patersongroup

Consulting Engineers

March 23, 2022 File: PE4752-LET.03 154 Colonnade Road South Ottawa, Ontario Canada, K2E 7J5 Tel: (613) 226-7381 Fax: (613) 226-6344

Magil Laurentian Realty Investments

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Attention: Ms. Maureen Flanigan

Designated Substance Survey

36-40 Armstrong Street & 961-967 Wellington Street West

Ottawa, Ontario

Dear Sir,

Subject:

Further to your request and authorization, Paterson Group (Paterson) conducted a Designated Substance Survey (DSS) for the properties addressed 36-40 Armstrong Street and 961-967 Wellington Street West, in the City of Ottawa, Ontario. This letter report summarizes our findings and results of the DSS.

1.0 BACKGROUND

The subject properties are situated on the south side of Armstrong Street and the north side of Wellington Street West, between Hilda Street and Garland Street, in the City of Ottawa, Ontario. The properties are currently occupied by four low-rise residential buildings, constructed sometime in the 1910's/1920's. It is our understanding that the subject buildings are to be demolished in the near future as part of a site redevelopment program. The purpose of this investigation was to identify any potential designated substances within the subject buildings.

2.0 SITE INSPECTION AND OBSERVATIONS

A representative from Paterson Group conducted a site inspection of the subject buildings on March 10, 2022. At that time, a visual inspection was carried out for materials containing the following designated substances: acrylonitrile, arsenic, asbestos, benzene, coke oven emissions, ethylene oxide, isocyanates, lead, mercury, silica, and vinyl chloride, as well as the following substances: ozone depleting substances (ODSs) and polychlorinated biphenyls (PCBs).

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Building materials such as buried services, roofing materials, floor levelling compounds, caulking, and sealants, which have historically contained asbestos, were not included in this survey since they are generally inaccessible, used in a random fashion, and have a low risk of asbestos fibre release.

2.1 Acrylonitrile

Acrylonitrile is prescribed as a designated substance under Ontario Regulation (O. Reg.) 490/09 of the Occupational Health and Safety Act. It is a volatile, flammable liquid that is used to make many chemicals such as plastics, rubber, and synthetic fibres. Acrylonitrile may be present in stable form in surface coatings (e.g. paints), building material adhesives, and plastics. The above noted products are not considered to pose a concern, provided they are not subjected to extreme heat, such as a torch. Exposure to acrylonitrile is unlikely and not suspected within the subject buildings.

2.2 Arsenic

Arsenic is prescribed as a designated substance under O. Reg. 490/09 of the Occupational Health and Safety Act. Arsenic has many industrial uses, such as the hardening of copper and lead alloys, and can also be found in older lead-based paints. Similar to acrylonitrile, arsenic may also be present in stable form within building material adhesives and some metal alloys. Based on the limited quantity of potentially arsenic containing materials within the subject buildings, it is not expected that the arsenic concentration in the air will exceed its maximum allowable Time Weighted Average Exposure Value (TWAEV).

2.3 Asbestos

Asbestos is prescribed as a designated substance under O. Reg. 490/09 of the Occupational Health and Safety Act. Asbestos-containing materials (ACMs) are defined under O. Reg. 278/05 of the Occupational Health and Safety Act as having a concentration of 0.5% or more by dry weight of fibrous asbestos (i.e. chrysotile, amosite, crocidolite and/or other amphiboles). Asbestos was commonly used in residential and commercial construction between 1930 and 1980.

A total of 94 bulk samples of potentially asbestos containing materials were obtained from the subject buildings during the March 10, 2022, inspection and submitted to Paracel Laboratories in Ottawa, Ontario for analysis. The potential asbestos containing materials were analyzed to determine the presence, type, and content of asbestos, as shown in Tables 1 to 4 below. The laboratory certificates of analysis have been appended to this letter.

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Table 1 – Summary of Asbestos Testing 36 Armstrong Street March 10. 2022

Sample No.	Description	Colour	Location	Fibrous Asbestos Content	Other Materials
36-DWJC1			Basement Wall		
36-DWJC2			1st Floor Bathroom Wall		
36-DWJC3			1st Floor Living Room Wall		
36-DWJC4			2 nd Floor Bathroom Wall		
36-DWJC5	Drywall Joint Compound	White	2 nd Floor Hallway Wall	None	100% Non-Fibres
36-DWJC6	Compound		3 rd Floor Bathroom Wall		
36-DWJC7			3 rd Floor Kitchen Wall		
36-DWJC8			1st Floor Garage Wall		
36-DWJC9			1st Floor Garage Wall		
36-PL1			2 nd Floor Stairwell Wall		
36-PL2			2 nd Floor Stairwell Wall		
36-PL3	Plaster Skim Coat	White	3 rd Floor Stairwell Wall	None	100% Non-Fibres
36-PL4	Cour		3 rd Floor Kitchen Wall		
36-PL5			3 rd Floor Hallway Wall		
36-PRG1			2 nd Floor Stairwell Wall		
36-PRG2			2 nd Floor Stairwell Wall		
36-PRG3	Cement Parging	Grey	3 rd Floor Stairwell Wall	None	100% Non-Fibres
36-PRG4			3 rd Floor Kitchen Wall		
36-PRG5			3 rd Floor Hallway Wall		
36-VFT1					
36-VFT2	Vinyl Floor Tiles (20 x 20 cm)	Brown	1st Floor Kitchen Floor	None	100% Non-Fibres
36-VFT3	(20 / 20 0111)				
36-INS1					
36-INS2	Insulation	Yellow	Basement Wall Cavity	None	95% MMVF 5% Non-Fibres
36-INS3	1				370 14011-110162

 $\begin{tabular}{ll} \square & MMVF-Man Made Vitreous Fibres (i.e., Fiberglass, Mineral Wool, Rockwool, Glasswool). \end{tabular}$

□ **Bold** – Results exceed the asbestos-containing definable limit.

Plaster Skim Coat – 36 Armstrong Street

Plaster skim coat was identified throughout the entirety of the subject building. Five samples of the plaster skim coat were submitted for laboratory analysis. No asbestos was detected in any of the samples analyzed, and as a result, the plaster skim coat is not considered to be an asbestos containing material.

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Cement Parging – 36 Armstrong Street

Cement parging was identified throughout the entirety of the subject building. Five samples of the cement parging were submitted for laboratory analysis. No asbestos was detected in any of the samples analyzed, and as a result, the cement parging is not considered to be an asbestos containing material.

Drywall Joint Compound – 36 Armstrong Street

Drywall joint compound was identified throughout the entirety of the subject building. Nine samples of the drywall joint compound were submitted for laboratory analysis. No asbestos was detected in any of the samples analyzed, and as a result, the drywall joint compound is not considered to be an asbestos containing material.

Vinyl Floor Tiles – 36 Armstrong Street

Vinyl floor tiles were identified in the first floor kitchen of the subject building. Three samples of the vinyl floor tile type were submitted for laboratory analysis via positive stop. No asbestos was detected in any of the samples analyzed, and as a result, the vinyl floor tiles are not considered to be an asbestos containing material.

Insulation – 36 Armstrong Street

Insulation was identified within an exposed wall cavity in the basement of the subject building. Three samples of the insulation were submitted for laboratory analysis. No asbestos was detected in any of the samples analyzed, and as a result, the insulation is not considered to be an asbestos containing material.

Table 2 – Summary of Asbestos Testing	g
40 Armstrong Street	
March 10, 2022	

Sample No.	Description	Colour	Location	Fibrous Asbestos Content	Other Materials
40-DWJC1			1st Floor Kitchen Wall (Rear Unit)		
40-DWJC2		White	1st Floor Living Room Wall (Rear Unit)		100% Non-Fibres
40-DWJC3			1st Floor Living Room Wall (Rear Unit)		
40-DWJC4	Drywall Joint		1st Floor Kitchen Wall (Front Unit)	None	
40-DWJC5	Compound		1st Floor Hallway Wall (Front Unit)	none	
40-DWJC6		Off-White	1st Floor Hallway Wall (Front Unit)		
40-DWJC7]		2 nd Floor Stairwell Wall		
40-DWJC8			2 nd Floor Bedroom Wall		

Notes:

- ☐ MMVF Man Made Vitreous Fibres (i.e., Fiberglass, Mineral Wool, Rockwool, Glasswool).
- □ **Bold** Results exceed the asbestos-containing definable limit.

