Northwest Master Bedroom	Paint (on East Plaster Wall)	Light Purple	**19 PPM**
24223 LS16	Upper Floor - Northwest Master Bedroom	Paint (on North Gypsum Board Wall)	Light Purple	**< 7 PPM**
24223 LS17	Upper Floor - Northwest Master Bedroom	Paint (on West Gypsum Board Wall)	Dark Purple	**10 PPM**
24223 LS18	Upper Floor - South Laundry Room (former exterior south deck)	Paint (on South Stucco Wall)	Pink	**9 PPM**
24223 LS19	Upper Floor - South Bathroom	Paint (on South Plaster Wall)	Grey	**633 PPM**
24223 LS20	Upper Floor - South Bathroom	Glazing Finish (on Ceramic Wall Tile)	Beige	**15,800 PPM**
24223 LS21	Lower Floor - Stairwell Landing	Paint (on South Plaster Wall)	Light Beige	**185 PPM**
24223 LS22	Lower Floor - Northeast Living Room	Paint (on East Wood Wall Panel)	White	**492 PPM**
24223 LS23	Lower Floor - Furnace Closet (within South Kitchen)	Paint (on North Wood Stud)	Pink	**570 PPM**
24223 LS24	Lower Floor - South Kitchen	Glazing Finish (on Ceramic Wall Tile)	White	**178 PPM**
24223 LS25	Lower Floor - West Bathroom	Glazing Finish (on Ceramic Wall Tile)	White	**5,955 PPM**
24223 LS26	Exterior (North Wall)	Paint (on Stucco Wall)	Pink	**10 PPM**
24223 LS27	Exterior (North Wall)	Paint (on Wood Door Trim)	White	**< 6 PPM**
24223 LS28	Exterior (North Section)	Coating (on Concrete Step)	Dark Brown	**< 6 PPM**
24223 LS29	Exterior (North Section)	Paint (on Metal Railing)	White	**29 PPM**
24223 LS30	Exterior (North Section)	Paint (on Wood Stair)	Grey	**< 6 PPM**

Analyst(s): Scott Price

Natural Resources Canada Ressources naturelles Canada Canada

Certified to ISO:20807; and Health Canada's and Natural Resources Canada's requirements for compliance with Health Canada Safety Code 32&34

LEACHATE LEAD SAMPLE REPORT

Date: June 4, 2021

Client: **CITY OF COQUITLAM**

Location: **Residential Dwelling**
500 Jefferson Avenue
Coquitlam, BC

Comments:
1) Samples were analyzed in accordance with EPA Analytical Methods 6020A & 1311.
2) Sample results report leachate lead only.
3) Reportable Detection Limit is 0.25 mg/L.
4) Ministry of Environment defines lead leachate hazardous waste level as 5.0 mg/L or greater.
5) Samples will be disposed of after 30 days, unless the client requests otherwise.

Sample(s) Collected on May 31, 2021

Sample	Location	Description	Colour	Lead Leachate mg/L
24223 LLS01 (LS03)	Upper Floor - Centre Hallway	Paint (on Northeast Plaster Wall)	Beige	<0.25 mg/L
24223 LLS02 (LS10)	Upper Floor - Centre Hallway	Paint (on North Wood Door Trim)	White	<0.25 mg/L
24223 LLS03 (LS11)	Upper Floor - Centre Hallway	Paint (on West Wood Door Trim)	Dark Purple	0.30 mg/L
24223 LLS04 (LS12)	Upper Floor - North Bedroom	Paint (on South Plaster Wall)	Light Blue	<0.25 mg/L
24223 LLS05 (LS13)	Upper Floor - North Bedroom	Paint (on South Wood Door Frame)	Cream	0.26 mg/L
24223 LLS06 (LS14)	Upper Floor - North Bedroom	Paint (on South Wood Door Trim)	Dark Blue	<0.25 mg/L
24223 LLS07 (LS19)	Upper Floor - South Bathroom	Paint (on South Plaster Wall)	Grey	<0.25 mg/L
24223 LLS08 (LS21)	Lower Floor - Stairwell Landing	Paint (on South Plaster Wall)	Light Beige	<0.25 mg/L
24223 LLS09 (LS22)	Lower Floor - Northeast Living Room	Paint (on East Wood Wall Panel)	White	<0.25 mg/L
24223 LLS10 (LS23)	Lower Floor - Furnace Closet (within South Kitchen)	Paint (on North Wood Stud)	Pink	<0.25 mg/L

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June 4, 2021

CITY OF COQUITLAM
Finance, Lands & Police
3000 Guildford Way
Coquitlam, BC V3B 7N2

Attention: Mr. Sandeep Minhas, BA, RI
Property Negotiator

Ref: CONTRACTOR VERSION - PRE-PROJECT HAZARDOUS BUILDING MATERIALS SURVEY FOR THE PLANNED DEMOLITION OF THE RESIDENTIAL DWELLING AND OUT-BUILDING LOCATED AT 504 JEFFERSON AVENUE, COQUITLAM, BC

1.0 INTRODUCTION

Astech Consultants Ltd. (Astech) was retained by the City of Coquitlam to conduct a Pre-Project Hazardous Building Materials Survey and compile a detailed report on the presence and location of asbestos containing building materials, lead, polychlorinated biphenyls (PCBs), mercury, stored chemicals, and silica to be impacted by the planned demolition of the Residential Dwelling and Out-Building located at 504 Jefferson Avenue, Coquitlam, BC.

Astech's survey and report format is designed specifically to satisfy the current applicable regulation from the Workers' Compensation Board of British Columbia (WCB) Occupational Health and Safety Regulation 20.112 regarding hazardous building material assessments by a Qualified Person for buildings and structures.

This survey was conducted on May 7, 31, and June 1, 2021 by Scott Price assisted by Jesse James and Brian Tang of Astech. It must be emphasized that this survey was concerned exclusively with the subject buildings. The site survey was destructive in nature and thorough in investigating layered floor, wall, and ceiling systems. However, inaccessible areas which would require the actual dismantling of substantial portions of the buildings in order to gain access were not investigated. No attempt was made to investigate underground services or the surrounding property. Therefore, if during work activities, other hazardous materials, asbestos containing materials, or potential asbestos containing materials not included in this report are discovered, work should immediately cease in the affected area. At that time, Astech should be contacted so that they can initiate immediate appropriate action so that there are no undue delays.

2.0 BUILDING DESCRIPTION

The subject buildings on site are described as:

- a two-storey residential dwelling with attached garage and faced with stucco and wood siding. According to BC Assessment, the building was originally constructed in 1961. The building has had a few renovations and additions over the years. The building is heated by a forced air natural gas

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furnace and ductwork. At the time of survey, the interior and exterior of the building were in fair condition.
- a detached northwest wood shed. At the time of survey, the interior and exterior of the building were in fair condition.

3.0 METHODOLOGY

3.1 ASBESTOS CONTAINING MATERIALS

A visual inspection was undertaken in order to determine the type, location, and homogeneous nature of asbestos and potential asbestos containing building materials located at the subject buildings. During this inspection, one hundred fifty-five (155) bulk samples of potential asbestos containing materials were collected from specific locations of the buildings, however, four (4) bulk samples did not require analysis. The number of samples collected during this survey are in accordance with the guidelines established by the WCB in their 2020 publication Safe Work Practices for Handling Asbestos, and as indicated by actual site conditions. The samples collected were submitted for analysis at our in-house laboratory in accordance with the WCB Occupational Health and Safety Regulation, utilizing polarized light microscopy, and dispersion staining techniques. Results of laboratory analysis of the samples collected during this survey are attached.

3.2 LEAD FINISHES

A visual inspection was undertaken in order to determine the type and location of paints, primers, coatings, and/or glazing finishes suspected of containing lead at the subject buildings. During this inspection, twenty-four (24) potential lead finishes were analyzed from specific locations of the buildings. The finishes were analyzed in accordance with US EPA methods and the requirements of the WCB Occupational Health and Safety Regulation. Results of the finishes analyzed during this survey are attached.

