

February 21, 2020

City of Saskatoon
1101 Ave P North
Saskatoon, SK
S7L 7K6

Attention: Hazel Fernandez

Subject: Pre-Renovation Assessment – Forestry Farm Pump House

Tyneal Knackstedt of Bersch Consulting Ltd. conducted a site visit on February 13, 2020, to the Forestry Farm Pump House. The purpose of the visit was to investigate for the presence of asbestos-containing materials (ACMs). ACMs were not identified within the area based on the scope of work for renovation.

This test report relates only to the materials sent for examination and any use or extension of the information by the client of these results is the responsibility of the client.

Site Observations and Information

The wall paneling consisted of wood panels on top of wood walls. Since the panels and wall are remaining in place there are no concerns regarding asbestos within these materials. Please reference to **Appendix I** for the **Site Photos**.

If any questions arise on the results of the attached information, please contact our office at (306) 978-6665. Thank you for this opportunity of service.

Sincerely,



Tyneal Knackstedt PAg
Bersch Consulting Ltd.
B67PRB13J -Pump House

Appendix I

Site Photos

Photo ID

B67PRB13J - 001

Description

Wall panel cored into wood wall behind.



Bersch Consulting Ltd.

January 7, 2020

City of Saskatoon
1101 Avenue P North
Saskatoon, SK
S7L 7K6

ATTENTION: Jodi Aicher

SUBJECT: Bulk Sample Analysis Report – Forestry Farm – Header Building

Please find attached the laboratory results for the bulk sample collected on January 6, 2020 from the Forestry Farm Header Building located at 1903 Forestry Farm Park Drive, Saskatoon, Saskatchewan. The sample was analyzed for the identification of asbestos. Asbestos was detected within the sample.

The results for the sample submitted was obtained by examination in accordance with the current USEPA 600/R-93/116 Method for the analysis of asbestos in building materials using polarized light microscopy and dispersion staining techniques. The detection limit of this method is listed as less than 1% by volume.

This test report relates only to the materials sent for examination and any use or extension of the information by the client of these results is the responsibility of the client.

If any questions arise on the results of the attached information, please contact our office. Thank you for this opportunity of service.

Sincerely,



Tyneal Knackstedt, PAg
Bersch Consulting Ltd.
B76BLA06J – Header Building

Bulk Sample Analysis Report

January 7, 2020

Project Number: B67.20

Client: City of Saskatoon

Contact: Jodi Aicher

Location: Saskatoon Forestry Farm

File Number: B67BAA06J

Sample Number	Sample Date	Sample Material	Sample Location and Information	Asbestos	%	Analyst
1	2020/01/06	Parging	Header Building 2 nd Floor Office Chimney <i>*Vermiculite was detected within the sample*</i>	Actinolite	<1%	EMSL/WB

Note: The results for the samples submitted were obtained by examination in accordance with the current USEPA 600/R-93/116 Method for the analysis of asbestos in building materials using polarized light microscopy and dispersion staining techniques. The detection limit of this method is listed as less than 1% by volume.

Inspection Report

July 18, 2018

Client: City of Saskatoon
222 3rd Avenue N
Saskatoon, SK
S7K 0J5

Attention: Tim Sinclair-Smith

File Number: B67IRG16H- Saskatoon Forestry Farm

Project: Saskatoon Forestry Farm – Investigation of Maintenance Building & Pump House

Evan Westad of Bersch Consulting Ltd. conducted a site visit on July 16, 2018, to Saskatoon Forestry Farm located at 1903 Forestry Farm Park Drive, Saskatoon, Saskatchewan. The purpose of the visit was to conduct a visual investigation and collect bulk samples to determine the presence/absence of asbestos. One (1) bulk samples was collected and analyzed for the identification of asbestos. Asbestos **was** detected within the sample.

The results for the bulk sample were obtained by examination in accordance with the current USEPA 600/R-04/004 Method for the analysis of asbestos in vermiculite using polarized light microscopy and dispersion staining techniques. The detection limit of this method is qualitative. This test report relates only to the materials sent for examination and any use or extension of the information by the client of these results is the responsibility of the client. Please reference **Appendix I** for the bulk analysis report.

