

Abatement Completion Report

December 23, 2021

Client

Calvin van Mulligen MPE Engineering Lethbridge, AB Squareone #

SQ1MH21303

Location

Old Stiles Building,

Bassano, AB

Abatement Start Date

October 17, 2021

Dear Mr. Van Mulligen

Remediclean conducted asbestos abatement following procedures listed under the Alberta Asbestos Abatement Manual. In this Abatement Completion Report, you will find all the site-specific information: (moderate risk abatement of vinyl flooring, pipe elbows and wall insulation, and low risk abatement of floor tile and pipe insulation) that was needed and/or obtained throughout the job:

Synopsis of Project

Important Dates:

Phase I: Began abatement	October 17, 2021
Phase I: Completed abatement	October 27, 2021
Phase I: Area passed Air Clearance Monitoring, and is now safe for unprotected persons	October 28, 2021
Phase II: Began abatement	October 26, 2021
Phase II: Completed abatement	October 27, 2021
Phase III: Began abatement	October 28, 2021
Phase III: Completed abatement	October 28, 2021
Phase IV: Began abatement	November 8, 2021
Phase IV: Completed abatement	November 8, 2021
Phase V: Began abatement	November 9, 2021
Phase V: Completed abatement	November 9, 2021
Phase IV & V: Area passed Air Clearance Monitoring, and is now safe for unprotected persons	November 10, 2021
Phase VI: Began abatement	November 10, 2021
Phase VI: Completed abatement	November 10, 2021
Phase VI: Area passed Air Clearance Monitoring, and is now safe for unprotected persons	November 11, 2021

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Detailed Project Information

Description of Project

Remediclean conducted asbestos abatement throughout the site in six (6) phases:

Phase I: moderate risk abatement of floor tile (second floor hallway), vinyl flooring (second floor bathroom) and wall plaster (second floor NW room)

Phase II: low risk abatement of floor tile (throughout main floor)

Phase III: moderate risk glove bagging of abandoned pipe elbow (basement)

Phase IV: moderate risk abatement of vinyl flooring (South entrance)

Phase V: moderate risk abatement of vinyl flooring (South entrance)

Phase VI: moderate risk abatement of wall insulation (basement)

Results from the final inspection and air monitoring conducted by Squareone Consulting show that Remediclean safely completed the scope of work and the area is safe for the occupancy of unprotected workers.

Before Removal

Phase I







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Phase II



Phase III





Phase IV





Phase V



Phase VI





<u>Equipment</u>

The following is a list of required equipment, Remediclean added equipment that they needed or helped with their abatement:

- DOP'd negative air units	- Extension cords	- Wetting agent	- Polyethylene sheeting (≥ 6 mil)	- Encapsulant
- Replacement HEPA filters	- First aid kit and plan	- Removal equipment	- 6 mil thick labelled disposal bags	- Fire extinguisher
-PAPRs, and half masks	- Garden hose	- Exacto knives	- Barriers and warning signs	
- DOP'd vacuum cleaners	- hand pump or airless sprayer	- Duct tape	 Mops, rags, and other cleaning supplies 	

Personal Protective Equipment

Workers entering the containment will wear:

- Protective clothing that is made of material that resists penetration by asbestos fibres.

- NIOSH approved PAPR or ½ mask respirators with P100 filters

- Rubber boots, or steel toe boots with boot covers will be worn on their feet to ensure full

decontamination

During any waist bag transfer, workers will wear: protective clothing that is made of material that resists

penetration by asbestos fibres, and a NIOSH approved 1/2 mask respirator with P100 filters.

Each individual person has been fit tested for their respective respirators and will do a fit check prior to

dawning the mask.

Notice of Project (NOP)

An NOP is a job specific document that must be filled out and submitted to Alberta Occupational Health

& Safety (OH&S) 72 hours before abatement has begun. Remediclean submitted their NOP, received

acknowledgment and are able to begin abatement activities on October 17, 2021. Remediclean has kept

a record of this on site during the entire abatement procedure.

Worker Abatement Cards

All works entering the containment possess a valid worker abatement card on site.

Air Monitoring

All air monitoring procedures have been conducted following the outline provided in the Alberta

Asbestos Abatement Manual, and analyses following the NIOSH Method 7400 particle counting

method.

