



Air Quality Testing Report

For

**Isabella County Administration Building
200 N. Main Street
Mt. Pleasant, MI 48857**

Prepared for:

**Isabella County
200 N. Main Street
Mt. Pleasant, MI 48857**

Completed by:

**Northern Analytical Services
P.O. Box 1604
Big Rapids, Michigan 49307**

**Project No.: 230145
Report Date: October 19, 2023**

Air Quality Testing
Isabella County
Administration Building
Project No.: 230145
Report Date: October 19, 2023

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Air Quality Testing Report
Isabella County
Administration Building
Project No.: 230145
Report Date: October 19, 2023

Executive Summary

Northern Analytical Services, LLC. (NAS) was retained by Isabella County to perform air quality testing at the Administration Building as a result of a potential asbestos fiber release. Preliminary testing was performed on October 12, 2023 with low levels of asbestos fibers detected (see NAS report dated 10/16/23). Additional testing was performed on October 17, 2023 in an effort to better represent each of the effected spaces.

This second round of testing included air sampling using aggressive sampling methods with transmission electron microscopy (TEM) analysis. Laboratory results are attached to this report and indicate fiber levels were below acceptable levels. The most stringent of the current regulatory air clearance criteria is established by the US EPA under the Asbestos Hazard Emergency Response Act (AHERA) with an average of less than 70 structures per square millimeter (S/mm²) to be considered as passing.

During this second round of testing, NAS collected a total of 31 samples with an overall average of 1.9 S/mm²; asbestos was only detected on four samples, each with 15 S/mm², the other 27 samples were none-detect.

Based on these results, the building is safe to re-enter with caution. Damaged friable ACM is present in three rooms and above the ceiling tiles. NAS recommends removing the building contents to help facilitate a building wide remediation project to properly address the damaged ACM. The forced air HVAC system is currently off and should not be operated; the ductwork feeds the contaminated rooms and if operated could effect the air quality of the rest of the building.

Test Procedures

Testing was performed using transmission electron microscopy (TEM) methods. Air samples were collected from 10 locations on each level of the building, with at least one sample from each office suite. Air samples were collected by affixing a sampling cassette to a high-volume vacuum pump. Samples were calibrated both pre and post sample collection using a standard high-flow rotameter. TEM samples were delivered via United Parcel Services to SanAir Technologies for analysis.

Air Quality Testing Report
 Isabella County
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Sample Results

Laboratory results for each sample collected are attached to this report. The following is a summary of these results:

TEM-Air

Sample Number	Location	Result (S/mm ²)
11	Rm. 125	None Detected
12	Rm. 121	None Detected
13	Rm. 119	None Detected
14	Rm. 116	None Detected
15	Rm. 115	None Detected
16	Rm. 111	None Detected
17	Rm. 109	None Detected
18	Hall 101	None Detected
19	Rm. 103	None Detected
20	Rm. 142	None Detected
21	Rm. 132	None Detected
22	Rm. 201	None Detected
23	Rm. 228	None Detected
24	Rm. 226	15.00
25	Rm. 210	None Detected
26	Rm. 222	None Detected
27	Rm. 313	15.00
28	Rm. 310	None Detected
29	Rm. 319	None Detected
30	Rm. 302	15.00
31	Rm. 303	None Detected
32	Rm. 324	None Detected
33	Rm. 331	None Detected
34	Rm. 334	None Detected
35	Rm. 339	None Detected
36	Rm. 320	None Detected
37	Rm. 301	15.00
38	Rm. 232	None Detected
39	Rm. 220	None Detected
40	Rm. 218	None Detected
41	Rm. 213	None Detected

The US EPA established clearance criteria is less than 70 S/mm²

Conclusion

The test results indicate that low levels of asbestos fibers are present in the air in some locations of the building. In addition, damaged asbestos containing materials are present above the ceiling cavities throughout the building and in rooms 101, 325, and 307.