During this inspection, seven (7) bulk samples of intact lead containing paint on wood and cementitious substrates were collected from the subject buildings. The bulk samples were submitted for Toxicity Characteristic Leachate Procedure for lead (TCLP lead) laboratory analysis in accordance with US EPA methods and the requirements of the WCB Occupational Health and Safety Regulation. Results of laboratory analysis of the samples collected during this survey are attached.

3.3 LEAD CONSTRUCTION MATERIALS, SOLID PCBs, MERCURY, STORED CHEMICALS, AND SILICA

A visual inspection was undertaken at the subject buildings in order to determine the presence of:

- construction materials suspected of containing lead and other heavy metals,
- fluorescent and high intensity discharge (HID) light fixtures suspected of containing PCB ballasts or capacitors,
- thermostats, light tubes/bulbs, and associated equipment suspected of containing mercury,
- stored chemicals suspected of being toxic, flammable, or explosive, and
- building materials suspected of containing silica in crystalline and non-crystalline forms.

4.0 INSPECTION RESULTS

4.1 ASBESTOS CONTAINING MATERIALS

GENERAL NOTES - DWELLING

#1 Plaster and Affected Gypsum Board Lath: Although the analytical results for some of the plaster samples indicate non-asbestos results because of its non-homogeneous nature, site investigation and laboratory analysis of other representative samples have determined that as listed below, there is **asbestos** containing plaster on gypsum board lath (some concealed behind gypsum board with non-asbestos filling compound).

As well, some of the **asbestos** containing plaster is concealed behind and/or abutting wood, gypsum board, ceramic tiles, laminate, texture coats, grout, adhesive, and other building materials that are contaminated with the **asbestos** containing plaster. There is also **asbestos** containing plaster and residue on and within electrical junction boxes and other building materials where plaster is located.

Additionally, there is **asbestos** containing plaster residue on floors (concealed beneath carpet, floor tiles, ceramic tiles, and other flooring materials, plumbing fixtures, millwork, and other building materials).

#2 Filling Compound and Affected Gypsum Board: Although the analytical results for some of the gypsum board filling compound samples indicate non-asbestos results because of renovations conducted in the 1980s or later, site investigation and laboratory analysis of other representative samples have determined that as listed below, there is **asbestos** containing filling compound on older gypsum board (installed between approximately 1964 and 1979), or there is newer gypsum board with non-asbestos filling compound fastened directly to or abutting the older gypsum board with **asbestos** containing filling compound (some multi-layered and some concealed behind wood and other building materials).

As well, some of the **asbestos** containing filling compound and affected gypsum board are concealed behind and/or abutting wood, ceramic tiles, laminate, texture coats, grout, adhesive, and other building materials that are contaminated with the **asbestos** containing filling compound. There is also **asbestos** containing filling compound and **asbestos** containing filling compound residue on and within electrical junction boxes and other building materials where finished gypsum board is located.

Additionally, there is **asbestos** containing filling compound residue on floors (concealed beneath carpet, floor tiles, ceramic tiles, and other flooring materials, plumbing fixtures, millwork, and other building materials).

#3 Potential Asbestos Containing Building Materials: The potential **asbestos** containing building materials listed below must be considered **asbestos** containing until laboratory results determine otherwise. In order to test the materials destructive testing may be required.

The visual inspection and/or analytical results determined that asbestos containing materials and/or potential asbestos containing materials are located at the following specific locations:

DWELLING - LOWER FLOOR

Stairwell to Upper Floor including Front Entrance Landing, and
Stairwell Landing
- **Asbestos** containing plaster (see General Note #1 above).
- **Asbestos** containing filling compound on gypsum board (see General Note #2 above).

South Kitchen including Small Centre Hallway
- **Asbestos** containing floor tiles (concealed beneath a layer of non-asbestos floor tiles, non-asbestos floor tile adhesive, and other building materials).
- **Asbestos** containing filling compound on gypsum board (see General Note #2 above).

Utility Closet (within South Kitchen)
- **Asbestos** containing paper and/or paper tape on ductwork.
- **Asbestos** containing paper insulation lining interior of metal exhaust vents to rooftop.

East Living Room
- **Asbestos** containing floor tiles (concealed beneath a layer of carpet and other building materials).
- **Asbestos** containing filling compound on gypsum board (see General Note #2 above).

North Bedroom including Closet,
South Bathroom, and
Northwest Bedroom including Closet
- **Asbestos** containing filling compound on gypsum board (see General Note #2 above).

Southwest Laundry Room, and
West Entrance Hallway
- **Asbestos** containing filling compound on gypsum board (see General Note #2 above).
- **Asbestos** containing stucco (some concealed behind wood and other construction materials, and some on adjoining building materials).

Wall Cavities
- **Asbestos** containing floor tiles (concealed beneath some newer partition walls).
- **Asbestos** containing paper and/or paper tape on ductwork, wood, registers, and debris.

Ceiling Spaces
- **Asbestos** containing paper and/or paper tape on ductwork, wood, registers, and debris.
- **Asbestos** containing paper insulation lining interior of metal exhaust vents to rooftop.

DWELLING - UPPER FLOOR

Northeast Living Room,
Centre Hallway including Closets,
North Bedroom including Closet,
Northwest Bedroom including Closet, and
Southwest Bedroom including Closet
- **Asbestos** containing plaster (see General Note #1 above).

East Dining Area
- **Asbestos** containing plaster (see General Note #1 above).
- **Asbestos** containing filling compound on gypsum board (see General Note #2 above).
- **Asbestos** containing putty on former exterior metal-framed window (some concealed).

South Kitchen
- **Asbestos** containing floor tiles (concealed beneath a layer of **asbestos** containing paper backed sheet flooring and other building materials).
- **Asbestos** containing paper backed sheet flooring (within cabinetry).
- **Asbestos** containing plaster (see General Note #1 above).
- **Asbestos** containing filling compound on gypsum board (see General Note #2 above).
- **Asbestos** containing putty in window of former exterior wood door (mostly concealed).
- **Asbestos** containing putty on former exterior metal-framed window (some concealed).
- **Asbestos** containing coating on underside of metal sink.

South Covered Deck
- **Asbestos** containing stucco (some concealed behind wood and other construction materials, and some on adjoining building materials).

South Bathroom
- **Asbestos** containing paper backed sheet floorings and paper backing residue (concealed beneath a layer of non-asbestos floor tiles and other building materials).
- **Asbestos** containing plaster (see General Note #1 above).

Floor Cavities
- **Asbestos** containing paper and/or paper tape on ductwork, wood, registers, and debris.
- **Asbestos** containing paper insulation lining interior of metal exhaust vents to rooftop.

Wall Cavities
- **Asbestos** loose fill vermiculite insulation debris and **asbestos** contaminated fibreglass and/or rock wool insulations, back of gypsum board lath, gypsum board walls, and other building materials.
- **Asbestos** containing paper insulation lining interior of metal exhaust vents to rooftop.

Ceiling Spaces
- **Asbestos** loose fill vermiculite insulation debris and **asbestos** contaminated fibreglass and/or rock wool insulations, back of gypsum board lath, and other building materials.
- **Asbestos** containing paper insulation lining interior of metal exhaust vents to rooftop.

Attic
- **Asbestos** loose fill vermiculite insulation and **asbestos** contaminated fibreglass and/or rock wool insulations, back of gypsum board lath, and other building materials.

DWELLING - EXTERIOR

Walls and Soffits
- **Asbestos** containing stucco walls and soffits (some concealed behind wood and other construction materials, and some on adjoining building materials).
- **Asbestos** loose fill vermiculite insulation debris within soffits (concealed).
- **Asbestos** containing caulking at east wall electrical cable penetration (some concealed and some on adjoining building materials).

Doors and Windows
- **Asbestos** containing putty on exterior metal-framed windows (some concealed).
- Potential **asbestos** containing sealants/putties in exterior vinyl and wood-framed windows (see General Note #3 above).