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Table 2 – Summary of Asbestos Testing (Continued) 40 Armstrong Street March 10, 2022

Sample No.	Description	Colour	Location	Fibrous Asbestos Content	Other Materials
40-DWJC9	Drywall Joint Compound	Off-White	2 nd Floor Hallway Wall	None 100% Non-Fib	
40-STIP1				1% Chrysotile	99% Non-Fibres
40-STIP2	Stipple Plaster	Beige	1st Floor Kitchen Ceiling (Rear Unit)	Not A	Analyzed
40-STIP3				(Posit	ive Stop)
40-LIN1					15% Cellulose
40-LIN2	Linoleum	Beige	1st Floor Kitchen Floor (Rear Unit)	None	5% MMVF
40-LIN3]			80% Non-Fibr	
40-VFT1					1% MMVF
40-VFT2]	Beige	1st Floor Kitchen Floor (Rear Unit)	None	1% Other Fibres
40-VFT3	Vinyl Floor Tiles				98% Non-Fibres
40-VFT4	(20 x 20 cm)				1% MMVF
40-VFT5		Blue	1st Floor Kitchen Floor (Rear Unit)	None	1% Other Fibres
40-VFT6					98% Non-Fibres
40-INS1					
40-INS2]	Yellow	1st Floor Wall Cavity (Rear Unit)	None	95% MMVF 5% Non-Fibres
40-INS3	- In a collection				070 11011 1 15100
40-INS4	- Insulation -				
40-INS5]	Pink	2 nd Floor Attic Ceiling Cavity	None	95% MMVF 5% Non-Fibres
40-INS6					3,011011110100

[☐] MMVF – Man Made Vitreous Fibres (i.e., Fiberglass, Mineral Wool, Rockwool, Glasswool).

Drywall Joint Compound – 40 Armstrong Street

Drywall joint compound was identified throughout the entirety of the subject building. Nine samples of the drywall joint compound were submitted for laboratory analysis. No asbestos was detected in any of the samples analyzed, and as a result, the drywall joint compound is not considered to be an asbestos containing material.

Stipple Plaster – 40 Armstrong Street

Stipple plaster was identified on the ceiling of the first floor rear unit of the subject building. Three samples of the stipple plaster were submitted for laboratory analysis via positive stop. One sample of the stipple plaster was found to contain 1% chrysotile asbestos. Based on the analytical test results, the stipple plaster ceiling is considered to be an asbestos containing material.

Bold – Results exceed the asbestos-containing definable limit.

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Linoleum – 40 Armstrong Street

Linoleum was identified in the kitchen of the first floor rear unit of the subject building. Three samples of the linoleum were submitted for laboratory analysis via positive stop. No asbestos was detected in any of the samples analyzed, and as a result, the linoleum is not considered to be an asbestos containing material.

Vinyl Floor Tiles – 40 Armstrong Street

Two types of vinyl floor tiles were identified in the kitchen of the first floor rear unit of the subject building. Three samples of each vinyl floor tile type (yielding a total of six samples) were submitted for laboratory analysis via positive stop. No asbestos was detected in any of the samples analyzed, and as a result, the vinyl floor tiles are not considered to be an asbestos containing material.

Insulation – 40 Armstrong Street

Two types of insulation were identified in exposed wall cavities in the first floor rear unit and the second floor attic of the subject building. Three samples of each insulation type (yielding a total of six samples) were submitted for laboratory analysis via positive stop. No asbestos was detected in any of the samples analyzed, and as a result, the insulation is not considered to be an asbestos containing material.

Table 3 – Summary of Asbestos Testing
961 Wellington Street West
March 10, 2022

Sample No.	Description	Colour	Location	Fibrous Asbestos Content	Other Materials
961-DWJC1			1 st Floor Living Room Wall (Unit #961)		
961-DWJC2			1 st Floor Bathroom Wall (Unit #961)		100% Non-Fibres
961-DWJC3			1 st Floor Bedroom Wall (Unit #961)		
961-DWJC4			2 nd Floor Hallway Wall (Unit #963A)		
961-DWJC5	Drywall Joint Compound	White	2 nd Floor Bedroom Wall (Unit #963A)	None	
961-DWJC6	Compound		2 nd Floor Hallway Wall (Unit #963B)		
961-DWJC7			2 nd Floor Kitchen Wall (Unit #963B)		
961-DWJC8			3 rd Floor Hallway Wall (Unit #963D)		
961-DWJC9			3 rd Floor Hallway Wall (Unit #963D)		
961-STUC1					
961-STUC2	Stucco	Grey	Exterior Façade	None	100% Non-Fibres
961-STUC3	1				
A	•		•		•

Notes:

- □ MMVF Man Made Vitreous Fibres (i.e., Fiberglass, Mineral Wool, Rockwool, Glasswool).
- Bold Results exceed the asbestos-containing definable limit.

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	gton Street		Гesting (Continued)		
Sample No.	Description	Colour	Location	Fibrous Asbestos Content	Other Materials
961-INS1					

3rd Floor Wall Cavity (Unit #963D)

961-INS3 Notes:

961-INS2

- ☐ MMVF Man Made Vitreous Fibres (i.e., Fiberglass, Mineral Wool, Rockwool, Glasswool).
- □ **Bold** Results exceed the asbestos-containing definable limit.

Drywall Joint Compound – 961 Wellington Street West

Pink

Drywall joint compound was identified throughout the entirety of the subject building. Nine samples of the drywall joint compound were submitted for laboratory analysis. No asbestos was detected in any of the samples analyzed, and as a result, the drywall joint compound is not considered to be an asbestos containing material.

Stucco – 961 Wellington Street West

Insulation

A stucco finish was identified on the exterior façade of the subject building. Three samples of the stucco were submitted for laboratory analysis. No asbestos was detected in any of the samples analyzed, and as a result, the stucco is not considered to be an asbestos containing material.

Insulation – 961 Wellington Street West

Insulation was identified within an exposed wall cavity on the third floor of the subject building. Three samples of the insulation were submitted for laboratory analysis. No asbestos was detected in any of the samples analyzed, and as a result, the insulation is not considered to be an asbestos containing material.

	Summary of gton Street 2022		Testing		
Sample No.	Description	Colour	Location	Fibrous Asbestos Content	Other Materials
967-PL1	Plaster Skim	White	1st Floor Kitchen Wall	None	100% Non-Fibres
967-PL2	Coat	vviiite	1st Floor Hallway Wall	None	
Notes:					

- ☐ MMVF Man Made Vitreous Fibres (i.e., Fiberglass, Mineral Wool, Rockwool, Glasswool).
 - Bold Results exceed the asbestos-containing definable limit.

95% MMVF

5% Non-Fibres

None

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Table 4 – Summary of Asbestos Testing (Continued)
967 Wellington Street West
March 10, 2022

Sample No.	Description	Colour	Location	Fibrous Asbestos Content	Other Materials
967-PL3			1st Floor Living Room Wall		
967-PL4	Plaster Skim Coat	Grey	2 nd Floor Kitchen Wall	None	100% Non-Fibres
967-PL5	Coat		2 nd Floor Hallway Wall		
967-PRG1			1 st Floor Kitchen Wall		
967-PRG2	1		1st Floor Hallway Wall		
967-PRG3	Cement Parging	Grey	1st Floor Living Room Wall	None	100% Non-Fibres
967-PRG4	1		2 nd Floor Kitchen Wall		
967-PRG5	1		2 nd Floor Hallway Wall		
967-DWJC1			1st Floor Bathroom Wall		100% Non-Fibres
967-DWJC2			1st Floor Living Room Wall		
967-DWJC3	Drywall Joint Compound	White	1st Floor Bedroom Wall	None	
967-DWJC4	Compound		2 nd Floor Kitchen Wall		
967-DWJC5	1		2 nd Floor Kitchen Wall		
967-LIN1					
967-LIN2	1	Brown	1st Floor Bathroom Floor	None	5% MMVF 95% Non-Fibres
967-LIN3	1				95 /6 NOTI-TIBLES
967-LIN4	Linoleum				10% Cellulose
967-LIN5	1	Beige	1 st Floor Front Foyer Floor	None	5% MMVF
967-LIN6	1				85% Non-Fibres
967-VFT1					
967-VFT2	1	Beige	1st Floor Bathroom Floor	None	100% Non-Fibres
967-VFT3	Vinyl Floor Tiles				
967-VFT4	(20 x 20 cm)				
967-VFT5	1	Grey	2 nd Floor Bathroom Floor	None	100% Non-Fibres
967-VFT6	1				

Notes:

Plaster Skim Coat – 967 Wellington Street West

Plaster skim coat was identified throughout the entirety of the subject building. Five samples of the plaster skim coat were submitted for laboratory analysis. No asbestos was detected in any of the samples analyzed, and as a result, the plaster skim coat is not considered to be an asbestos containing material.

[☐] MMVF – Man Made Vitreous Fibres (i.e., Fiberglass, Mineral Wool, Rockwool, Glasswool).

[□] **Bold** – Results exceed the asbestos-containing definable limit.

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Cement Parging – 967 Wellington Street West

Cement parging was identified throughout the entirety of the subject building. Five samples of the cement parging were submitted for laboratory analysis. No asbestos was detected in any of the samples analyzed, and as a result, the cement parging is not considered to be an asbestos containing material.

Drywall Joint Compound – 967 Wellington Street West

Drywall joint compound was identified throughout the entirety of the subject building. Five samples of the drywall joint compound were submitted for laboratory analysis. No asbestos was detected in any of the samples analyzed, and as a result, the drywall joint compound is not considered to be an asbestos containing material.

Linoleum – 967 Wellington Street West

Two types of linoleum were identified in the first floor bathroom and second floor stairwell of the subject building. Three samples of each linoleum type (yielding a total of six samples) were submitted for laboratory analysis via positive stop. No asbestos was detected in any of the samples analyzed, and as a result, the linoleum is not considered to be an asbestos containing material.