During moderate risk abatement activities air monitoring was conducted inside the clean room, outside

of the containment, and an occupational was taken on workers. Once the abatement and a final visual

walkthrough was completed, Remediclean glued out the abatement area and dirty room. Following a

minimum 4 hour drying time, air clearance monitoring was performed. The air clearances showed that

there were no residual fibres left, and that the containment was clear to be dismantled then occupied

by unprotected persons.

During low risk abatement activities, air monitoring was conducted inside the work area and outside the

work area. Once the abatement, final visual walkthrough, and air monitoring confirmed work was

completed, the area was deemed safe to be occupied by unprotected persons.

Finished Project

Phase I







Phase II



Phase III



Phase IV

N/A

Phase V



Phase VI



Site Inspection

Prior to abatement activities Squareone performed a pre-contamination inspection to ensure that all

safety precautions were in place and that the containment erected met the criteria set out in the

abatement manual. Both Remediclean and Squareone conducted daily inspections to ensure the

integrity of the containment was not compromised. Upon completion of abatement Squareone or

Remediclean conducted a final inspection that ensured Remediclean left no asbestos containing

material and all dust and debris was cleaned.

All vacuums used in this project are equipped with a 99.97% HEPA filter and have been DOP tested

within the last year.

All negative air machines used are equipped with a 99.97% HEPA filter and were DOP tested on site.

Final Recommendation

Remediclean has completed the project and further air monitoring and/or sampling is no longer

required. All Remediclean air monitoring results fell below the Occupational Exposure Level.

If you have any questions, comments, or are in need of further assistance please contact me directly.

Sincerely,

Mike Anderson President & CEO

Squareone Consulting Ltd.

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Appendices:

Appendix I

Daily Air Monitoring Reports

Appendix I



October 17, 2021

Client

Mark Ballard Remediclean Calgary, AB

Squareone #

SQ1MH21303

Location

Old Stiles Building,

Bassano, AB

Abatement Start Date

October 17, 2021

Dear Mr. Ballard,

This report was produced to adhere to the specifications in the Alberta Asbestos Abatement Manual. During abatement all air monitoring result must be provided on site within 24 hours of sampling.

The following table is a representation of the air sampling results for October 17, 2021.

Sample #	Pump	Location	Concentration (fibres/cm³)	Below OEL/PF
1	Clean room	2 nd Floor; Top of Stairs	0.01	Y/Y
2	Outside Work Area	2 nd Floor; North End	0.01	Y/Y
3	Occupational	During Removal	0.02	Y/Y
4	Field Blank	-	<7 Fibres	Y/Y
5	Field Blank	-	<7 Fibres	Y/Y

OEL stands for Occupational Exposure Limit

PF stands for the protection factor that a particular respirator is good for Y stands for YES, this means that the samples fell below the OEL for asbestos exposure If concentration shows <0.0001 then 0 fibres were observing in the reading fields

Sincerely,

Mike Anderson President

Squareone Consulting Ltd.

MA



October 25, 2021

Client

Mark Ballard Remediclean Calgary, AB

Squareone #

SQ1MH21303

Location

Old Stiles Building,

Bassano, AB

Abatement Start Date

October 17, 2021

Dear Mr. Ballard,

This report was produced to adhere to the specifications in the Alberta Asbestos Abatement Manual. During abatement all air monitoring result must be provided on site within 24 hours of sampling.

The following table is a representation of the air sampling results for October 25, 2021.

Sample #	Pump	Location	Concentration (fibres/cm³)	Below OEL/PF
6	Clean room	2 nd Floor; Top of Stairs	0.01	Y/Y
7	Outside Work Area	2 nd Floor; North End	0.01	Y/Y
8	Occupational	During Removal	0.01	Y/Y
9	Field Blank	-	<7 Fibres	Y/Y
10	Field Blank	-	<7 Fibres	Y/Y

OEL stands for Occupational Exposure Limit

PF stands for the protection factor that a particular respirator is good for Y stands for YES, this means that the samples fell below the OEL for asbestos exposure If concentration shows <0.0001 then 0 fibres were observing in the reading fields

Sincerely,

Mike Anderson President

Squareone Consulting Ltd.