Main Rooftop
- Potential **asbestos** containing caulking at metal electrical pole (see General Note #3 above).

West Attached Garage Rooftop
- No asbestos materials observed.

DETACHED NORTHWEST WOOD SHED

Interior and Exterior including Rooftop
- No asbestos materials observed.

4.2 LEAD

The visual inspection and/or laboratory analytical results determined the following at the subject buildings (some of which is in a deteriorated condition and flaking):

Dwelling - Interior
- grey glazing finish containing more than 100,000 parts per million (PPM) of **lead** was used on ceramic tiles,
- light brown glazing finish containing 3,080 PPM of **lead** was used on ceramic tiles,
- non-leachable green paint containing 1,626 PPM of **lead** was used on concrete foundation,
- non-leachable grey paint containing 1,582 PPM of **lead** was used on wood trim in Attached Garage,
- non-leachable green paint containing 1,278 PPM of **lead** was used on wood trim in Attached Garage,
- beige paint containing 408 PPM of **lead** was used on plaster surfaces,
- white paint containing 342 PPM of **lead** was used on plaster surfaces,
- light grey paint containing 320 PPM of **lead** was used on plaster surfaces,
- non-leachable white paint containing 202 PPM of **lead** was used on wood surfaces,
- non-leachable grey paint containing 125 PPM of **lead** was used on concrete surfaces,
- white paint containing 15 PPM of **lead** was used on fireplace brick,
- grey paint containing 12 PPM of **lead** was used on wood fireplace trim,
- white paint containing 10 PPM of **lead** was used on gypsum board surfaces,
- beige paint containing 10 PPM of **lead** was used on gypsum board surfaces,
- grey paint containing 10 PPM of **lead** was used on gypsum board surfaces,
- beige paint containing less than 6 PPM of **lead** was used on wood wall panels, and
- there may be cast iron drain pipes with a **lead** packing material at the connection bells and there may be **lead** sleeves at the toilets.

Dwelling - Exterior
- non-leachable white paint containing 809 PPM of **lead** was used on wood surfaces,
- non-leachable dark brown paint containing 517 PPM of **lead** was used on wood surfaces,
- white paint containing 347 PPM of **lead** was used on stucco surfaces,
- white paint containing 48 PPM of **lead** was used on exterior metal clad wood doors,
- dark brown paint containing 20 PPM of **lead** was used concrete foundation, and
- there are **lead** roof vents and caps located on the Main Rooftop.

Detached Northwest Shed - Exterior
- grey paint containing 7 PPM of **lead** was used on wood siding, and
- white paint containing 7 PPM of **lead** was used on wood trim.

4.3 PCBs

The visual inspection determined that there are no fluorescent or HID light fixtures at the subject buildings suspected of having PCB containing ballasts or capacitors.

4.4 MERCURY

The visual inspection determined that there is one (1) wall mounted thermostat at the Dwelling that contains mercury. Also, there are a few fluorescent light bulbs at the Dwelling that contain mercury.

4.5 STORED CHEMICALS AND OTHER HAZARDOUS MATERIALS

The following list of materials were present in and around the subject buildings at time of inspection:

- several containers of paint, cleaners, petroleum products, and garden chemicals,
- a few lawnmowers bearing petroleum products,
- compressors and piping with suspect ozone depleting substances (CFC's) in three refrigerators,
- smoke detector(s) with a radioactive component within,
- a few areas with animal droppings,
- a few areas with visible mould on windows, wood, and other building materials, and
- piping containing natural gas leading to heating equipment.

4.6 SILICA

All concrete, cement, brick, ceramic tile, gypsum board, plaster, stucco, grout, mortar, and any other cementitious building materials located at the subject buildings are suspected of containing silica in crystalline and non-crystalline forms.

4.7 GYPSUM BOARD

The visual inspection and/or laboratory analytical results determined the following at the subject buildings:

- there is gypsum board lath behind **asbestos** containing plaster located throughout the Dwelling (see Section 4.1 including General Note #1 above), and therefore would be disposed of as mixed asbestos and gypsum waste, and
- there is **asbestos** containing filling compound on gypsum board located in several areas of the Dwelling (see Section 4.1 including General Note #2 above), and therefore would be disposed of as mixed asbestos and gypsum waste.

5.0 RECOMMENDATIONS

5.1 ASBESTOS CONTAINING MATERIALS

Prior to demolition of a building, the asbestos containing materials (or assumed asbestos containing materials) must first be removed and disposed of as asbestos waste by a qualified hazardous materials abatement contractor in accordance with the WCB Occupational Health and Safety Regulation. Disposal

of asbestos containing materials must be performed in accordance with the BC Ministry of Environment and Climate Change Strategy - *Environmental Management Act* - Hazardous Waste Regulation.

5.2 LEAD

Paints/Primers
Where lead (or potential lead) based paints and/or primers are affected by a project, the work must be performed by a qualified contractor in accordance with the WCB Occupational Health and Safety Regulation and their 2020 publication entitled Safe Work Practices For Handling Lead.

Where the base substrate material is to be removed in conjunction with lead paint removal, the base substrate and lead based paints and/or primers should be removed intact by the contractor, in accordance with the contractor's risk assessment and site specific work procedures. The workers conducting the work and workers in close proximity to the work being performed, should be protected with personal protective equipment as determined by the contractor's risk assessment and site specific work procedures.

Lead containing paints which remain attached to wood and/or other building materials must be labelled as lead based paints (LBP) for transporting to a licensed/approved disposal site or recycling facility. A licensed/approved facility receiving the waste must be informed of the lead content of these materials and be agreeable to receiving these materials. Prior to acceptance of waste with lead paints at a licensed/ approved disposal facility, the contractor generating the waste must ensure that all waste materials containing LBP's are sampled intact, fastened directly to the base substrate, and representative of the waste stream created by demolition. Astech has submitted seven (7) samples for analysis utilizing a Toxicity Characteristic Leachate Procedure for lead (TCLP lead) test to determine the potential for soil and/or groundwater contamination. The contractor shall have any additional samples analyzed utilizing a TCLP lead test to determine the potential for soil and/or groundwater contamination, if deemed necessary by the site receiving the waste.

If the lead paints are to be separated or removed from the building materials by means of sanding, scraping, abrading, blasting, etc., more stringent work procedures would apply. The removed lead paints, depending on lead concentrations and leachate results, may become a Hazardous Waste and therefore must be disposed of in accordance with the BC Ministry of Environment and Climate Change Strategy - *Environmental Management Act* - Hazardous Waste Regulation.

Glazing Finishes
Where ceramic tiles with lead (or potential lead) glazing finishes are to be removed, the ceramic tile and glazing finish should be removed intact. The workers conducting the work and workers in close proximity to the work being performed, should be protected with personal protective equipment as determined by the removal contractor's risk assessment and site specific work procedures. Ceramic tiles and glazing finishes that are removed intact may be disposed of as normal construction waste.

If the lead glazing finishes are to be separated or removed from the ceramic tiles by means of sanding, scraping, abrading, blasting, etc., more stringent work procedures by a qualified abatement contractor would apply in order to satisfy the WCB Occupational Health and Safety Regulation and their 2020 publication entitled Safe Work Practices For Handling Lead.

Lead Construction Materials
Prior to demolition of a building, the lead in bells of drain pipe, lead sleeves at toilets, and lead roof jacks must first be removed, and be recycled or disposed of in accordance with the BC Ministry of Environment and Climate Change Strategy - *Environmental Management Act* - Hazardous Waste Regulation.

5.3 MERCURY

Prior to demolition of a building, the mercury containing thermostats and light bulbs must first be removed, and be salvaged, recycled or disposed of, in accordance with the BC Ministry of Environment and Climate Change Strategy - *Environmental Management Act* - Hazardous Waste Regulation.