Vinyl Floor Tiles – 967 Wellington Street West

Two types of vinyl floor tiles were identified in the first floor bathroom and second floor bathroom of the subject building. Three samples of each vinyl floor tile type (yielding a total of six samples) were submitted for laboratory analysis via positive stop. No asbestos was detected in any of the samples analyzed, and as a result, the vinyl floor tiles are not considered to be an asbestos containing material.

Insulation – 967 Wellington Street West

No insulation materials were identified within the subject building at the time of the site inspection. If any insulation materials are encountered in the wall or ceiling cavities, we request that we be notified to allow for the testing of this material.

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2.4 Benzene

Benzene is prescribed as a designated substance under O. Reg 490/09 of the Occupational Health and Safety Act. Benzene is used in the manufacturing of many products including plastics, rubbers, resins, and synthetic fibres. It is also used as a solvent in printing and paints as well as in petroleum products, such as gasoline and diesel. Benzene may be present in older paints, sealants, and roofing materials, some of which may be present in the subject buildings. Benzene is not considered to be a concern, since it typically vaporizes rapidly from most products shortly after manufacturing or application, however, the above noted materials should not be subjected to extreme heat without proper worker respiratory protection.

2.5 Coke Oven Emissions

Coke oven emissions are prescribed as a designated substance under O. Reg. 490/09 of the Occupational Health and Safety Act. Coke oven emissions are not typically found outside of the metal extraction industry. No sources of coke oven emissions are suspected or were observed within the subject buildings.

2.6 Ethylene Oxide

Ethylene oxide is prescribed as a designated substance under O. Reg 490/09 of the Occupational Health and Safety Act. Ethylene oxide is used in large volumes as a chemical intermediate in the manufacturing of many industrial products including textiles, detergents, foam, antifreeze, solvents, and adhesives. Based on the limited quantity of potentially ethylene oxide containing materials within the subject buildings, ethylene oxide is not considered to pose a concern.

2.7 Isocyanates

Isocyanates are prescribed as a designated substance under O. Reg. 490/09 of the Occupational Health and Safety Act. Isocyanates are the raw materials from which all polyurethane products are made. They are used widely in the manufacturing of foams, plastics, adhesives, synthetic fibres, and coatings; such as paints and varnishes, some of which are present in the subject buildings. Over time, isocyanates will volatize out of these materials, but will only be present in trace amounts and are not expected to reach hazardous air concentrations. As a result, isocyanates are not considered to pose a concern.

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2.8 Lead

Lead is prescribed as a designated substance under O. Reg. 490/09 of the Occupational Health and Safety Act. For the purposes of this report, the commonly used value of 90 ppm [Surface Coatings Material Regulation (SOR/2005-109) – October 2010] will serve as the lead-containing definable limit. Lead concentrations will be categorized into three (3) classes, lead-based (greater than 5000 ppm), lead-containing (between 90 ppm and 5000 ppm) and non-lead containing (less than 90 ppm).

Lead may be present in older paints, plastics, lead caulking in bell joints for cast iron piping systems, lead solder in copper piping systems, electrical equipment, and ceramics. Painted surfaces on the interior of the subject buildings were observed at the time of the site inspection and 14 paint samples were obtained and submitted to Paracel Laboratories in Ottawa, Ontario for lead content analysis. The sample locations and lead content can be found below in Tables 5 to 8. The laboratory certificate of analysis is appended to this letter.

Table 5 – Summary of Lead Testing
36 Armstrong Street
March 10, 2022

Sample No.	Location	Colour	Lead-Containing Definable Limit (µg/g)	Lead Content (µg/g)		
36-PT1	1st Floor Living Room Wall	Grey		<5		
36-PT2	2 nd Floor Hallway Wall	Blue/Grey	00	<5		
36-PT3	3 rd Floor Kitchen Wall	White	90	<5		
36-PT4	1st Floor Garage Wall	White		<5		
Notes: Bold - Results exceed the lead-containing definable limit.						

Based on the analytical test results, no lead-containing paints were identified within the subject building at 36 Armstrong Street.

Table 6 – Summary of Lead Testing
40 Armstrong Street
March 10, 2022

Sample No.	Location	Colour	Lead-Containing Definable Limit (µg/g)	Lead Content (µg/g)
40-PT1	1st Floor Living Room Wall (Rear Unit)	Blue/Grey		83
40-PT2	1st Floor Hallway Wall (Front Unit)	Beige	90	<5
40-PT3	2 nd Floor Hallway Wall	Grey		6
Notes:				

Notes:

□ **Bold** - Results exceed the lead-containing definable limit.

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Notes:

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Based on the analytical test results, no lead-containing paints were identified within the subject building at 40 Armstrong Street.

Table 7 – Summary of Lead Testing 961 Wellington Street West March 10, 2022											
Sample No.	Location	Colour	Lead-Containing Definable Limit (µg/g)	Lead Content (µg/g)							
961-PT1	1 st Floor Living Room Wall (Unit #961)	Brown		<5							
961-PT2	2 nd Floor Living Room Wall (Unit #963A)	Beige		<5							
961-PT3	2 nd Floor Kitchen Wall (Unit #963B)	Cream	90	<5							
961-PT4	961-PT4 3 rd Floor Kitchen Wall (Unit #963D) Beige <5										
961-PT5	Exterior Façade	Red		34							

Based on the analytical test results, no lead-containing paints were identified within the subject building at 961 Wellington Street West.

Bold - Results exceed the lead-containing definable limit.

967 Wellin	Table 8 – Summary of Lead Testing 967 Wellington Street West March 10, 2022									
Sample No.	Location	Colour	Lead-Containing Definable Limit (µg/g)	Lead Content (µg/g)						
967-PT1	1st Floor Living Room Wall	White	00	<5						
967-PT2 2 nd Floor Kitchen Wall Beige 90 2,170										
Notes: Bold - Results exceed the lead-containing definable limit.										

Based on the analytical test results, one lead-containing paint was identified within the subject building at 967 Wellington Street West.

2.9 Mercury

Mercury is prescribed as a designated substance under O.Reg 490/09 of the Occupational Health and Safety Act. Mercury may be present in thermostats, barometers, and hydrometers, along with other laboratory measuring devices. It may also be present in older lead-based paints and many types of light fixtures, including fluorescent tubes. Any mercury containing equipment must be disposed of according to O. Reg. 347, as amended by O. Reg. 558, if it is being decommissioned.

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2.10 Vinyl Chloride

Vinyl chloride is prescribed as a designated substance under O. Reg. 490/09 of the Occupational Health and Safety Act. Vinyl chloride is the parent compound of polyvinyl chloride (PVC) which is used in many consumer and industrial plastic products. It is also used extensively in the glass, rubber, and paper industries. Vinyl chloride may be present in stable form within pipes, plastics, vinyl's, and interior finishes such as paints and varnishes throughout the subject buildings. The health hazard associated with vinyl chloride comes primarily from the inhalation of fumes. In most applications, vinyl chloride is considered to be stable as long as it is not subjected to extreme heat. As a result, vinyl chloride is not expected to be a concern as long as materials are not subjected to extreme heat.

2.11 Silica

Silica is prescribed as a designated substance under O. Reg. 490/09 of the Occupational Health and Safety Act. Silica or silicon dioxide is the basic component of sand, quartz, and granite rock. Silica is expected to be present within any concrete and cement parging in the subject buildings. Typical handling procedures include wetting materials prior to, and during, any demolition activities that are required to control dust.

2.12 Ozone Depleting Substances (ODSs)

Potential sources of ODSs observed on-site include fire extinguishers, refrigerators, and air conditioning units. These appliances appeared to be in good condition at the time of the site inspection and should be regularly serviced by a licensed contractor or removed prior to any large-scale demolition activities.

2.13 Polychlorinated Biphenyls (PCBs)

No potential sources of PCBs were observed inside the subject buildings at the time of the visual inspection.

3.0 SURVEY SUMMARY AND RECOMMENDATIONS

Based on our survey, one asbestos containing materials (ACMs) was identified in the subject building at 40 Armstrong Street. The possible presence of limited quantities of acrylonitrile, arsenic, benzene, ethylene oxide, isocyanates, and silica in the aforementioned building materials do not pose a concern, provided precautionary measures are followed during any future demolition works.

Asbestos

Based on the observations made during the site inspection, combined with the analytical test results, the following ACM was identified within one of the subject buildings:

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40 Armstrong Street

□ Stipple Plaster; located on the ceiling throughout the first floor rear apartment unit of the subject building.

All ACMs must be removed from the subject building prior to being disturbed by any planned demolition activities. If any insulation materials are encountered in the wall or ceiling cavities that have not been identified in this report, we request that we be notified to allow for the testing of this material. In the event that any other suspected asbestos containing materials are discovered, all work is to cease until samples can be collected and analysed. Alternatively, these materials can be treated as asbestos containing and be disposed/managed of accordingly.