MA



October 26, 2021

Client

Mark Ballard Remediclean Calgary, AB

Squareone #

SQ1MH21303

Location

Old Stiles Building,

Bassano, AB

Abatement Start Date

October 17, 2021

Dear Mr. Ballard,

This report was produced to adhere to the specifications in the Alberta Asbestos Abatement Manual. During abatement all air monitoring result must be provided on site within 24 hours of sampling.

The following table is a representation of the air sampling results for October 26, 2021.

Sample #	Pump	Location	Concentration (fibres/cm³)	Below OEL/PF
18	Inside Work Area	Main Floor; Front Room	<0.01	Y/Y
19	Outside Work Area	Back of Main Floor	0.02	Y/Y
20	Field Blank	-	<7 Fibres	Y/Y
21	Field Blank	-	<7 Fibres	Y/Y

Confidence Limits available upon request

OEL stands for Occupational Exposure Limit

PF stands for the protection factor that a particular respirator is good for

Y stands for YES, this means that the samples fell below the OEL for asbestos exposure

N/A indicates sample was overloaded with debris or a variable was unknown All counts less than or equal to 5.5 fibers in 100 fields are represented in fiber density (f/mm²)



October 27, 2021

Client

Mark Ballard Remediclean Calgary, AB

Squareone #

SQ1MH21303

Location

Old Stiles Building,

Bassano, AB

Abatement Start Date

October 17, 2021

Dear Mr. Ballard,

This report was produced to adhere to the specifications in the Alberta Asbestos Abatement Manual. During abatement all air monitoring result must be provided on site within 24 hours of sampling.

The following table is a representation of the air sampling results for October 27, 2021.

Sample #	Pump	Location	Concentration (fibres/cm³)	Below OEL/PF
22	Inside Work Area	Main Floor; Front Room	<0.01	Y/Y
23	Outside Work Area	Back of Main Floor	<0.01	Y/Y
24	Field Blank	-	<7 Fibres	Y/Y
25	Field Blank	-	<7 Fibres	Y/Y

Confidence Limits available upon request

OEL stands for Occupational Exposure Limit

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N/A indicates sample was overloaded with debris or a variable was unknown All counts less than or equal to 5.5 fibers in 100 fields are represented in fiber density (f/mm²)



October 28, 2021

Client Mark Ballard

Remediclean Calgary, AB Squareone #

SQ1MH21303

Location

Old Stiles Building,

Bassano, AB

Abatement Start Date

October 17, 2021

Dear Mr. Ballard,

This report was produced to adhere to the specifications in the Alberta Asbestos Abatement Manual. During abatement all air monitoring result must be provided on site within 24 hours of sampling.

The following table is a representation of the air sampling results for October 28, 2021.

Sample #	Pump	Location	Concentration (fibres/cm³)	Below OEL/PF
12	Air Clearance 1 #1	2 nd Floor; Hallway	<0.01	Y/Y
13	Air Clearance 2 #2	2 nd Floor; Hallway	<0.01	Y/Y
14	Inside Work Area	Basement	<0.01	Y/Y
15	Occupational	During Glove-bag Removal	0.02	Y/Y
16	Field Blank	-	<7 Fibres	Y/Y
17	Field Blank	-	<7 Fibres	Y/Y

Confidence Limits available upon request

OEL stands for Occupational Exposure Limit

PF stands for the protection factor that a particular respirator is good for

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N/A indicates sample was overloaded with debris or a variable was unknown

All counts less than or equal to 5.5 fibers in 100 fields are represented in fiber density (f/mm²)

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November 8, 2021

Client Mark Ballard

Remediclean Calgary, AB Squareone #

SQ1MH21303

Location

Old Stiles Building,

Bassano, AB

Abatement Start Date

October 17, 2021

Dear Mr. Ballard,

This report was produced to adhere to the specifications in the Alberta Asbestos Abatement Manual. During abatement all air monitoring result must be provided on site within 24 hours of sampling.

The following table is a representation of the air sampling results for November 8, 2021.