5.4 STORED CHEMICALS AND OTHER HAZARDOUS MATERIALS

Stored Chemicals
Prior to demolition of a building, stored chemicals, ozone depleting substances within refrigeration equipment, and radioactive equipment must first be removed, and be recycled or disposed of, in accordance with the BC Ministry of Environment and Climate Change Strategy - *Environmental Management Act* - Hazardous Waste Regulation.

Animal Droppings
Animal droppings which can cause infectious disease and/or respiratory disease in humans should be removed as biohazardous waste by a qualified abatement contractor in accordance with the WCB Occupational Health and Safety Regulation, prior to unprotected trades performing work in or conducting selective demolition of a building. In lieu of removing droppings, workers shall wear respirators and protective clothing while in contaminated areas of a building, and while conducting selective demolition of a building.

Mould
The differing types of moulds and/or fungi which can cause infectious disease and/or respiratory disease in humans should be removed as biohazardous waste by a qualified abatement contractor in accordance with the WCB Occupational Health and Safety Regulation, prior to unprotected trades performing work in affected areas of a building. In lieu of removing moulds and fungi, workers shall wear respirators and protective clothing while in contaminated areas of a building.

Prior to the demolition of a building, mould which is attached to building materials such as wood, metal and concrete may be disposed of in a manner applicable to normal demolition waste. Workers conducting selective demolition of a building shall wear respirators and protective clothing while in contaminated areas of a building.

Natural Gas
The natural gas must be shut off and purged by Fortis BC or a qualified trades person prior to work that would affect the gas, and prior to building demolition.

5.5 SILICA

Where cementitious building materials that are suspected of containing silica in crystalline form are directly impacted by the project (i.e. drilling, cutting, abrading, etc.), the work should be performed in a controlled manner to avoid the release of crystalline silica dust. Cutting, drilling, or otherwise disturbing these building materials must be performed by a qualified contractor's trained personnel in accordance with the WCB Occupational Health and Safety Regulation.

6.0 OWNER'S AND ABATEMENT CONTRACTOR'S RESPONSIBILITIES

Owner's Responsibilities
For the remediation of hazardous building materials, contract specifications, quality control, and final acceptance of the work remain the responsibility of the Owner. In order to ensure that the Owner has acted in a responsible manner, and to ensure regulatory board compliance, it is recommended that the work and project air monitoring be performed by a qualified and properly insured (with proof of necessary asbestos inclusion rider) Hazardous Materials Abatement Contractor.

Abatement Contractor's Responsibilities
The Abatement Contractor upon completing the work shall have their "Qualified Person" inspect the worksite in its entirety to confirm that asbestos and other hazardous building materials have been properly removed, then promptly provide the Owner with a signed Letter of Completion.

As well, prior to transport of hazardous waste, the Abatement Contractor shall assist the Owner by completing and submitting the BC Ministry of Environment and Climate Change Strategy Waste Generator Number Registration Form (Schedule 5 Form 1), once signed by the Owner, if no BC Generator number exists. If a BC Generator number exists and requires updating for this specific project, the Abatement Contractor shall assist with completing and submitting the update.

Project Documentation should also be provided to the Owner including, but not necessarily limited to, a Notice of Project for work involving Asbestos and/or Lead Paint, Risk Assessment, Exposure Control Plan, and Site Specific Work Procedures, Worker Respirator Fit Test Forms/Logs and Training Acknowledgement Forms, Certification of DOP Testing of HEPA Filtered Equipment used on site, Air Sample Results, Material Safety Data Sheets (MSDS) for products used on site, Transportation Waybills, and Waste Manifest Forms.

7.0 APPROXIMATE QUANTITIES FOR HAZARDOUS MATERIALS

The following approximate quantities for hazardous materials are provided as a means to satisfy the requirements of the WCB, and are provided for reference only. Contractors shall be responsible for verifying exact quantities for the purpose of bidding the work.

ASBESTOS CONTAINING MATERIALS	APPROXIMATE QUANTITIES
Confirmed Asbestos Containing Materials	
Asbestos Floorings (floor tiles, paper backed sheet floorings, and paper backing residue) and Contaminated Building Materials (paper backed sheet floorings and paper backing residue to be removed intact with base wood substrate remaining attached)	730 square feet
Asbestos Plaster and Residue, Affected Gypsum Board Lath, and Other Contaminated Building Materials	3,210 square feet
Asbestos Filling Compound and Residue, Affected Gypsum Board, and Other Contaminated Building Materials	3,810 square feet
Asbestos Containing Exterior Stucco, Affected, Wood, Brick, Construction Papers, and Other Contaminated Building Materials	2,270 square feet
Asbestos Caulking at Electrical Cable Wall Penetrations and Contaminated Building Materials	1 location
Asbestos Loose Fill Vermiculite Insulation, Debris, and Contaminated Gypsum Board Lath, Gypsum Board, Insulations, and Other Building Materials	1,400 square feet plus contaminated areas in proximity
Asbestos Paper and/or Paper Tape on Ductwork, Wood, Registers, and Debris	120 lineal feet
Asbestos Paper Insulation Lining Interior of Metal Exhaust Vents to Rooftop	1 vent
Asbestos Putty On Exterior and Former Exterior Metal-Framed Windows	10 windows
Asbestos Putty in Windows of Former Exterior Wood Doors	1 door
Asbestos Coating on Underside of Metal Sinks	1 sink
Potential Asbestos Containing Materials	
Potential Asbestos Caulking at Main Rooftop Metal Electrical Pole	1 location
Potential Asbestos Sealants/Putties in Exterior Vinyl and Wood-Framed Windows	10 windows
OTHER HAZARDOUS MATERIALS	
Non-Leachable Lead Paint Remaining Attached to Building Materials for Recycle/Disposal	Not Determined
Lead Products for Recycle (lead in bells of drain pipe, lead sleeves, and lead roof vents and caps)	Not Determined
Mercury Containing Thermostats	1 thermostat
Mercury Containing Light Bulbs	1 bulb

We hope you have found the above information useful. If you have any questions, or require clarification please contact this office.

Scott Price, Principal
Astech Consultants Ltd.
Ref: 24224HE01C.SP

ASBESTOS BULK SAMPLE REPORT

Date: June 4, 2021

Client: **CITY OF COQUITLAM**

Location: **Residential Dwelling**
504 Jefferson Avenue
Coquitlam, BC

Comments:
1) Asbestos (bulk) by PLM analyzed as per NIOSH 9002 Issue 2.
2) Workers' Compensation Board of British Columbia (WCB) defines asbestos containing material as 0.5% or more asbestos, with the exception of Vermiculite Insulation which is defined as “any asbestos”.
3) Samples will be disposed of after 90 days, unless the Client requests otherwise.

Sample(s) Collected on May 7, 2021

				Non-Asbestos	Asbestos
Sample	**Location**	**Description**	**Layer: Colour**	**% Type**	**% Type**
24224 BS01	Exterior (North Section)	Ground Brick Mortar	1: Grey	100% Non-Fibrous	None Detected
24224 BS02	Exterior (North Section)	Ground Brick Mortar	1: Grey	100% Non-Fibrous	None Detected
24224 BS03	Exterior (North Section)	Ground Brick Mortar	1: Grey	100% Non-Fibrous	None Detected
24224 BS04	Exterior (North Wall)	Wall Construction Paper	1: Black	98% Cellulose 2% Non-Fibrous	None Detected
24224 BS05	Exterior (North Wall)	Putty (on Exterior Metal Framed Window)	1: Grey	97% Non-Fibrous	**3% Chrysotile**
24224 BS06	Exterior (North Wall)	Putty (on Exterior Metal Framed Window)	1: Grey		Analysis Not Required - See Sample BS05
24224 BS07	Exterior (North Wall)	Putty (on Exterior Metal Framed Window)	1: Grey		Analysis Not Required - See Sample BS05
24224 BS08	Exterior (East Section)	Roofing Shingle Debris (on Ground)	1: Dark Grey	65% Glass 35% Non-Fibrous	None Detected
24224 BS09	Exterior (East Section)	Roofing Shingle Adhesive (on Shingle Debris)	2: Black	100% Non-Fibrous	None Detected
24224 BS10a	Exterior (North Wall)	Paint Stucco (Outer Layer)	1: White 2: White	100% Non-Fibrous	None Detected
24224 BS10b	Exterior (North Wall)	Stucco (Inner Layer)	3: Grey	100% Non-Fibrous	None Detected