Site Observations and Information

The scope of this investigation included the Maintenance Building and Old Pump House on the Saskatoon Forestry Farm site. Vermiculite was identified within the seed storage room in the northwest corner of the Maintenance Building, the second-floor loft and “Burlap and Twine Storage Room”. Vermiculite in the seed storage room is leaking from the east and west wall cavities onto the floor in minor amounts. In the second-floor loft vermiculite is leaking from a penetration in the north wall. In the “Burlap and Twine Storage Room” vermiculite is leaking through joints in the ceiling tin in the north half of the room. Vermiculite was not identified in any other areas of the Maintenance Building or Pump House.

The vermiculite may be cleaned under following low-risk procedures by HEPA vacuuming and caulking penetrations to prevent further contamination. Following this step areas containing or suspected to contain vermiculite should be inspected regularly and staff be alerted to its presence. See **Appendix II** for site photos.

If any questions arise on the results of the attached information, please contact Evan Westad at (306) 978-6665. Thank you for this opportunity of service.

Sincerely,



Evan Westad
Bersch Consulting Ltd.
File No.: B67PRG16H- Saskatoon Forestry Farm

Appendix I

Bulk Sample Analysis

July 17, 2018

City of Saskatoon
222 3rd Street,
Saskatoon, Sk
S7K 0J5

Attention: Tim Sinclair-Smith

Subject: Vermiculite Bulk Sample Analysis Report- Saskatoon Forestry Farm

Please find attached the laboratory results for the bulk sample collected on July 16, 2018 from the Saskatoon Forestry Farm- Maintenance Building located at 1905 Forestry Farm Park Drive. The sample was analyzed for the identification of asbestos. Asbestos was detected within the vermiculite sample.

The results for the vermiculite wall insulation sample was obtained by examination in accordance with the EPA/600/R-04/004 Polarized Light Microscope and Filtration Technique. The laboratory detected **Actinolite/Tremolite** within the sample. Based on the sample results, the material is classified as a **hazardous** material.

Occupational Health and Safety, 1996 – Section 330 b.1 “asbestos-containing material means: (.i) vermiculite determined to contain any asbestos when tested according to an approved method”

Reference page 10 of the EACO Vermiculite Guideline 2015 document - 5. Analysis of Vermiculite – “If amphibole asbestos is detected, even at low concentrations by PLM, the material shall be considered as an asbestos-containing material (ACM).”

This test report relates only to the materials sent for examination and any use or extension of the information by the client of these results is the responsibility of the client.

If any questions arise on the results of the attached information, please contact our office. Thank you for this opportunity of service.

Sincerely,



Evan Westad
Bersch Consulting Ltd.
B67BLG16H- Maintenance Building

Bulk Sample Analysis Report

July 17 2018

Project Number: B67.18

Client: City of Saskatoon

Contact: Tim Sinclair-Smith

Location: Saskatoon Forestry Farm- Maintenance Building

File Number: B67BAG16H

Sample Number	Sample Date	Sample Material	Sample Location and Information	Asbestos	%	Analyst
1	2018/07/16	Vermiculite	Seed Storage- West Wall	Actinolite/ Tremolite	>.1%	WB

Note: The results for the samples submitted were obtained by examination in accordance with the current USEPA 600/R-93/116 Method for the analysis of asbestos in building materials using polarized light microscopy and dispersion staining techniques. The detection limit of this method is listed as less than 1% by volume.

Appendix II

Site Photos



Photo 001- Seed Storage Room



Photo 002- Seed Storage Room



Photo 003- Second Floor Loft



Photo 004- "Burlap and Twine Storage"



Photo 005- "Burlap and Twine Storage"

BERSCH & ASSOCIATES LTD.

September 21st, 2016

City of Saskatoon
222 3rd Avenue North
Saskatoon, SK
S7K 0J5

ATTENTION: Hazel Fernandez

SUBJECT: Bulk Sample Analysis Report – Forest Farm Park and Zoo

Please find attached the laboratory results for the bulk samples collected from the Forestry Farm Park and Zoo on September 14th, 2016 located at 1903 Forestry Farm Park Dr, Saskatoon, SK. The samples were analyzed for the identification of asbestos. Asbestos **was not** detected in the samples.

The results for the samples submitted were obtained by examination in accordance with the current USEPA 600/R-93/116 Method for the analysis of asbestos in building materials using polarized light microscopy and dispersion staining techniques. The detection limit of this method is listed as less than 1% by volume.