Sample #	Pump	Location	Concentration (fibres/cm³)	Below OEL/PF
26	Clean Room	Main Floor; Hallway	<0.01	Y/Y
27	Outside Work Area	Main Floor; Front Room	<0.01	Y/Y
28	Occupational	During Removal	<0.01	Y/Y
29	Field Blank	-	<7 Fibres	Y/Y
30	Field Blank	-	<7 Fibres	Y/Y

Confidence Limits available upon request

OEL stands for Occupational Exposure Limit

PF stands for the protection factor that a particular respirator is good for

Y stands for YES, this means that the samples fell below the OEL for asbestos exposure

N/A indicates sample was overloaded with debris or a variable was unknown

All counts less than or equal to 5.5 fibers in 100 fields are represented in fiber density (f/mm 2)



November 9, 2021

Client

Mark Ballard Remediclean Calgary, AB

Squareone #

SQ1MH21303

Location

Old Stiles Building,

Bassano, AB

Abatement Start Date

October 17, 2021

Dear Mr. Ballard,

This report was produced to adhere to the specifications in the Alberta Asbestos Abatement Manual. During abatement all air monitoring result must be provided on site within 24 hours of sampling.

The following table is a representation of the air sampling results for November 9, 2021.

Sample #	Pump	Location	Concentration (fibres/cm³)	Below OEL/PF
31	Clean Room	Main Floor; Hallway	<0.01	Y/Y
32	Outside Work Area	Main Floor; Front Room	<0.01	Y/Y
33	Field Blank	-	<7 Fibres	Y/Y
34	Field Blank	-	<7 Fibres	Y/Y

Confidence Limits available upon request

OEL stands for Occupational Exposure Limit

 $\ensuremath{\mathsf{PF}}$ stands for the protection factor that a particular respirator is good for

Y stands for YES, this means that the samples fell below the OEL for asbestos exposure N/A indicates sample was overloaded with debris or a variable was unknown

All counts less than or equal to 5.5 fibers in 100 fields are represented in fiber density (f/mm²)



November 10, 2021

Client

Mark Ballard Remediclean Calgary, AB Squareone #

SQ1MH21303

Location

Old Stiles Building,

Bassano, AB

Abatement Start Date

October 17, 2021

Dear Mr. Ballard,

This report was produced to adhere to the specifications in the Alberta Asbestos Abatement Manual. During abatement all air monitoring result must be provided on site within 24 hours of sampling.

The following table is a representation of the air sampling results for November 10, 2021.

Sample #	Pump	Location	Concentration (fibres/cm³)	Below OEL/PF
35	Air Clearance	Back of Main Floor	<0.01	Y/Y
36	Air Clearance	Back of Main Floor	<0.01	Y/Y
37	Field Blank	-	<7 Fibres	Y/Y
38	Field Blank	-	<7 Fibres	Y/Y
39	Clean Room	Basement	<0.01	Y/Y
40	Outside Work Area	Basement	<0.01	Y/Y

Confidence Limits available upon request

OEL stands for Occupational Exposure Limit

PF stands for the protection factor that a particular respirator is good for

 $\begin{tabular}{ll} Y stands for YES, this means that the samples fell below the OEL for asbestos exposure \end{tabular}$

N/A indicates sample was overloaded with debris or a variable was unknown

All counts less than or equal to 5.5 fibers in 100 fields are represented in fiber density (f/mm²)



November 11, 2021

Client Mark Ballard

Remediclean Calgary, AB

Squareone #

SQ1MH21303

Location

Old Stiles Building,

Bassano, AB

Abatement Start Date

October 17, 2021

Dear Mr. Ballard,

This report was produced to adhere to the specifications in the Alberta Asbestos Abatement Manual. During abatement all air monitoring result must be provided on site within 24 hours of sampling.

The following table is a representation of the air sampling results for November 11, 2021.

Sample #	Pump	Location	Concentration (fibres/cm³)	Below OEL/PF
35	Air Clearance	Basement	<0.01	Y/Y
36	Air Clearance	Basement	<0.01	Y/Y
37	Field Blank	-	<7 Fibres	Y/Y
38	Field Blank	-	<7 Fibres	Y/Y

Confidence Limits available upon request

OEL stands for Occupational Exposure Limit

 $\ensuremath{\mathsf{PF}}$ stands for the protection factor that a particular respirator is good for

Y stands for YES, this means that the samples fell below the OEL for asbestos exposure N/A indicates sample was overloaded with debris or a variable was unknown

All counts less than or equal to 5.5 fibers in 100 fields are represented in fiber density (f/mm²)