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				Non-Asbestos	Asbestos
Sample	**Location**	**Description**	**Layer: Colour**	**% Type**	**% Type**
24224 BS11	Exterior (North Wall)	Wall Construction Paper	4: Dark Brown	98% Cellulose 2% Non-Fibrous	None Detected
24224 BS12a	Exterior (East Wall)	Paint Stucco (Outer Layer)	1: White 2: White	100% Non-Fibrous	None Detected
24224 BS12b	Exterior (East Wall)	Stucco (Inner Layer)	3: Grey	100% Non-Fibrous	None Detected
24224 BS13	Exterior (East Wall)	Wall Construction Paper	4: Dark Brown	98% Cellulose 2% Non-Fibrous	None Detected
24224 BS14	Exterior (East Wall)	Wall Construction Paper	1: Black	98% Cellulose 2% Non-Fibrous	None Detected
24224 BS15	Exterior (East Wall)	Coating (on Concrete)	1: Black	100% Non-Fibrous	None Detected
24224 BS16a	Exterior (East Wall)	Paint Stucco (Outer Layer)	1: White 2: White	100% Non-Fibrous	None Detected
24224 BS16b	Exterior (East Wall)	Stucco (Inner Layer)	3: Grey	100% Non-Fibrous	None Detected
24224 BS17	Exterior (East Wall)	Caulking (at Electrical Cable Penetration)	1: Grey	90% Non-Fibrous	**10% Chrysotile**
24224 BS18	Exterior (East Wall)	Pipe Thread Compound (at Fitting of Natural Gas Piping)	1: Grey	100% Non-Fibrous	None Detected
24224 BS19	Exterior (East Wall)	Caulking (around Exterior Wood-Framed Window)	1: Off-White	100% Non-Fibrous	None Detected
24224 BS20	Exterior (South Wall)	Wall Construction Paper	1: Black	98% Cellulose 2% Non-Fibrous	None Detected
24224 BS21	Exterior (South Wall)	Caulking (at Joint of Vertical Wood Siding)	1: Off-White	100% Non-Fibrous	None Detected
24224 BS22	Exterior (South Wall)	Caulking (at Joint of Horizontal Wood Siding)	1: White	100% Non-Fibrous	None Detected
24224 BS23	Exterior (South Wall)	Caulking (where Wood Door Trim abuts Stucco Wall)	1: White	100% Non-Fibrous	None Detected
24224 BS24	Exterior (South Wall at West Attached Garage)	Kraft Batt Insulation	1: Pink	98% Glass 2% Non-Fibrous	None Detected
		Insulation Adhesive	2: Black	2% Cellulose 2% Glass 96% Non-Fibrous	None Detected
		Insulation Paper Backing	3: Brown	98% Cellulose 2% Non-Fibrous	None Detected
24224 BS25a	Exterior (West Wall)	Paint Stucco (Outer Layer)	1: White 2: White	100% Non-Fibrous	None Detected
24224 BS25b	Exterior (West Wall)	Stucco (Inner Layer)	3: Grey	100% Non-Fibrous	None Detected
24224 BS26	Exterior (West Wall)	Wall Construction Paper	4: Dark Brown	98% Cellulose 2% Non-Fibrous	None Detected
24224 BS27a	Exterior (West Wall)	Paint Stucco (Outer Layer)	1: White 2: White	100% Non-Fibrous	None Detected
24224 BS27b	Exterior (West Wall)	Stucco (Inner Layer)	3: Grey	100% Non-Fibrous	None Detected

Sample	Location	Description	Layer: Colour	Non-Asbestos % Type	Asbestos % Type
24224 BS28	Exterior (West Wall)	Wall Construction Paper	4: Dark Brown	98% Cellulose 2% Non-Fibrous	None Detected
24224 BS29	Lower Floor - Front Entrance Foyer	Ceramic Floor Tile Grout	1: Beige	100% Non-Fibrous	None Detected
24224 BS30	Lower Floor - Front Entrance Landing	Ceramic Floor Tile Mortar	2: Grey	100% Non-Fibrous	None Detected
24224 BS31	Lower Floor - Front Entrance Landing	Ceramic Floor Tile Mortar	2: Grey	100% Non-Fibrous	None Detected
24224 BS32	Lower Floor - Front Stairwell Landing	Ceramic Floor Tile Mortar	1: Grey	100% Non-Fibrous	None Detected
24224 BS33	Lower Floor - Front Entrance Landing	Paint Filling Compound on Gypsum Board (West Wall)	1: White 2: White	100% Non-Fibrous	None Detected
24224 BS34	Lower Floor - Front Entrance Landing	Ceramic Wall Tile Grout	1: Beige	100% Non-Fibrous	None Detected
24224 BS35	Lower Floor - Front Entrance Landing	Ceramic Wall Tile Adhesive	2: Beige	100% Non-Fibrous	None Detected
24224 BS36a	Lower Floor - Front Entrance Landing	Paint Plaster (Outer Layer, East Wall))	1: White 2: White	100% Non-Fibrous	None Detected
24224 BS36b	Lower Floor - Front Entrance Landing	Plaster (Inner Layer, East Wall)	3: Grey	3% Cellulose 97% Non-Fibrous	None Detected
24224 BS37	Exterior (North Wall)	Sealant (in Window of Exterior Metal Clad Wood Door)	1: Black	100% Non-Fibrous	None Detected
24224 BS38	Upper Floor - Northeast Living Room	Flooring Construction Paper	1: Beige	98% Cellulose 2% Non-Fibrous	None Detected
24224 BS39	Upper Floor - Northeast Living Room	Sheet Flooring Wear Surface	2: Beige	100% Non-Fibrous	None Detected
		Felt Backing	3: Black	65% Cellulose 5% Synthetic 30% Non-Fibrous	None Detected
24224 BS40	Upper Floor - Northeast Living Room	Slate Floor Tile Grout (at Fireplace)	1: Off-White	100% Non-Fibrous	None Detected
24224 BS41	Upper Floor - Northeast Living Room	Slate Floor Tile Mortar (at Fireplace)	2: Grey	100% Non-Fibrous	None Detected
24224 BS42	Upper Floor - Northeast Living Room	Slate Floor Tile Mortar (at Fireplace)	2: Grey	100% Non-Fibrous	None Detected
24224 BS43	Upper Floor - Northeast Living Room	Slate Floor Tile Mortar (at Fireplace)	2: Grey	100% Non-Fibrous	None Detected
24224 BS44	Upper Floor - Northeast Living Room	Wall Brick Mortar (at Fireplace)	1: Grey	100% Non-Fibrous	None Detected
24224 BS45	Upper Floor - Northeast Living Room	Wall Brick Mortar (at Fireplace)	1: Grey	100% Non-Fibrous	None Detected