With the building (excluding rms 101, 307, and 325) meeting/exceeding AHERA clearance criteria, the majority of the building can be re-opened at this time with the following restrictions:

- The three spaces that have been temporarily sealed off (rooms 101, 307, and 325) remain sealed and off limits until each can be professionally cleaned by an accredited asbestos contractor.
- All forced air HVAC systems remain off; these systems were off during testing and have not been cleared for re-use.
- No ceiling tiles are moved; damaged friable ACM has been found above the ceilings on each level and requires cleaning.
- All maintenance and custodial staff receive at least 2 hours of asbestos awareness training.
- Re-occupancy is temporary and primarily to remove the building contents so the damaged ACM can be properly handled.

Appendix A

TEM Results



The Identification Specialists

Analysis Report
prepared for
Northern Analytical Services, LLC

Report Date: 10/19/2023

Project Name: Isabella County

Project #: 230145

SanAir ID#: 23057808



NVLAP LAB CODE 600227-0

11709 Chesterdale Road | Cincinnati, Ohio 45246
888.895.1177 | 513.438.6006 | IAQ@SanAir.com | SanAir.com



SanAir ID Number
23057808
FINAL REPORT
10/19/2023 11:39:11 AM

Name: Northern Analytical Services, LLC
Address: 14870 225th Avenue
Big Rapids, MI 49307
Phone: 231-679-0005

Project Number: 230145
P.O. Number:
Project Name: Isabella County
Collected Date: 10/17/2023
Received Date: 10/18/2023 9:40:00 AM

Dear Kevin Delancey,

We at SanAir would like to thank you for the work you recently submitted. The 16 sample(s) were received on Wednesday, October 18, 2023 via UPS. The final report(s) is enclosed for the following sample(s): 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26.

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

Sincerely,

A handwritten signature in black ink that reads "Maureen Y. Haley". The signature is fluid and cursive.

Maureen Y. Haley
Asbestos Laboratory Manager
SanAir Technologies Laboratory

Final Report Includes:

- Cover Letter
- Analysis Pages
- Disclaimers and Additional Information

Sample conditions:

- 16 samples in Good condition.



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Project Number: 230145
P.O. Number:
Project Name: Isabella County
Collected Date: 10/17/2023
Received Date: 10/18/2023 9:40:00 AM

Analyst: Burany, Xianying

Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E

Sample	Volume (Liters)	Area Analyzed	Non Asb	Asbestos Type(s)	# Structures		Analytical Sensitivity (S/cc)	Reporting Limits	Asbestos	
					≥ 0.5μ < 5	≥ 5μ		LCL - UCL (S/cc)	Concentration (S/mm ²)	(S/cc)
23057808-001 11 Room 125	1200	0.0650 mm ²	0	None Detected			0.0049		<15.00	<0.0049
23057808-002 12 Room 121	1200	0.0650 mm ²	0	None Detected			0.0049		<15.00	<0.0049
23057808-003 13 Room 119	1200	0.0650 mm ²	0	None Detected			0.0049		<15.00	<0.0049
23057808-004 14 Room 116	1200	0.0650 mm ²	0	None Detected			0.0049		<15.00	<0.0049
23057808-005 15 Room 115	1200	0.0650 mm ²	0	None Detected			0.0049		<15.00	<0.0049
23057808-006 16 Room 111	1200	0.0650 mm ²	0	None Detected			0.0049		<15.00	<0.0049
23057808-007 17 Room 109	1200	0.0650 mm ²	0	None Detected			0.0049		<15.00	<0.0049
23057808-008 18 Hall 101	1200	0.0650 mm ²	0	None Detected			0.0049		<15.00	<0.0049
23057808-009 19 Room 103	1200	0.0650 mm ²	0	None Detected			0.0049		<15.00	<0.0049

Analyst:

Approved Signatory:

Analysis Date: 10/19/2023

Date: 10/19/2023



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Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E