The removal, disturbance, or encapsulation of the identified ACMs throughout the subject building must be done in accordance with the procedures outlined in O. Reg. 278/05, and conducted by a contractor specialized in this type of work. A full copy of O. Reg. 278/05, made under the Occupational Health and Safety Act, can be found at http://www.elaws.gov.on.ca/html/regs/english/elaws_regs_050278_e.htm.

Lead

Based on the analytical test results, one lead-containing paint was identified within the second floor of the subject building at 967 Armstrong Street.

Lead may be present in the solder used for the copper plumbing system. This does not pose a concern to construction workers, provided it is not heated or pulverized. Appropriate procedures for working with lead on construction sites should be developed and implemented during any renovations/demolition or maintenance activities. Further information on precautionary measures can be obtained from the document entitled, "Guideline – Lead on Construction Projects", prepared by the Occupational Health and Safety Branch of the Ontario Ministry of Labour and dated April 2011.

Silica

Silica is expected to be present in various building materials, including concrete and cement parging. When potential silica containing materials (as identified in this report) are to be disturbed, precautions should be taken to minimize dust creation, such as wetting surfaces, as well as to protect workers, such as providing appropriate dust masks. Further information can be obtained from the document entitled, "Guideline – Silica on Construction Projects" prepared by the Occupational Health and Safety Branch of the Ontario Ministry of Labour and dated April 2011.

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4.0 STATEMENT OF LIMITATIONS

A designated substance survey was completed for the buildings located at 36-40 Armstrong Street and 961-967 Wellington Street West, in the City of Ottawa, Ontario. The results of the survey are based on our visual observations made at the time of the site inspection in conjunction with our analytical test results. Should any conditions be encountered at the subject properties that differ from our findings, we request that we be notified immediately in order to allow for a reassessment.

This report was prepared for the sole use of Magil Laurentian Realty Investments. Permission and notification from Magil Laurentian Realty Investments and Paterson Group will be required prior to the release of this report to any other party.

We trust that this submission will satisfy your present requirements. If you have any questions regarding this report, please contact our office.

Regards,

Paterson Group Inc.

N. Gullin

Nick Sullivan, B.Sc.

Eric Leveque, B.A.

Report Distribution:

- Magil Laurentian Realty Investments
- □ Paterson Group Inc.

Attachments:

■ Laboratory Certificates of Analysis



300 - 2319 St. Laurent Blvd Ottawa, ON, K1G 4J8 1-800-749-1947 www.paracellabs.com

Certificate of Analysis

Paterson Group Consulting Engineers

Client ID

154 Colonnade Road South

Nepean, ON K2E 7J5 Attn: Nick Sullivan Client PO: 33869

Project: PE4752

Custody:

Daracal ID

Report Date: 17-Mar-2022 Order Date: 11-Mar-2022

Order #: 2211611

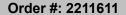
This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Paracel ID	Client ID
2211611-01	961-DWJC1
2211611-02	961-DWJC2
2211611-03	961-DWJC3
2211611-04	961-DWJC4
2211611-05	961-DWJC5
2211611-06	961-DWJC6
2211611-07	961-DWJC7
2211611-08	961-DWJC8
2211611-09	961-DWJC9
2211611-10	961-STUC1
2211611-11	961-STUC2
2211611-12	961-STUC3
2211611-13	961-INS1
2211611-14	961-INS2
2211611-15	961-INS3
2211611-16	967-PL1
2211611-17	967-PL2
2211611-18	967-PL3
2211611-19	967-PL4
2211611-20	967-PL5
2211611-21	967-PRG1
2211611-22	967-PRG2
2211611-23	967-PRG3
2211611-24	967-PRG4
2211611-25	967-PRG5
2211611-26	967-DWJC1

Approved By:

Heather S.H. McGregor, BSc

Laboratory Director - Microbiology



Report Date: 17-Mar-2022

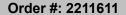


Certificate of Analysis

2211611-70

40-DWJC3

Client: Paterson Group Consulting Engineers Order Date: 11-Mar-2022 Client PO: 33869 Project Description: PE4752 2211611-27 967-DWJC2 2211611-28 967-DWJC3 2211611-29 967-DWJC4 2211611-30 967-DWJC5 2211611-31 967-LIN1 2211611-32 967-LIN2 2211611-33 967-LIN3 2211611-34 967-LIN4 2211611-35 967-LIN5 2211611-36 967-LIN6 2211611-37 967-VFT1 2211611-38 967-VFT2 2211611-39 967-VFT3 2211611-40 967-VFT4 2211611-41 967-VFT5 2211611-42 967-VFT6 2211611-43 36-DWJC1 2211611-44 36-DWJC2 2211611-45 36-DWJC3 2211611-46 36-DWJC4 2211611-47 36-DWJC5 2211611-48 36-DWJC6 2211611-49 36-DWJC7 2211611-50 36-DWJC8 2211611-51 36-DWJC9 2211611-52 36-PL1 2211611-53 36-PL2 2211611-54 36-PL3 2211611-55 36-PL4 2211611-56 36-PL5 2211611-57 36-PRG1 2211611-58 36-PRG2 2211611-59 36-PRG3 2211611-60 36-PRG4 2211611-61 36-PRG5 2211611-62 36-VFT1 36-VFT2 2211611-63 2211611-64 36-VFT3 2211611-65 36-INS1 2211611-66 36-INS2 2211611-67 36-INS3 2211611-68 40-DWJC1 2211611-69 40-DWJC2





Report Date: 17-Mar-2022 Certificate of Analysis Client: Paterson Group Consulting Engineers Order Date: 11-Mar-2022 Client PO: 33869 **Project Description: PE4752** 2211611-71 40-DWJC4 2211611-72 40-DWJC5 2211611-73 40-DWJC6 2211611-74 40-DWJC7 2211611-75 40-DWJC8 2211611-76 40-DWJC9 2211611-77 40-STIP1 2211611-78 40-STIP2 2211611-79 40-STIP3 2211611-80 40-LIN1 2211611-81 40-LIN2 2211611-82 40-LIN3 2211611-83 40-VFT1 2211611-84 40-VFT2 2211611-85 40-VFT3 2211611-86 40-VFT4 2211611-87 40-VFT5 2211611-88 40-VFT6 2211611-89 40-INS1 2211611-90 40-INS2 2211611-91 40-INS3 2211611-92 40-INS4 2211611-93 40-INS5 2211611-94 40-INS6



Client: Paterson Group Consulting Engineers

Client PO: 33869

Report Date: 17-Mar-2022 Order Date: 11-Mar-2022 Project Description: PE4752

Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content						
2211611-01	10-Mar-22	White	Drywall Joint Compound	i No	Client ID: 961-DWJC1							
					Non-Fibers	100						
2211611-02	10-Mar-22	White	Drywall Joint Compound	i No	Client ID: 961-DWJC2							
					Non-Fibers	100						
2211611-03	10-Mar-22	White	Drywall Joint Compound	i No	Client ID: 961-DWJC3							
					Non-Fibers	100						
2211611-04	10-Mar-22	White	Drywall Joint Compound	i No	Client ID: 961-DWJC4							
					Non-Fibers	100						
2211611-05	10-Mar-22	White	Drywall Joint Compound	i No	Client ID: 961-DWJC5							
						Non-Fibers	100					
2211611-06	211611-06 10-Mar-22 White	White	Drywall Joint Compound	i No	Client ID: 961-DWJC6							
				Non-Fibers	100							
2211611-07	-07 10-Mar-22	10-Mar-22	10-Mar-22	10-Mar-22	10-Mar-22	10-Mar-22	10-Mar-22	10-Mar-22 White Drywall	Drywall Joint Compound	i No	Client ID: 961-DWJC7	
					Non-Fibers	100						
2211611-08	10-Mar-22	White	Drywall Joint Compound	d No	Client ID: 961-DWJC8							
					Non-Fibers	100						
2211611-09	10-Mar-22	White	Drywall Joint Compound	i No	Client ID: 961-DWJC9							
					Non-Fibers	100						
2211611-10	10-Mar-22	Grey	Stucco	No	Client ID: 961-STUC1							
					Non-Fibers	100						
2211611-11	10-Mar-22	Grey	Stucco	No	Client ID: 961-STUC2							
					Non-Fibers	100						
2211611-12	10-Mar-22	Grey	Stucco	No	Client ID: 961-STUC3							
					Non-Fibers	100						