Sample	Location	Description	Layer: Colour	Non-Asbestos % Type	Asbestos % Type
24224 BS46	Upper Floor - Northeast Living Room	Wall Brick Mortar (at Fireplace)	1: Grey	100% Non-Fibrous	None Detected
24224 BS47	Upper Floor - Northeast Living Room (Wall Cavity)	Kraft Batt Insulation	1: Grey	98% Glass 2% Non-Fibrous	None Detected
		Insulation Adhesive	2: Black	2% Cellulose 2% Glass 96% Non-Fibrous	None Detected
		Insulation Paper Backing	3: Brown	98% Cellulose 2% Non-Fibrous	None Detected
24224 BS48a	Upper Floor - Northeast Living Room	Paint Filling Compound Patch (on North Wall Plaster)	1: Light Grey 2: White	100% Non-Fibrous	None Detected
24224 BS48b	Upper Floor - Northeast Living Room	Paint Plaster (Outer Layer, North Wall)	3: Light Grey 4: White	97% Non-Fibrous	**3% Chrysotile**
24224 BS48c	Upper Floor - Northeast Living Room	Plaster (Inner Layer, North Wall)	5: Grey	100% Non-Fibrous	None Detected
24224 BS49	Upper Floor - Northeast Living Room	Paint Spray Applied Texture Coat (Ceiling)	1: White 2: Off-White	100% Non-Fibrous	None Detected
24224 BS50	Upper Floor - Northeast Living Room	Paint Spray Applied Texture Coat (Ceiling)	1: White 2: Off-White	100% Non-Fibrous	None Detected
24224 BS51	Upper Floor - Northeast Living Room	Paint Spray Applied Texture Coat (Ceiling)	1: White 2: Off-White	100% Non-Fibrous	None Detected
24224 BS52	Upper Floor - East Dining Area	Putty (on Former Exterior Metal-Framed Window)	1: Grey	97% Non-Fibrous	**3% Chrysotile**
24224 BS53a	Upper Floor - East Dining Area	Paint Filling Compound on Gypsum Board (West Wall)	1: Light Grey 2: White	100% Non-Fibrous	None Detected
24224 BS53b	Upper Floor - East Dining Area	Paint Concealed Plaster (Outer Layer, West Wall)	3: Light Grey 4: White	97% Non-Fibrous	**3% Chrysotile**
24224 BS54a	Upper Floor - Centre Hallway	Paint Plaster (Outer Layer, South Wall))	1: Grey 2: White	100% Non-Fibrous	None Detected
24224 BS54b	Upper Floor - Centre Hallway	Plaster (Inner Layer, South Wall)	3: Grey	2% Cellulose 98% Non-Fibrous	None Detected
24224 BS55	Upper Floor - Centre Hallway	Paint Spray Applied Texture Coat (Ceiling)	1: White 2: Off-White	100% Non-Fibrous	None Detected
24224 BS56	Upper Floor - Centre Hallway	Paint Spray Applied Texture Coat (Ceiling)	1: White 2: Off-White	100% Non-Fibrous	None Detected

Sample	Location	Description	Layer: Colour	Non-Asbestos % Type	Asbestos % Type
24224 BS57	Upper Floor - Centre Hallway	Paint Spray Applied Texture Coat (Ceiling)	1: White 2: Off-White	100% Non-Fibrous	None Detected
24224 BS58a	Upper Floor - Centre Hallway	Paint Ceiling Plaster (Outer Layer)	1: Grey 2: White	100% Non-Fibrous	None Detected
24224 BS58b	Upper Floor - Centre Hallway	Ceiling Plaster (Inner Layer)	3: Grey	100% Non-Fibrous	None Detected
24224 BS59	Upper Floor - Centre Hallway	Foil Faced Insulation (within Incandescent Light Fixture)	1: White	98% Glass 2% Non-Fibrous	None Detected
24224 BS60	Upper Floor - South Kitchen	Sheet Flooring Wear Surface	1: Beige	100% Non-Fibrous	None Detected
		Paper Backing	2: Grey	5% Cellulose 15% Non-Fibrous	**80% Chrysotile**
24224 BS61	Upper Floor - South Kitchen	9" Floor Tile	3: Brown	98% Non-Fibrous	**2% Chrysotile**
24224 BS62	Upper Floor - South Kitchen	Floor Tile Adhesive	4: Black	2% Cellulose 98% Non-Fibrous	None Detected
24224 BS63	Upper Floor - South Kitchen	12" Floor Tile (on Cupboard Shelf)	1: Beige	3% Synthetic 97% Non-Fibrous	None Detected
24224 BS64a	Upper Floor - South Kitchen	Paint Plaster (Outer Layer, South Wall)	1: Beige 2: White	100% Non-Fibrous	None Detected
24224 BS64b	Upper Floor - South Kitchen	Plaster (Inner Layer, South Wall)	3: Grey	100% Non-Fibrous	None Detected
24224 BS65	Upper Floor - South Kitchen	Adhesive (on South Wall Plaster)	1: Beige	100% Non-Fibrous	None Detected
24224 BS66	Upper Floor - South Kitchen	Cove Base (South Wall)	1: Black	100% Non-Fibrous	None Detected
24224 BS67	Upper Floor - South Kitchen	Cove Base Adhesive (South Wall)	2: Brown	100% Non-Fibrous	None Detected
24224 BS68	Upper Floor - South Kitchen	Coating (on Underside of Metal Sink)	1: Black	98% Non-Fibrous	**2% Chrysotile**
24224 BS69	Upper Floor - South Covered Deck	Deck Floor Coating	1: Grey	100% Non-Fibrous	None Detected
24224 BS70a	Upper Floor - South Covered Deck	Paint Stucco (Outer Layer)	1: Cream 2: White	98% Non-Fibrous	**2% Chrysotile**
24224 BS70b	Upper Floor - South Covered Deck	Stucco Soffit (Inner Layer)	4: Grey	100% Non-Fibrous	None Detected
24224 BS71	Upper Floor - South Covered Deck (Wall Cavity)	Loose Fill Insulation	1: Yellow	98% Glass 2% Non-Fibrous	None Detected
24224 BS72	Upper Floor - South Bathroom	12" Floor Tile	1: Off-White	100% Non-Fibrous	None Detected

Sample	Location	Description	Layer: Colour	Non-Asbestos % Type	Asbestos % Type
24224 BS73	Upper Floor - South Bathroom	Sheet Flooring Wear Surface	2: Beige	100% Non-Fibrous	None Detected
		Paper Backing	3: Grey	5% Cellulose 15% Non-Fibrous	**80% Chrysotile**
24224 BS74	Upper Floor - South Bathroom	Sheet Flooring Wear Surface	4: Brown	100% Non-Fibrous	None Detected
		Paper Backing	5: Grey	5% Cellulose 15% Non-Fibrous	**80% Chrysotile**
24224 BS75	Upper Floor - South Bathroom	Sheet Flooring Wear Surface	6: Beige	100% Non-Fibrous	None Detected
		Felt Backing	7: Black	80% Cellulose 10% Synthetic 10% Non-Fibrous	None Detected
24224 BS76	Upper Floor - South Bathroom	Ceramic Tile Grout (on Counter Top)	1: Beige	100% Non-Fibrous	None Detected
24224 BS77	Upper Floor - South Bathroom	Ceramic Tile Adhesive (on Counter Top)	2: Beige	100% Non-Fibrous	None Detected
24224 BS78a	Upper Floor - North Bedroom	Paint Plaster (Outer Layer, North Wall)	1: Beige 2: White	100% Non-Fibrous	None Detected
24224 BS78b	Upper Floor - North Bedroom	Plaster (Inner Layer, North Wall)	3: Grey	100% Non-Fibrous	None Detected
24224 BS79a	Upper Floor - Southwest Bedroom	Paint Plaster (Outer Layer, North Wall)	1: Beige 2: White	100% Non-Fibrous	None Detected
24224 BS79b	Upper Floor - Southwest Bedroom	Plaster (Inner Layer, North Wall)	3: Grey	100% Non-Fibrous	None Detected
24224 BS80	Upper Floor - Attic	Loose Fill Vermiculite Insulation	1: Beige	99% Non-Fibrous	**1% Actinolite**
24224 BS81	Lower Floor - South Kitchen	12" Floor Tile	1: Beige	100% Non-Fibrous	None Detected
24224 BS82	Lower Floor - South Kitchen	Floor Tile Adhesive	2: Beige	100% Non-Fibrous	None Detected
24224 BS83	Lower Floor - South Kitchen	Paint Filling Compound on Gypsum Board (Ceiling)	1: White 2: White	100% Non-Fibrous	None Detected
24224 BS84	Lower Floor - South Kitchen	Coating (on Underside of Metal Sink)	1: White	100% Non-Fibrous	None Detected
24224 BS85	Lower Floor - South Kitchen	Laminate Wall Adhesive	1: Beige	100% Non-Fibrous	None Detected
24224 BS86	Lower Floor - South Kitchen	Paint Filling Compound on Gypsum Board (East Wall)	1: White 2: White	100% Non-Fibrous	None Detected