This test report relates only to the materials sent for examination and any use or extension of the information by the client of these results is the responsibility of the client.

If any questions arise on the results of the attached information, please contact our office 306 222 7477. Thank you for this opportunity of service!

Sincerely,



Brad Berschiminsky
Bersch & Associates Ltd.

File: B67BLI14F

Bersch & Associates Ltd.

B67BAI14F

Box 3568

Humboldt, Sask. S0K 2A0

BULK SAMPLE ANALYSIS REPORT**PROJECT NO: B67.16****CLIENT: CITY OF SASKATOON****CONTACT: HAZEL FERNANDEZ****LOCATION: FORESTRY FARM ZOO**

NO.	DATE	SAMPLE INFORMATION	ASBESTOS	%	ANALYST
1	14-Sep-16	Storage Room (Old Bunkhouse) - Stipple Ceiling Texture	No Asbestos Detected		WB
2	14-Sep-16	Office Room (Old Bunkhouse) - 1' x 1' Ceiling Tile	No Asbestos Detected		WB
3	14-Sep-16	Kitchen (Old Bunkhouse) - Sheet Flooring Grey W/ Fleck Pattern	No Asbestos Detected		WB
4	14-Sep-16	NE Room 2nd Floor (Old Bunkhouse) - Corkboard	No Asbestos Detected		WB
5	14-Sep-16	SW Room 2nd Floor (Old Bunkhouse) - Ceiling Plaster	No Asbestos Detected		WB
6	14-Sep-16	SW Room Attic Stairwell (Old Bunkhouse) - Ceiling Plaster	No Asbestos Detected		WB
7	14-Sep-16	SW Room Attic Stairwell (Old Bunkhouse) - Sheet Flooring Brown W/ Green	No Asbestos Detected		WB

Bersch & Associates Ltd.

B67BAI14F

Box 3568

Humboldt, Sask. S0K 2A0

BULK SAMPLE ANALYSIS REPORT**PROJECT NO: B67.16****CLIENT: CITY OF SASKATOON****CONTACT: HAZEL FERNANDEZ****LOCATION: FORESTRY FARM ZOO**

NO.	DATE	SAMPLE INFORMATION	ASBESTOS	%	ANALYST
8	14-Sep-16	Basement Cellar Room (Old Bunkhouse) - Sheet Flooring Orange	No Asbestos Detected		WB
9	14-Sep-16	Basement Chimney (Old Bunkhouse) - Brick Mortar	No Asbestos Detected		WB
10	14-Sep-16	Straw Storage Quonset - Shingle	No Asbestos Detected		WB
11	14-Sep-16	Basement Piller (Lunchroom) - Brick Mortar	No Asbestos Detected		WB
12	14-Sep-16	Blacksmith Shed - Chimney Brick Mortar	No Asbestos Detected		WB
13	14-Sep-16	Basement Stairwell (Superintendent Residence) - Brick Mortar	No Asbestos Detected		WB
14	14-Sep-16	Basement Stairwell (Superintendent Res.) - Chimney Brick Mortar	No Asbestos Detected		WB

Bersch & Associates Ltd.

B67BAI14F

Box 3568

Humboldt, Sask. S0K 2A0

BULK SAMPLE ANALYSIS REPORT**PROJECT NO: B67.16****CLIENT: CITY OF SASKATOON****CONTACT: HAZEL FERNANDEZ****LOCATION: FORESTRY FARM ZOO**

NO.	DATE	SAMPLE INFORMATION	ASBESTOS	%	ANALYST
15	14-Sep-16	Attic Middle (Superintendent Res.) - Insulation	No Asbestos Detected		WB
16	14-Sep-16	Attic East Wall (Superintendent Res.) - Insulation	No Asbestos Detected		WB
17	14-Sep-16	2nd Floor (Superintendent Res.) - Plaster Wall	No Asbestos Detected		WB
18	14-Sep-16	Basement Mens Washroom (Lunchroom) - Ceiling Tile	No Asbestos Detected		WB
19	14-Sep-16	Concession Booth - Linoleum	No Asbestos Detected		WB
20	14-Sep-16	Stairwell (Horse Barn) - Linoleum	No Asbestos Detected		WB
21	14-Sep-16	Shed (West of Quarantine) - Tar Paper	No Asbestos Detected		WB