Client: Paterson Group Consulting Engineers

Client PO: 33869

Report Date: 17-Mar-2022 Order Date: 11-Mar-2022 Project Description: PE4752

Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content	
2211611-13	10-Mar-22	Pink	Insulation	No	Client ID: 961-INS1		
					MMVF	95	
					Non-Fibers	5	
2211611-14	10-Mar-22	Pink	Insulation	No	Client ID: 961-INS2		
					MMVF	95	
					Non-Fibers	5	
2211611-15	10-Mar-22	Pink	Insulation	No	Client ID: 961-INS3		
					MMVF	95	
					Non-Fibers	5	
2211611-16	2211611-16 10-Mar-22	White	Plaster Skim Coat	No	Client ID: 967-PL1		
					Non-Fibers	100	
2211611-17	211611-17 10-Mar-22 White Plas	11-17 10-Mar-22 White Plas	Plaster Skim Coat	Coat No	Client ID: 967-PL2	[Z-01]	
				Non-Fibers	100		
2211611-18	11-18 10-Mar-22	10-Mar-22	Grey	Plaster Skim Coat	No	Client ID: 967-PL3	
					Non-Fibers	100	
2211611-19	10-Mar-22	Grey	Plaster Skim Coat	No	Client ID: 967-PL4		
					Non-Fibers	100	
2211611-20	10-Mar-22	Grey	Plaster Skim Coat	No	Client ID: 967-PL5		
					Non-Fibers	100	
2211611-21	10-Mar-22	Grey	Parging Cement	No	Client ID: 967-PRG1		
					Non-Fibers	100	
2211611-22	10-Mar-22	Grey	Parging Cement	No	Client ID: 967-PRG2		
					Non-Fibers	100	
2211611-23	10-Mar-22	Grey	Parging Cement	No	Client ID: 967-PRG3		
				Non-Fibers	100		



Client: Paterson Group Consulting Engineers

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Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
2211611-24	10-Mar-22	Grey	Parging Cement	No	Client ID: 967-PRG4	
					Non-Fibers	100
2211611-25	10-Mar-22	Grey	Parging Cement	No	Client ID: 967-PRG5	
					Non-Fibers	100
2211611-26	10-Mar-22	White	Drywall Joint Compound	l No	Client ID: 967-DWJC1	
					Non-Fibers	100
2211611-27	10-Mar-22	White	Drywall Joint Compound	l No	Client ID: 967-DWJC2	
					Non-Fibers	100
2211611-28	10-Mar-22	White	Drywall Joint Compound	l No	Client ID: 967-DWJC3	
					Non-Fibers	100
2211611-29 10-Mar-22	10-Mar-22	White	Drywall Joint Compound	l No	Client ID: 967-DWJC4	
				Non-Fibers	100	
2211611-30	10-Mar-22 White	Drywall Joint Compound	l No	Client ID: 967-DWJC5		
					Non-Fibers	100
2211611-31	10-Mar-22	Brown	Linoleum	No	Client ID: 967-LIN1	
					MMVF	5
					Non-Fibers	95
2211611-32	10-Mar-22	Brown	Linoleum	No	Client ID: 967-LIN2	
					MMVF	5
					Non-Fibers	95
2211611-33	10-Mar-22	Brown	Linoleum	No	Client ID: 967-LIN3	
					MMVF	5
					Non-Fibers	95



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Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
2211611-34	10-Mar-22	Beige	Linoleum	No	Client ID: 967-LIN4	
					Cellulose	10
					MMVF	5
					Non-Fibers	85
2211611-35	10-Mar-22	Beige	Linoleum	No	Client ID: 967-LIN5	
					Cellulose	10
					MMVF	5
					Non-Fibers	85
2211611-36	10-Mar-22	Beige	Linoleum	No	Client ID: 967-LIN6	
					Cellulose	10
					MMVF	5
					Non-Fibers	85
2211611-37 10-Mar-22	Beige	Vinyl Floor Tile	No	Client ID: 967-VFT1		
					Non-Fibers	100
2211611-38	10-Mar-22	Beige	Vinyl Floor Tile	No	Client ID: 967-VFT2	
					Non-Fibers	100
2211611-39	10-Mar-22	Beige	Vinyl Floor Tile	No	Client ID: 967-VFT3	
					Non-Fibers	100
2211611-40	10-Mar-22	Grey	Vinyl Floor Tile	No	Client ID: 967-VFT4	
					Non-Fibers	100
2211611-41	10-Mar-22	Grey	Vinyl Floor Tile	No	Client ID: 967-VFT5	
					Non-Fibers	100
2211611-42	10-Mar-22	Grey	Vinyl Floor Tile	No	Client ID: 967-VFT6	
					Non-Fibers	100
2211611-43	10-Mar-22	White	Drywall Joint Compound	l No	Client ID: 36-DWJC1	
					Non-Fibers	100



Client: Paterson Group Consulting Engineers

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Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
2211611-44	10-Mar-22	White	Drywall Joint Compound	No	Client ID: 36-DWJC2	
					Non-Fibers	100
2211611-45	10-Mar-22	White	Drywall Joint Compound	No	Client ID: 36-DWJC3	
					Non-Fibers	100
2211611-46	10-Mar-22	White	Drywall Joint Compound	No	Client ID: 36-DWJC4	
					Non-Fibers	100
2211611-47	10-Mar-22	White	Drywall Joint Compound	No	Client ID: 36-DWJC5	
					Non-Fibers	100
2211611-48	10-Mar-22	White	Drywall Joint Compound	No	Client ID: 36-DWJC6	
					Non-Fibers	100
2211611-49	10-Mar-22	White	Drywall Joint Compound	No	Client ID: 36-DWJC7	
					Non-Fibers	100
2211611-50	10-Mar-22 White	White Drywall Joint Compound	l No	Client ID: 36-DWJC8		
					Non-Fibers	100
2211611-51	10-Mar-22	White	Drywall Joint Compound	No	Client ID: 36-DWJC9	
					Non-Fibers	100
2211611-52	10-Mar-22	White	Plaster Skim Coat	No	Client ID: 36-PL1	
					Non-Fibers	100
2211611-53	10-Mar-22	White	Plaster Skim Coat	No	Client ID: 36-PL2	
					Non-Fibers	100
2211611-54	10-Mar-22	White	Plaster Skim Coat	No	Client ID: 36-PL3	
					Non-Fibers	100
2211611-55	10-Mar-22	White	Plaster Skim Coat	No	Client ID: 36-PL4	
				Non-Fibers	100	



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Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content					
2211611-56	10-Mar-22	White	Plaster Skim Coat	No	Client ID: 36-PL5						
					Non-Fibers	100					
2211611-57	10-Mar-22	Grey	Parging Cement	No	Client ID: 36-PRG1						
					Non-Fibers	100					
2211611-58	10-Mar-22	Grey	Parging Cement	No	Client ID: 36-PRG2						
					Non-Fibers	100					
2211611-59	10-Mar-22	Grey	Parging Cement	No	Client ID: 36-PRG3						
					Non-Fibers	100					
2211611-60	2211611-60 10-Mar-22	Grey	Parging Cement	No	Client ID: 36-PRG4						
					Non-Fibers	100					
2211611-61	2211611-61 10-Mar-22	1-61 10-Mar-22	10-Mar-22	10-Mar-22	10-Mar-22	10-Mar-22	1 10-Mar-22	1-61 10-Mar-22	10-Mar-22 Grey Parging Cement No Client I	Client ID: 36-PRG5	
					Non-Fibers	100					
2211611-62	-62 10-Mar-22	10-Mar-22 Brown	Vinyl Floor Tile No	Client ID: 36-VFT1							
					Non-Fibers	100					
2211611-63	63 10-Mar-22 Brown Vinyl	Vinyl Floor Tile	No	Client ID: 36-VFT2							
					Non-Fibers	100					
2211611-64	10-Mar-22	Brown	Vinyl Floor Tile	No	Client ID: 36-VFT3						
					Non-Fibers	100					
2211611-65	10-Mar-22	Yellow	Insulation	No	Client ID: 36-INS1						
					MMVF	95					
					Non-Fibers	5					
2211611-66	10-Mar-22	Yellow	Insulation	No	Client ID: 36-INS2						
					MMVF	95					
				Non-Fibers	5						



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Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content	
2211611-67	10-Mar-22	Yellow	Insulation	No	Client ID: 36-INS3		
					MMVF	95	
					Non-Fibers	5	
2211611-68	10-Mar-22	White	Drywall Joint Compound	d No	Client ID: 40-DWJC1		
					Non-Fibers	100	
2211611-69	10-Mar-22	White	Drywall Joint Compound	d No	Client ID: 40-DWJC2		
					Non-Fibers	100	
2211611-70	10-Mar-22	White	Drywall Joint Compound	d No	Client ID: 40-DWJC3		
					Non-Fibers	100	
2211611-71	10-Mar-22	10-Mar-22	71 10-Mar-22 Off-white Drywall	Drywall Joint Compound	npound No	Client ID: 40-DWJC4	
					Non-Fibers	100	
2211611-72	211611-72 10-Mar-22	1-72 10-Mar-22 Of	10-Mar-22 Off-white Drywall Joint C	Drywall Joint Compound	ind No	Client ID: 40-DWJC5	
					Non-Fibers	100	
2211611-73	10-Mar-22 Off-white	Off-white	Off-white Drywall Joint Compound	d No	Client ID: 40-DWJC6		
					Non-Fibers	100	
2211611-74	10-Mar-22	Off-white	Drywall Joint Compound	d No	Client ID: 40-DWJC7		
					Non-Fibers	100	
2211611-75	10-Mar-22	Off-white	Drywall Joint Compound	d No	Client ID: 40-DWJC8		
					Non-Fibers	100	
2211611-76	10-Mar-22	White	Drywall Joint Compound	d No	Client ID: 40-DWJC9		
					Non-Fibers	100	
2211611-77	10-Mar-22	Beige	Stipple/Joint Compound	Yes	Client ID: 40-STIP1	[Z-01a]	
					Chrysotile	1	
					Non-Fibers	99	