Sample	Location	Description	Layer: Colour	Non-Asbestos % Type	Asbestos % Type
24224 BS87	Lower Floor - Utility Closet (Wall Cavity)	Kraft-Faced Fibreglass Batt Insulation	1: Grey	98% Glass 2% Non-Fibrous	None Detected
		Insulation Adhesive	2: Black	2% Cellulose 2% Glass 96% Non-Fibrous	None Detected
		Insulation Paper	3: Brown	98% Cellulose 2% Non-Fibrous	None Detected
24224 BS88	Lower Floor - Utility Closet	Paper Duct Tape	1: Grey	10% Cellulose 5% Non-Fibrous	**85% Chrysotile**
24224 BS89	Lower Floor - Utility Closet	Pipe Thread Compound (at Fitting of Natural Gas Piping)	1: Cream	100% Non-Fibrous	None Detected
24224 BS90	Lower Floor - South Kitchen	9" Floor Tile	1: Beige	97% Non-Fibrous	**3% Chrysotile**
24224 BS91	Lower Floor - South Kitchen	Floor Tile Adhesive	2: Black	100% Non-Fibrous	None Detected
24224 BS92	Lower Floor - East Living Room	Ceramic Floor Tile Grout (at Fireplace)	1: Grey	100% Non-Fibrous	None Detected
24224 BS93	Lower Floor - East Living Room	Ceramic Floor Tile Mortar (at Fireplace)	2: Grey	100% Non-Fibrous	None Detected
24224 BS94	Lower Floor - East Living Room	Ceramic Floor Tile Mortar (at Fireplace)	2: Grey	100% Non-Fibrous	None Detected
24224 BS95	Lower Floor - East Living Room	Ceramic Floor Tile Mortar (at Fireplace)	2: Grey	100% Non-Fibrous	None Detected
24224 BS96	Lower Floor - East Living Room	Paint Filling Compound on Gypsum Board (South Wall)	1: White 2: White	100% Non-Fibrous	None Detected
24224 BS97	Lower Floor - East Living Room	Wall Brick Mortar (at Fireplace)	1: Grey	100% Non-Fibrous	None Detected
24224 BS98	Lower Floor - East Living Room	Wall Brick Mortar (at Fireplace)	1: Grey	100% Non-Fibrous	None Detected
24224 BS99	Lower Floor - East Living Room	Wall Brick Mortar (at Fireplace)	1: Grey	100% Non-Fibrous	None Detected
24224 BS100	Lower Floor - East Living Room	Paint Filling Compound on Gypsum Board (Ceiling)	1: White 2: White	100% Non-Fibrous	None Detected
24224 BS101	Lower Floor - East Living Room - Closet	Pipe Thread Compound (at Fitting of Natural Gas Piping)	1: Grey	100% Non-Fibrous	None Detected
24224 BS102	Lower Floor - South Bathroom	16" Floor Tile	1: Beige	100% Non-Fibrous	None Detected
24224 BS103	Lower Floor - South Bathroom	Floor Tile Adhesive	2: Beige	100% Non-Fibrous	None Detected

Sample	Location	Description	Layer: Colour	Non-Asbestos % Type	Asbestos % Type
24224 BS104	Lower Floor - South Bathroom	Sheet Flooring Wear Surface	3: Off-White	100% Non-Fibrous	None Detected
		Paper Backing	4: Grey	70% Cellulose 10% Glass 20% Non-Fibrous	None Detected
24224 BS105	Lower Floor - South Bathroom	Flooring Adhesive	5: Beige	100% Non-Fibrous	None Detected
24224 BS106	Lower Floor - South Bathroom	Ceramic Wall Tile Grout	1: White	100% Non-Fibrous	None Detected
24224 BS107	Lower Floor - South Bathroom	Ceramic Wall Tile Mortar	2: White	100% Non-Fibrous	None Detected
24224 BS108	Lower Floor - South Bathroom	Caulking (at Door Threshold)	1: Cream	100% Non-Fibrous	None Detected
24224 BS109	Lower Floor - South Bathroom	Caulking (at Door Threshold)	1: Cream	100% Non-Fibrous	None Detected
24224 BS110	Lower Floor - South Bathroom	Caulking (at Door Threshold)	1: White	100% Non-Fibrous	None Detected
24224 BS111	Lower Floor - South Bathroom	Caulking (at Wood Cove Base)	1: White	100% Non-Fibrous	None Detected
24224 BS112	Lower Floor - Northwest Bedroom	Filling Compound on Gypsum Board (West Wall)	1: White	100% Non-Fibrous	None Detected
24224 BS113	Lower Floor - Northwest Bedroom	Paint Filling Compound on Concealed Gypsum Board (West Wall)	1: Cream 2: White	97% Non-Fibrous	**3% Chrysotile**
24224 BS114	Lower Floor - Northwest Bedroom	Paint Filling Compound on Gypsum Board (Ceiling)	1: White 2: White	100% Non-Fibrous	None Detected
24224 BS115	Lower Floor - Southwest Laundry Room	16" Floor Tile	1: Beige	100% Non-Fibrous	None Detected
24224 BS116	Lower Floor - Southwest Laundry Room	Floor Tile Adhesive	2: Beige	100% Non-Fibrous	None Detected
24224 BS117	Lower Floor - West Entrance Hallway	16" Floor Tile	1: Grey	100% Non-Fibrous	None Detected
24224 BS118	Lower Floor - West Entrance Hallway	Floor Tile Adhesive	2: Beige	100% Non-Fibrous	None Detected
24224 BS119	Lower Floor - West Entrance Hallway	Paint Filling Compound on Gypsum Board (East Wall)	1: White 2: White	100% Non-Fibrous	None Detected
24224 BS120	Lower Floor - West Entrance Hallway	Foil Faced Insulation (within Incandescent Light Fixture)	1: White	98% Glass 2% Non-Fibrous	None Detected
24224 BS121	Exterior - Main Rooftop	Roofing Shingle	1: Dark Grey	65% Glass 35% Non-Fibrous	None Detected
24224 BS122	Exterior - Main Rooftop	Roofing Adhesive	2: Black	100% Non-Fibrous	None Detected

Sample	Location	Description	Layer: Colour	Non-Asbestos % Type	Asbestos % Type
24224 BS123	Exterior - Main Rooftop	Roofing Shingle	3: Dark Grey	65% Glass 35% Non-Fibrous	None Detected
24224 BS124	Exterior - Main Rooftop	Roofing Adhesive	4: Black	100% Non-Fibrous	None Detected
24224 BS125	Exterior - Lower West Attached Garage Rooftop	Roofing Shingle	1: Dark Grey	65% Glass 35% Non-Fibrous	None Detected
24224 BS126	Exterior - Lower West Attached Garage Rooftop	Roofing Adhesive	2: Black	100% Non-Fibrous	None Detected