Sample	Volume (Liters)	Area Analyzed	Non Asb	Asbestos Type(s)	# Structures		Analytical Sensitivity (S/cc)	Reporting Limits	Asbestos Concentration	
					≥ 0.5μ	< 5 ≥ 5μ		LCL - UCL (S/cc)	(S/mm ²)	(S/cc)
23057808-010 20 Room 142	1200	0.0650 mm ²	0	None Detected			0.0049		<15.00	<0.0049
23057808-011 21 Room 132	1200	0.0650 mm ²	0	None Detected			0.0049		<15.00	<0.0049
23057808-012 22 Room 201	1200	0.0650 mm ²	1	None Detected			0.0049		<15.00	<0.0049
23057808-013 23 Room 228	1200	0.0650 mm ²	1	None Detected			0.0049		<15.00	<0.0049
23057808-014 24 Room 226	1200	0.0650 mm ²	0	Chrysotile	1	0	0.0049	0.0001 - 0.0273	15.00	0.0049
23057808-015 25 Room 210	1200	0.0650 mm ²	0	None Detected			0.0049		<15.00	<0.0049
23057808-016 26 Room 222	1200	0.0650 mm ²	0	None Detected			0.0049		<15.00	<0.0049

Analyst:

Approved Signatory:

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Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

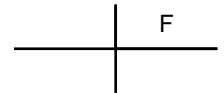
SanAir Sample ID: 23057808-001

Grid Box ID: 23025

Grid Orientation

Client Sample ID: 11

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1

No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Burany, Xianying

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
d1	f1	NSD									None		
d1	f3	NSD									None		
d1	f5	NSD									None		
d2	c10	NSD									None		
d2	c8	NSD									None		
23057808-001		Total:	0	0	0	Count:	0	0					



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Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

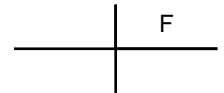
SanAir Sample ID: 23057808-002

Grid Box ID: 23025

Grid Orientation

Client Sample ID: 12

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1

No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Burany, Xianying

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
d3	c1	NSD									None		
d3	c3	NSD									None		
d3	c5	NSD									None		
d4	e10	NSD									None		
d4	e8	NSD									None		
23057808-002		Total:	0	0	0	Count:	0	0					



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Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

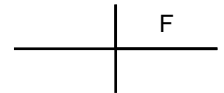
SanAir Sample ID: 23057808-003

Grid Box ID: 23025

Grid Orientation

Client Sample ID: 13

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1

No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Burany, Xianying

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
d5	a3	NSD									None		
d5	a5	NSD									None		
d5	a7	NSD									None		
e1	d2	NSD									None		
e1	d4	NSD									None		
23057808-003		Total:	0	0	0	Count:	0	0					



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Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

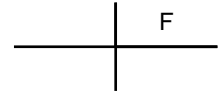
SanAir Sample ID: 23057808-004

Grid Box ID: 23025

Grid Orientation

Client Sample ID: 14

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1

No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Burany, Xianying

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
e2	j2	NSD									None		
e2	j4	NSD									None		
e2	j6	NSD									None		
e3	c1	NSD									None		
e3	f1	NSD									None		
23057808-004		Total:	0	0	0	Count:	0	0					



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Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

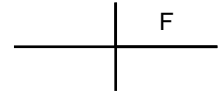
SanAir Sample ID: 23057808-005

Grid Box ID: 23025

Grid Orientation

Client Sample ID: 15

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1

No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Burany, Xianying

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
e4	a1	NSD									None		
e4	a3	NSD									None		
e4	a5	NSD									None		
e5	j7	NSD									None		
e5	j9	NSD									None		
23057808-005		Total:	0	0	0	Count:	0	0					



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Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

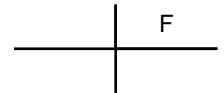
SanAir Sample ID: 23057808-006

Grid Box ID: 23025

Grid Orientation

Client Sample ID: 16

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1

No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Burany, Xianying

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
a6	j1	NSD									None		
a6	j3	NSD									None		
a6	j5	NSD									None		
a7	e10	NSD									None		
a7	e8	NSD									None		
23057808-006		Total:	0	0	0	Count:	0	0					