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Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
2211611-78	10-Mar-22	Beige	Stipple		Client ID: 40-STIP2	
					not analyzed, positive stop	
2211611-79	10-Mar-22	Beige	Stipple		Client ID: 40-STIP3	
					not analyzed, positive stop	
2211611-80	10-Mar-22	Beige	Linoleum	No	Client ID: 40-LIN1	
					Cellulose	15
					MMVF	5
					Non-Fibers	80
2211611-81	10-Mar-22	Beige	Linoleum	No	Client ID: 40-LIN2	
					Cellulose	15
					MMVF	5
					Non-Fibers	80
2211611-82	211611-82 10-Mar-22	Beige	Linoleum	No	Client ID: 40-LIN3	
					Cellulose	15
			MMVF	5		
					Non-Fibers	80
2211611-83	10-Mar-22	Beige	Vinyl Floor Tile	No	Client ID: 40-VFT1	
					MMVF	1
					Non-Fibers	98
					Other fibers	1
2211611-84	10-Mar-22	Beige	Vinyl Floor Tile	No	Client ID: 40-VFT2	
					MMVF	1
					Non-Fibers	98
					Other fibers	1
2211611-85	10-Mar-22	Beige	Vinyl Floor Tile	No	Client ID: 40-VFT3	
					MMVF	1
					Non-Fibers	98
					Other fibers	1



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Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
2211611-86	10-Mar-22	Blue	Vinyl Floor Tile	No	Client ID: 40-VFT4	
					MMVF	1
					Non-Fibers	98
					Other fibers	1
2211611-87	10-Mar-22	Blue	Vinyl Floor Tile	No	Client ID: 40-VFT5	
					MMVF	1
					Non-Fibers	98
					Other fibers	1
2211611-88	10-Mar-22	Blue	Vinyl Floor Tile	No	Client ID: 40-VFT6	
					MMVF	1
					Non-Fibers	98
					Other fibers	1
2211611-89	10-Mar-22	10-Mar-22 Yellow	Insulation	No	Client ID: 40-INS1	
					MMVF	95
					Non-Fibers	5
2211611-90	10-Mar-22	Yellow	Insulation	No	Client ID: 40-INS2	
					MMVF	95
					Non-Fibers	5
2211611-91	10-Mar-22	Yellow	Insulation	No	Client ID: 40-INS3	•
					MMVF	95
					Non-Fibers	5
2211611-92	10-Mar-22	Pink	Insulation	No	Client ID: 40-INS4	
					MMVF	95
					Non-Fibers	5
2211611-93	10-Mar-22	Pink	Insulation	No	Client ID: 40-INS5	
					MMVF	95
					Non-Fibers	5

Order #: 2211611

Report Date: 17-Mar-2022

Order Date: 11-Mar-2022

Project Description: PE4752

Certificate of Analysis

Client: Paterson Group Consulting Engineers

Client PO: 33869

Asbestos, PLM Visual Estimation **MDL - 0.5%**

Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
2211611-94	10-Mar-22	Pink	Insulation	No	Client ID: 40-INS6	
					MMVF	95
					Non-Fibers	5

^{*} MMVF: Man Made Vitreous Fibers: Fiberglass, Mineral Wool, Rockwool, Glasswool

Analysis Summary Table

Analysis	Method Reference/Description	Lab Location	Lab Accreditation	Analysis Date
Asbestos, PLM Visual Estimation	AppE to SubE of 40CFR Part753 and EPA/600/R-93/116	1 - Mississauga	CALA 3762	17-Mar-22

Mississauga Lab: 15 - 6800 Kitimat Rd Mississauga, Ontario, L5N 5M1

Qualifier Notes

Sample Qualifiers:

Z-01: Sample appears to be drywall joint compound.

Z-01a: Stipple and joint compound are inseparable.

Work Order Revisions | Comments

None

^{**} Analytes in bold indicate asbestos mineral content.

OPARACEL T R I III	Pa	rac	el ID: 2	211	611	Chain of Custody (Lab Use Only) 1-1947 Laurent Blvd. 2-1947	
Client Name: Paterson Group Inc.	Project	Referen	nce: PE4752			Page 1. of 8.	
Contact Name: Nick Sullivan	Quote #		PE4/57			Turnaround Time:	
Address	`					Immediate 1 Day 4 Hour 2 Day	
154 Colonnade Road South	PO #:		33869			□ 4 Hour □ 2 Day □ 8 Hour □ 3 Day	
Ottawa, Ontario	Email A	Address	:			■ Strout ■ 5 Day	
Telephone: 613-226-7381			nsulliva	n@pate	ersong	group.ca Date Required:	
ASBES	TO	88	MOL	DA	NA	ALYSIS	5500
Matrix: ☐ Air ☑ Bulk ☐ Tape Lift ☐ Swab ☐ Other			tory Gu				
Analyses: ☐ Microscopic Mold ☐ Culturable Mold ☐ Bacteria GR.							
Paracel Order Number:			111 113003				_
2211611			Air			. Asbestos - Bulk	
Sample ID	Samp	-	Volume (L)	Anal Requ		(10 . 10 . 11	sitive top?
1 961-DWSC1	Mar 10	/ 22	(-)	PL	_		
2 961 - DW3C 7						2.100.11	
3 961-DW3C3							
4 961-DW3C4							
5 961 - DW3C5	_	4					
6 961-DW3C6 7 961-DW3C7	_	_					
8 461 - DM2c8	-	+					
9 961-DWZC9	-	+			_		
10 961- STUC	-	+		-	\dashv	V L	
11 961- STUC Z	_	+	,	-	\dashv	Stucco	<u>X</u>
12 961- STUC 3	V	+		1	,	<u> </u>	X X X
* If left blank, all distinct materials identified in the samples will be analyzed and reported s		ly as pe	er EPA 600/			dditional charges will apply.	7
Comments: Relinquished By (Sign): Received at Depot:		, [Received			Method of Delivery: Method of Delivery: Verified By:	OSEC.

Received at Lab:

Verified By:

Date/Time:

Relinquished By (Print): Nick Date/Time: March 11, 2

Paracel ID: 2211611

Paracel ID: 2211611



Chain of Custody (Lab Use Only)

Client Name: Paterson Group Inc.	Project Refe	rence: PE475	20		Page Z. of 8	
Contact Name: Nick Sullivan	Quote #:	PE4/0	12		Turnaround Tin	
Address					Immediate 1	
154 Colonnade Road South	PO #:	33869			_	Day
Ottawa, Ontario	Email Addre	288;			■ 8 Hour ■ 3	Day
Telephone: 613-226-7381		nsulliva	an@patersong	group.ca		guiai
ASRE	STOS &				Date Required:	
Matrix: □ Air ☑ Bulk □ Tape Lift □ Swab □ Other			ideline:		Day Doi	
Analyses: ☐ Microscopic Mold ☐ Culturable Mold ☐ Bacteria C	- 0				SK Other:	
Paracel Order Number:	KAM LI	CM Asbes	tos 💌 PL	M Asbestos	bestos TEM Asbestos	
2211611		Air		A	sbestos - Bulk	
2211011	Sampling		Analysis	Identify Distinct Buildin	g Materials to Be Analyzed	Positive
Sample ID	Date	(L)	Required	(if not specified, all material	ls identified will be analyzed) *	Stop?
1961-INS1 2961-INSZ	Mar 10 / 22		PLM	Insulati	100	X
961-INS3	-		1			N N
967 - PLI				¥		
967- PLZ				Plaster S	kin Cont	
967 - PL3	+					
967-PL4						
967- PLS				N.		
967-PRG1				(0	
967-7262				Cement	Pasis	
967-PRG3						
967 - PRG4	$\vdash \forall$		1			
f left blank, all distinct materials identified in the samples will be analyzed and reporte	d separately as	per EPA 600/	R-93/116. Ad	ditional charges will apply		
linquished By (Sign): Received at Depot:	CUSE	Pagaivad		ditional charges will apply.	Method of Delivery:	bucin

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Paracel ID: 2211611 Chain of Custody (Lab Use Only) OPARACEL | TE IIIIIIIIIIII Laurent Blvd. ario K1G 4J8 -1947 Jaracellabs.com LABORATORIES LTD Page 3 of 8. Project Reference: PE4752 Client Name: **Turnaround Time:** Paterson Group Inc. 1 Day Contact Name: Nick Sullivan Quote #: Immediate 2 Day 4 Hour PO #: Address: 33869 154 Colonnade Road South ☐ 3 Day ■ 8 Hour Email Address: Regular Ottawa, Ontario Telephone: nsullivan@patersongroup.ca 613-226-7381 Date Required: ASBESTOS & MOLD ANALYSIS Regulatory Guideline: ☑ ON ☐ QC ☐ AB ☐ SK ☐ Other: Matrix: ☐ Air ☑ Bulk ☐ Tape Lift ☐ Swab ☐ Other Analyses: ☐ Microscopic Mold ☐ Culturable Mold ☐ Bacteria GRAM ☐ PCM Asbestos ☐ PLM Asbestos ☐ Chatfield Asbestos ☐ TEM Asbestos Paracel Order Number: Asbestos - Bulk 22/16/14 Air Identify Distinct Building Materials to Be Analyzed Positive Volume Analysis Sampling Stop? (if not specified, all materials identified will be analyzed) * Required Date (L) Sample ID Mar 10 / 22 PLM 1 967-PRG5 X Brown inoleum X X Beise X inoleum X LIN5 X