Analyst(s): Lillian Fan, Jessica Young

Sample(s) Collected on May 31, 2021

Sample	Location	Description	Layer: Colour	Non-Asbestos % Type	Asbestos % Type
24224 BS127a	Upper Floor - South Covered Deck (South Wall)	Paint Stucco (Outer Layer)	1: White 2: White	100% Non-Fibrous	None Detected
24224 BS127b	Upper Floor - South Covered Deck (South Wall)	Stucco (Inner Layer)	3: Grey	100% Non-Fibrous	None Detected
24224 BS128a	Lower Floor - Southwest Laundry Room (Ceiling)	Paint Stucco (Outer Layer)	1: White 2: White	100% Non-Fibrous	None Detected
24224 BS128b	Lower Floor - Southwest Laundry Room (Ceiling)	Stucco (Inner Layer)	3: Grey	2% Cellulose 98% Non-Fibrous	None Detected
24224 BS129a	Lower Floor - West Entrance Hallway (Ceiling)	Paint Stucco (Outer Layer)	1: White 2: White	100% Non-Fibrous	None Detected
24224 BS129b	Lower Floor - West Entrance Hallway (Ceiling)	Stucco (Inner Layer)	3: Grey	2% Cellulose 98% Non-Fibrous	None Detected
24224 BS130a	Exterior (East Wall)	Paint Stucco (Outer Layer)	1: White 2: White	98% Non-Fibrous	**2% Chrysotile**
24224 BS130b	Exterior (East Wall)	Stucco (Inner Layer)	3: Grey	100% Non-Fibrous	None Detected

Analyst(s): Lillian Fan

Sample(s) Collected on June 1, 2021

Sample	Location	Description	Layer: Colour	Non-Asbestos % Type	Asbestos % Type
24224 BS131	Upper Floor - South Kitchen	Putty (in Interior Wood-Framed Window Within Door)	1: Beige	99% Non-Fibrous	**1% Chrysotile**

				Non-Asbestos	Asbestos
Sample	**Location**	**Description**	**Layer: Colour**	**% Type**	**% Type**
24224 BS132	Upper Floor - South Kitchen	Putty (in Interior Wood-Framed Window Within Door)	1: Beige		Analysis Not Required - See Sample BS131
24224 BS133	Upper Floor - South Kitchen	Putty (in Interior Wood-Framed Window Within Door)	1: Beige		Analysis Not Required - See Sample BS131
24224 BS134	Exterior - Main Rooftop	Chimney Brick Mortar	1: Grey	100% Non-Fibrous	None Detected
24224 BS135	Exterior - Main Rooftop	Chimney Brick Mortar	1: Grey	100% Non-Fibrous	None Detected
24224 BS136	Exterior - Main Rooftop	Chimney Brick Mortar	1: Grey	100% Non-Fibrous	None Detected

Analyst(s): Jessica Young

AIHA PAT Programs LLC

American Industrial Hygiene Association (AIHA) Bulk Asbestos Proficiency Analytical Testing (BAPAT)
Astech Consultants Ltd. Laboratory Participant ID# 200542

LEAD BULK SAMPLE REPORT

Date: June 4, 2021

Client: **CITY OF COQUITLAM**

Location: **Residential Dwelling and Out-Building**
504 Jefferson Avenue
Coquitlam, BC

Comments:
1) The Workers' Compensation Board of British Columbia (WCB) no longer allows reference to Health Canada's definition of a lead-containing surface coating material.
2) WCB does not define a safe level for a lead-containing surface coating material.
3) Analyzed by X-Ray Fluorescence with direct read in parts per million (PPM).
4) Sample results report lead only.
5) < means less than, > means more than.

Sample(s) Analyzed on May 31, 2021

Sample	Location	Description	Colour	Lead PPM
24224 LS01	Lower Floor - Front Entrance Landing	Glazing Finish (on Ceramic Floor Tile)	Grey	**1,133 PPM**
24224 LS02	Lower Floor - Front Entrance Landing	Paint (on Exterior Metal Clad Wood Door)	White	**48 PPM**
24224 LS03	Lower Floor - Front Entrance Landing	Paint (on East Plaster Wall)	White	**342 PPM**
24224 LS04	Lower Floor - Front Entrance Landing	Paint (on West Gypsum Board Wall)	White	**10 PPM**
24224 LS05	Upper Floor - Northeast Living Room	Paint (on West Plaster Wall)	Beige	**408 PPM**
24224 LS06	Upper Floor - Northeast Living Room	Paint (on South Plaster Wall)	Light Grey	**320 PPM**
24224 LS07	Upper Floor - Northeast Living Room	Paint (on East Wood Wall Panel)	Beige	**<6 PPM**
24224 LS08	Upper Floor - Centre Hallway	Paint (on North Wood Door Frame)	White	**202 PPM**
24224 LS09	Upper Floor - Northeast Living Room	Paint (on East Fireplace Brick)	White	**15 PPM**
24224 LS10	Upper Floor - East Dining Area	Paint (on West Gypsum Board Wall)	Beige	**10 PPM**

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Sample	Location	Description	Colour	Lead PPM
24224 LS11	Upper Floor - South Bathroom	Glazing Finish (on East Ceramic Wall Tile)	Light Brown	**3,080 PPM**
24224 LS12	Lower Floor - East Living Room	Paint (on East Concrete Fireplace)	Grey	**125 PPM**
24224 LS13	Lower Floor - East Living Room	Paint (on East Wood Fireplace Trim)	Grey	**12 PPM**
24224 LS14	Lower Floor - East Living Room	Paint (on East Gypsum Board Wall)	Grey	**10 PPM**
24224 LS15	Lower Floor - East Living Room	Glazing Finish (on Ceramic Floor Tile)	Grey	**> 100,000 PPM**
24224 LS16	Lower Floor - Southwest Laundry Room	Paint (on South Concrete Foundation)	Green	**1,626 PPM**
24224 LS17	Exterior (North Wall)	Paint (on Stucco)	White	**347 PPM**
24224 LS18	Exterior (East Wall)	Paint (on Wood Siding)	White	**809 PPM**
24224 LS19	Exterior (East Wall)	Paint (on Concrete Foundation)	Dark Brown	**20 PPM**
24224 LS20	Exterior (North Wall)	Paint (on Wood Garage Door)	Dark Brown	**517 PPM**
24224 LS21	Lower Floor - Southwest Attached Garage	Paint (on Wood Trim)	Grey	**1,582 PPM**
24224 LS22	Lower Floor - Southwest Attached Garage	Paint (on Wood Trim)	Green	**1,278 PPM**
24224 LS23	Detached Northwest Shed - Exterior (East Wall)	Paint (on Wood Siding)	Grey	**7 PPM**
24224 LS24	Detached Northwest Shed - Exterior (East Wall)	Paint (on Wood Trim)	White	**7 PPM**

Analyst(s): Scott Price

Natural Resources Canada Ressources naturelles Canada Canada

Certified to ISO:20807; and Health Canada's and Natural Resources Canada's requirements for compliance with Health Canada Safety Code 32&34

LEACHATE LEAD SAMPLE REPORT

Date: June 4, 2021

Client: **CITY OF COQUITLAM**

Location: **Residential Dwelling**
504 Jefferson Avenue
Coquitlam, BC

Comments:
1) Samples were analyzed in accordance with EPA Analytical Methods 6020A & 1311.
2) Sample results report leachate lead only.
3) Reportable Detection Limit is 0.25 mg/L.
4) Ministry of Environment defines lead leachate hazardous waste level as 5.0 mg/L or greater.
5) Samples will be disposed of after 30 days, unless the client requests otherwise.

Sample(s) Collected on June 1, 2021

Sample	Location	Description	Colour	Lead Leachate mg/L
24224 LLS01 (LS08)	Upper Floor - Centre Hallway	Paint (on North Wood Door Frame)	White	0.26 mg/L
24224 LLS02 (LS12)	Lower Floor - East Living Room	Paint (on East Concrete Fireplace)	Grey	<0.25 mg/L
24224 LLS03 (LS16)	Lower Floor - Southwest Laundry Room	Paint (on South Concrete Foundation)	Green	<0.25 mg/L
24224 LLS04 (LS18)	Exterior (East Wall)	Paint (on Wood Siding)	White	<0.25 mg/L
24224 LLS05 (LS20)	Exterior (North Wall)	Paint (on Wood Garage Door)	Dark Brown	<0.25 mg/L
24224 LLS06 (LS21)	Lower Floor - Southwest Attached Garage	Paint (on East Wood Trim)	Grey	<0.25 mg/L
24224 LLS07 (LS22)	Lower Floor - Southwest Attached Garage	Paint (on East Wood Trim)	Green	0.50 mg/L

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