* If left blank, all distinct materials identified in the samples will be analyzed and reported separately as per EPA 600/R-93/116. Additional charges will apply. Comments:

Method of Delivery:

Verified By Received at Lab Received at Depot: Relinquished By (Sign): Date/Time: 11/03/22 19/20 Date/Time: Mar Relinquished By (Print): Nok Lar Date/Time: Date/Time: March

Paracel ID: 2211611 Chain of Custody (Lab Use Only) Laurent Blvd. ario K1G 4J8 -1947 LABORATORIES LTD. aracellabs.com Page 4. of 8 Client Name: Project Reference: PE4752 Paterson Group Inc. **Turnaround Time:** Contact Name: Nick Sullivan Ouote #: ☐ Immediate ☐ 1 Day Address: 4 Hour ☐ 2 Day 154 Colonnade Road South 33869 ■ 8 Hour ☐ 3 Day Email Address: Ottawa, Ontario Regular Telephone: 613-226-7381 nsullivan@patersongroup.ca Date Required: **ASBESTOS & MOLD ANALYSIS** Matrix: ☐ Air 🗵 Bulk ☐ Tape Lift ☐ Swab ☐ Other Regulatory Guideline: ☑ ON ☐ QC ☐ AB SK Other: Analyses: ☐ Microscopic Mold ☐ Culturable Mold ☐ Bacteria GRAM ☐ PCM Asbestos ☐ PLM Asbestos ☐ Chatfield Asbestos ☐ TEM Asbestos Paracel Order Number: Asbestos - Bulk 2211611 Air Identify Distinct Building Materials to Be Analyzed Positive Sampling Volume Analysis Stop? Sample ID (if not specified, all materials identified will be analyzed) * Date Required Mar 10 / 22 PLM X X X X X X * If left blank, all distinct materials identified in the samples will be analyzed and reported separately as per EPA 600/R-93/116. Additional charges will apply. Comments:

Verified By:

Relinquished By (Sign):

Relinquished By (Print):

Received at Depot:

OPARACEL TI RI WI			2211611		Chain of Custod (Lab Use Only)	
Client Name: Paterson Croup Inc.	Project Refer	ence: PE4752			Page 5. of 8.	
Paterson Group Inc.	Ouote #:	PE4752			Turnaround Time	
Contact Name: Nick Sullivan	Ç					Day Day
Address: 154 Colonnade Road South	PO #:	33869			□ 8 Hour □ 3 I	
Ottawa, Ontario	Email Addre	ss:			■ Re	
Telephone: 613-226-7381	nsullivan@patersongroup.ca Date Required:				Date Required:	
ASBESTOS & MOLD ANALYSIS						
Matrix: ☐ Air ☑ Bulk ☐ Tape Lift ☐ Swab ☐ Other	Regul	atory Gu	ideline: [ON QC AB	SK Other:	
Analyses: ☐ Microscopic Mold ☐ Culturable Mold ☐ Bacteria GR	AM 🗖 P	CM Asbest	tos 🗷 PL	M Asbestos	estos TEM Asbestos	
Paracel Order Number:				Ash	oestos - Bulk	
2211611	Sampling Date	Air Volume (L)		Identify Distinct Building	Materials to Be Analyzed	Positive
Sample ID			Analysis Required	(if not specified, all materials	identified will be analyzed) *	Stop?
1 36-DWSC7	Mar 10 / 22		PLM	Drywall Join	nt Compound	
2 36-DW JC8				,	,	
3 36-DW3C9				0)	V	
4 36-PLI				Plaster Skir	Cont	
5 36-PLZ 6 36-PL3						
7 36-PL4						H
8 36-PLS				1		
9 36-PRG1				Cenent Par	9:0)	
10 36-P2G2					9.0	
11 36- PRG3						
12 36 - PRG4			\bigvee	V	/	
* If left blank, all distinct materials identified in the samples will be analyzed and reported Comments:	separately as	per EPA 600	/R-93/116. Ad	ditional charges will apply.	Method of Delivery:	1

Relinquished By (Sign):

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Received at Depot:

Received at Lab.

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Received at Lab.

Date/Time: March 11, 2027

Date/Time: March 11, 2027

Date/Time: March 11, 2027

Date/Time: March 11, 2027

PARACEL TRU RES LABORATORIES LTD. REL	Pa		22116		Chain of Custody (Lab Use Only)	y
					Page 6. of 8.	
Client Name: Paterson Group Inc.	Project Refere	nce: PE4752	?		Turnaround Time	e:
Contact Name: Nick Sullivan	Quote #:				☐ Immediate ☐ 1 I	
Address: 154 Colonnade Road South	PO #:	33869			□ 4 Hour □ 2 I □ 8 Hour □ 3 I	*
Ottawa, Ontario	Email Addres	s:			⊠ Re	•
Telephone: 613-226-7381		nsulliva	n@patersongr	roup.ca	Date Required:	
	ESTOS &	MOI	DANA	LVSIS		
Matrix: ☐ Air ☑ Bulk ☐ Tape Lift ☐ Swab ☐ Oth Analyses: ☐ Microscopic Mold ☐ Culturable Mold ☐ Bacteria		atory Gu CM Asbes	ideline: E tos ⊠PL	☑ ON ☐ QC ☐ AB M Asbestos ☐ Chatfield Asb	SK Other:	
Paracel Order Number:				As	bestos - Bulk	
Counts ID	Sampling	Air Volume (L)	Analysis Required		Materials to Be Analyzed identified will be analyzed) *	Positive Stop?
Sample ID	Mar 10 / 22	(13)	PLM	Cement	Parsing	
1 36-PRGS 2 36-VFT1				Viny Floor	Tile Brown	×
3 36 - VET2				1	,	X
4 36-VFT3				V		\
5 36-INS				Insulation	0	
6 36 - INS 2						N N
7 36 - INS3						X
8 40 - DWJCI				Drywall Join	+ Compound	
* 14() * D003e1				1		1 1 1
9 40-00052						

12 40 - 06305					
* If left blank, all distinct materials identified in the sa	amples will be analyzed and reported separately	y as per EPA 600/R-93/116. A	dditional charges will apply.	lateria.	
Comments:				Metho	od of Delivery:
Comments				1	ACRUSE LOURS
				//	THE COURT
Relinquished By (Sign):	Received at Depot:	Received at Lab:	V	erified By:	
N/ Solland	M. PLAUSE	-			
D. Varanick ad Bur (Print) A / / C // a co	72012				1/20
Relinquished By (Print): Nick Sullivan	11/03/72 11	Date/Time: (W)	r11/22	Date/Time: Ma	V 11/22

10:00

15:16



Paracel ID: 2211611

23330	Chain of Custo
	(Lab Use Only)
113733	

	Project Refere	nce: pe 1750		Page 7. of Turnaround	<u> </u>
Client Name: Paterson Group Inc.		PE4752		☐ Immediate	
Contact Name: Nick Sullivan	Quote #:			□ 4 Hour	
Address: 154 Colonnade Road South	PO #:	33869		□ 8 Hour	
Ottawa, Ontario	Email Address	51		×	Regular
Telephone: 613-226-7381		nsulliva	n@patersong	roup.ca Date Required:	
	ASBESTOS &	MOL	D ANA	LYSIS	
			ideline: E		
Analyses: ☐ Microscopic Mold ☐ Culturable Mold ☐ Ba				M Asbestos	
Paracel Order Number:				Asbestos - Bulk	
2211/211		Air		Identify Distinct Building Materials to Be Analyzed	Positive
SONGI	Sampling	Volume (L)	Analysis Required	(if not specified, all materials identified will be analyze	d) * Stop?
Sample ID	Date Mar 10 / 22	(L)	PLM	Drywal Joint Compound	
1 40-DW3C6	111111111111111111111111111111111111111		1	1 South South South State of the State of th	
2 40-DW3C7					
3 40-DWJC8				V	
4 40-00369				Stipple Plaster	X
5 40 - STIP1					×
6 40-57182				V	
7 40 - STIP3				Linoleum	N N
8 40 - LINI					
9 HO-LIN2				V	□
10 40-LIN3				Viryl Floor Tile (Beize)	
11 40 - VFT 1	V		V	1	X
12 40 - VFT 2 * If left blank, all distinct materials identified in the samples will be analyzed	and reported separately a	per EPA 60	0/R-93/116. A	dditional charges will apply.	
* If left blank, all distinct materials identified in the samples will be analyzed Comments:	and reported repairing			Method of Delivery:	Caran
Relinquished By (Sign). Received at Depot:	1-	Receive	d at Lab:	Verified By:	
N. Miran					

OPARACEL TRL RES REL	Par	acel ID:	221161	urent Blvd. K1G 4J8 . 500-749-1947 e: paracel@paracellabs.com	lly)
Client Name: Paterson Group Inc.	Project Refere	ence: PE4752		Turnaround	
Contact Name: Nick Sullivan	Quote #:			☐ Immediate ☐	
Address	PO #:	33869		□ 4 Hour □	2 Day
154 Coloniade Road South	Email Address				3 Day
Ottawa, Ontario					Regular
Telephone: 613-226-7381			n@patersong	Date Required.	
ASBES				ALYSIS	
Matrix: ☐ Air 図 Bulk ☐ Tape Lift ☐ Swab ☐ Other	Regula	atory Gu	ideline: [
Analyses: ☐ Microscopic Mold ☐ Culturable Mold ☐ Bacteria GR	AM P	CM Asbest	tos 🗷 PL	M Asbestos	
Paracel Order Number:				Asbestos - Bulk	
2211611	Sampling Date	Air Volume (L)	Analysis Required	Identify Distinct Building Materials to Be Analyzed (if not specified, all materials identified will be analyzed	
Sample ID 1 40 - VFT3	Mar 10 / 22	(L)	PLM	Viryl Floor Tile (Beise)	×
2 40- VFT 4		,	7 4111	Viry Floor Tile (Rive)	N N
3 40 - VETS					
4 40-VET6				7	
5 40 - INS 1				Insulation (yellow)	■ ×
6 40- INS2				1	<u>⊠</u>
7 40 - INSS 8 40 - INSS				Insulation (Pink)	□□□
9 40 - INSS				1 11.11.11	Ø
10 40 - INS6					Ø
11				N. T. C.	
12					
* If left blank, all distinct materials identified in the samples will be analyzed and reported	separately as	per EPA 600	/R-93/116. Ac	dditional charges will apply. Method of Delivery:	
Comments:				I PLACE	laner
Relinquished By (Sign): Received at Depot:	OUSE	Received	l at Lab:	Verified By:	_

Date/Time: 11/03/22 1:1/2 Date/Time: Mar 11/22 Date/Time: Mar 11/22

10'no

15:11

Relinquished By (Print): Nick Sullivan
Date/Time: March 11, 2022



300 - 2319 St. Laurent Blvd Ottawa, ON, K1G 4J8 1-800-749-1947 www.paracellabs.com

Certificate of Analysis

Paterson Group Consulting Engineers

154 Colonnade Road South Nepean, ON K2E 7J5

Attn: Nick Sullivan

Client PO: 33868 Project: PE4752

Custody: 137018,137019

Report Date: 17-Mar-2022 Order Date: 11-Mar-2022

Order #: 2211605

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Paracel ID	Client ID
2211605-01	961-PT1
2211605-02	961-PT2
2211605-03	961-PT3
2211605-04	961-PT4
2211605-05	961-PT5
2211605-06	967-PT1
2211605-07	967-PT2
2211605-08	36-PT1
2211605-09	36-PT2
2211605-10	36-PT3
2211605-11	36-PT4
2211605-12	40-PT1
2211605-13	40-PT2
2211605-14	40-PT3

Approved By:



Mark Foto, M.Sc. Lab Supervisor



Order #: 2211605

Report Date: 17-Mar-2022 Order Date: 11-Mar-2022

Project Description: PE4752

Client PO: 33868

Client: Paterson Group Consulting Engineers

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Metals, ICP-MS	EPA 6020 - Digestion - ICP-MS	16-Mar-22	17-Mar-22

Qualifier Notes:

None

Sample Data Revisions

None

Work Order Revisions/Comments:

None

Other Report Notes:

n/a: not applicable ND: Not Detected

MDL: Method Detection Limit

Source Result: Data used as source for matrix and duplicate samples

%REC: Percent recovery.

RPD: Relative percent difference.

Order #: 2211605

Report Date: 17-Mar-2022 Order Date: 11-Mar-2022

 Client:
 Paterson Group Consulting Engineers
 Order Date: 11-Mar-2022

 Client PO:
 33868
 Project Description: PE4752

Sample Results

Lead Matrix: Pair										
Paracel ID	Client ID	Sample Date	Units	MDL	Result					
2211605-01	961-PT1	10-Mar-22	ug/g	5	<5					
2211605-02	961-PT2	10-Mar-22	ug/g	5	<5					
2211605-03	961-PT3	10-Mar-22	ug/g	5	<5					
2211605-04	961-PT4	10-Mar-22	ug/g	5	<5					
2211605-05	961-PT5	10-Mar-22	ug/g	5	34					
2211605-06	967-PT1	10-Mar-22	ug/g	5	<5					
2211605-07	967-PT2	10-Mar-22	ug/g	5	2170					
2211605-08	36-PT1	10-Mar-22	ug/g	5	<5					
2211605-09	36-PT2	10-Mar-22	ug/g	5	<5					
2211605-10	36-PT3	10-Mar-22	ug/g	5	<5					
2211605-11	36-PT4	10-Mar-22	ug/g	5	<5					
2211605-12	40-PT1	10-Mar-22	ug/g	5	83					
2211605-13	40-PT2	10-Mar-22	ug/g	5	<5					
2211605-14	40-PT3	10-Mar-22	ug/g	5	6					

Laboratory Internal QA/QC

		Reporting		Source		%REC		RPD	
Analyte	Result	Limit	Units	Result	%REC	Limit	RPD	Limit	Notes
Matrix Blank									
Lead	ND	5	ug/g						
Matrix Duplicate									
Lead	ND	5	ug/g	ND			NC	50	
Matrix Spike									
Lead	1160	5	ug/g	ND	92.9	70-130			



Paracel ID: 2211605



Blvd. 3 4J8

Paracel Order Number (Lab Use Only)

Chain Of Custody (Lab Use Only)

Nº 137018

bs.com Client Name: O Page of \$2 Quote #: **Turnaround Time** Address: □ 1 day ☐ 3 day Rd. S., OHawa, ON nsullivan@paterson group. ca Regular □ 2 day Date Required: REG 153/04 REG 406/19 Other Regulation Matrix Type: S (Soil/Sed.) GW (Ground Water) Required Analysis ☐ Table 1 ☐ Res/Park ☐ Med/Fine ☐ REG 558 ☐ pwqo SW (Surface Water) SS (Storm/Sanitary Sewer) ☐ Table 2 ☐ Ind/Comm ☐ Coarse P (Paint) A (Air) O (Other) ☐ CCME ☐ MISA F1-F4+BTEX ☐ Table 3 ☐ Agri/Other SU - Sani SU-Storm # of Containers ☐ Table Mun: Sample Taken Air Volume ģ For RSC: Yes No B (HWS) Other: PHCS Sample ID/Location Name ΒĦ Time P 961-PTI 10/22 10 Received By Driver/Depo Chain of Custody (Env) xlsx

Chain of Custody (Env) xlsx

Paracel ID: 2211605



Blvd. 3 4J8

bs.com

Paracel Order Number (Lab Use Only)

Chain Of Custody (Lab Use Only)

Nº 137019

Client Name: Paterson Group	Project Ref: PE4752							Page <u>Z</u> of <u>Z</u> Turnaround Time								
Contact Name: Nick Sullivan	Quote #:															
Address: 154 Colonnade Rd. S. Telephone: 613-226-7381	PO #: 33868 E-mail: ASullivan@patersongroup.ca							Ż				☐ 1 day ☐ 2 day Date Required:			□ 3 d	10.
☐ REG 153/04 ☐ REG 406/19 Other Regulation	M	latrix Tv	pe:	S (Soil/Sed.) GW (Gr	ound Water)					Red	nuired	Anal	vsis			
□ Table 1 □ Res/Park □ Med/Fine □ REG 558 □ PWQO □ Table 2 □ Ind/Comm □ Coarse □ CCME □ MISA	SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)				EX				N.C.	quii co	Allai				1	
□ Table 3 □ Agri/Other □ SU - Sani □ SU - Storm □ Table Mun: For RSC: □ Yes □ No □ Other:	×	Air Volume	Containers	Sample	Taken	90	o)	Metals by ICP			B (HWS)	d Paint		i	i i	
Sample ID/Location Name	Matrix	Air V	# of	Date	Time	PHCs F1-F4+BTEX	VOCs	PAHs	Met	Нд	CrVI	B (H	Lead			, ,
1 36-974	P		1	Mar 10/22				1					X		2100	1
2 40-PTI	1 1		1	. 4			, ,					, .				i.
3 40-PT2			1													
4 40 - PT3	1		V	1	10 11 7					31.6		. ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	V			_
5														_		
6														_		ş
7																
8															,	
9																1
10		1												1,		1
Comments: Relinquished By (Sigg) Received By D	river/D	epot:	17-30-0	·	Receives at Ab:	2948	a k C	Wy 1		Meth	FA	elivery	VEL	. 4	i VICIE	C
Relinquished By (Print): Nick Sull: van Date/Time: Date/Time: March 11, 2027 Temperature:	"/	0	7	TEXIE ZZ 111	Date/Time: Temperature:	115	322 °C	140	14	Date/	rified:		By:	20	214	Je

Revision 4.0