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Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

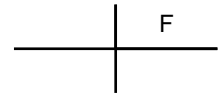
SanAir Sample ID: 23057808-007

Grid Box ID: 23025

Grid Orientation

Client Sample ID: 17

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1

No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Burany, Xianying

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
a8	c1	NSD									None		
a8	e1	NSD									None		
a8	g1	NSD									None		
a9	a6	NSD									None		
a9	a8	NSD									None		
23057808-007		Total:	0	0	0	Count:	0	0					



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Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

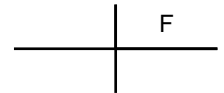
SanAir Sample ID: 23057808-008

Grid Box ID: 23025

Grid Orientation

Client Sample ID: 18

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1

No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Burany, Xianying

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
a10	h1	NSD									None		
a10	h3	NSD									None		
a10	h5	NSD									None		
b6	a5	NSD									None		
b6	a7	NSD									None		
23057808-008		Total:	0	0	0	Count:	0	0					



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Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

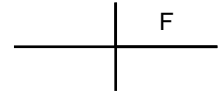
SanAir Sample ID: 23057808-009

Grid Box ID: 23025

Grid Orientation

Client Sample ID: 19

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1

No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Burany, Xianying

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
b7	c1	NSD									None		
b7	c3	NSD									None		
b7	c5	NSD									None		
b8	g1	NSD									None		
b8	i1	NSD									None		
23057808-009		Total:	0	0	0	Count:	0	0					



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Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

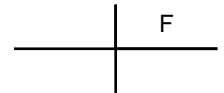
SanAir Sample ID: 23057808-010

Grid Box ID: 23025

Grid Orientation

Client Sample ID: 20

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1

No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Burany, Xianying

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
b10	i1	NSD									None		
b10	i3	NSD									None		
b9	j2	NSD									None		
b9	j4	NSD									None		
b9	j6	NSD									None		
23057808-010		Total:	0	0	0	Count:	0	0					



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Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

SanAir Sample ID: 23057808-011
Client Sample ID: 21
Instrument ID: Hitachi TEM Scope #1
Magnification: 20 K
AV: 100Kv

Grid Box ID: 23025
G.O.A.: 0.013 mm sq.
No. G.O. Analyzed: 5
Analyst: Burany, Xianying
Date: 10/19/2023

Grid Orientation

	F
--	---

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
c6	a1	NSD									None		
c6	a3	NSD									None		
c6	a5	NSD									None		
c7	j10	NSD									None		
c7	j8	NSD									None		
23057808-011		Total:	0	0	0	Count:	0	0					



SanAir ID Number
23057808
 FINAL REPORT
 10/19/2023 11:39:11 AM

Name: Northern Analytical Services, LLC
Address: 14870 225th Avenue
 Big Rapids, MI 49307
Phone: 231-679-0005

Project Number: 230145
P.O. Number:
Project Name: Isabella County
Collected Date: 10/17/2023
Received Date: 10/18/2023 9:40:00 AM

Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

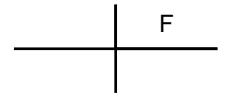
SanAir Sample ID: 23057808-012

Grid Box ID: 23025

Grid Orientation

Client Sample ID: 22

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1


No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Burany, Xianying

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
c8	a3	NSD									None		
c8	a5	NSD									None		
c8	a7	NSD									None		
c9	j10	NSD									None		
c9	j8	1	N								Non-Asbestos	0	
23057808-012		Total:	1	0	0	Count:	1	0					



SanAir ID Number
23057808
 FINAL REPORT
 10/19/2023 11:39:11 AM

Name: Northern Analytical Services, LLC
Address: 14870 225th Avenue
 Big Rapids, MI 49307
Phone: 231-679-0005

Project Number: 230145
P.O. Number:
Project Name: Isabella County
Collected Date: 10/17/2023
Received Date: 10/18/2023 9:40:00 AM

Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

SanAir Sample ID: 23057808-013

Grid Box ID: 23025

Grid Orientation

Client Sample ID: 23

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1

No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Burany, Xianying

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
c10	c1	NSD									None		
c10	c3	1	N			/					Non-Asbestos	0	
c10	c5	NSD									None		
d6	j3	NSD									None		
d6	j5	NSD									None		
23057808-013		Total:	1	0	0	Count:	1	0					



SanAir ID Number
23057808
 FINAL REPORT
 10/19/2023 11:39:11 AM

Name: Northern Analytical Services, LLC
Address: 14870 225th Avenue
 Big Rapids, MI 49307
Phone: 231-679-0005

Project Number: 230145
P.O. Number:
Project Name: Isabella County
Collected Date: 10/17/2023
Received Date: 10/18/2023 9:40:00 AM

Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

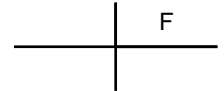
SanAir Sample ID: 23057808-014

Grid Box ID: 23025

Grid Orientation

Client Sample ID: 24

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1


No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Burany, Xianying

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
d7	j5	NSD									None		
d7	j7	NSD									None		
d7	j9	NSD									None		
d8	a1	1		Yes			7.5	0	0.1	Bundle	Chrysotile	0	
d8	a3	NSD									None		
23057808-014		Total:	0	1	0	Count:	1	0					



SanAir ID Number
23057808
FINAL REPORT
10/19/2023 11:39:11 AM

Name: Northern Analytical Services, LLC
Address: 14870 225th Avenue
Big Rapids, MI 49307
Phone: 231-679-0005

Project Number: 230145
P.O. Number:
Project Name: Isabella County
Collected Date: 10/17/2023
Received Date: 10/18/2023 9:40:00 AM

Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

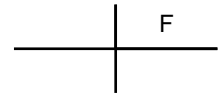
SanAir Sample ID: 23057808-015

Grid Box ID: 23025

Grid Orientation

Client Sample ID: 25

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1

No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Burany, Xianying

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
d10	j5	NSD									None		
d10	j7	NSD									None		
d9	j1	NSD									None		
d9	j3	NSD									None		
d9	j5	NSD									None		
23057808-015		Total:	0	0	0	Count:	0	0					



Name: Northern Analytical Services, LLC
Address: 14870 225th Avenue
Big Rapids, MI 49307
Phone: 231-679-0005

Project Number: 230145
P.O. Number:
Project Name: Isabella County
Collected Date: 10/17/2023
Received Date: 10/18/2023 9:40:00 AM

Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

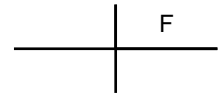
SanAir Sample ID: 23057808-016

Grid Box ID: 23025

Grid Orientation

Client Sample ID: 26

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1

No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Burany, Xianying

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
e6	a10	NSD									None		
e6	a6	NSD									None		
e6	a8	NSD									None		
e7	a1	NSD									None		
e7	a3	NSD									None		
23057808-016		Total:	0	0	0	Count:	0	0					

Disclaimer

The final report cannot be reproduced, except in full, without written authorization from SanAir. This report is the sole property of the client named on the SanAir Technologies Laboratory chain-of-custody (COC). Results in the report are confidential information intended only for the use by the customer listed on the COC. Neither results nor reports will be discussed with or released to any third party without our client's written permission. The accuracy of the results is dependent upon the client's sampling procedure and information provided to the laboratory by the client. SanAir assumes no responsibility for the sampling procedure and will provide evaluation reports based solely on the samples in the condition they were received at the laboratory and information provided by the client, such as project name, project number, po number, sample collection dates, special instructions, samples collected by, sample numbers, sample identifications/location, sample type, selected analysis type, flow rate, total volume or area, and start stop times that may affect the validity of the results in this report. Samples were received in good condition unless otherwise noted in the report. SanAir assumes no responsibility or liability in the manner in which results are used or interpreted. Clearance test for AHERA samples from abatement projects requires a minimum of five samples inside the work site, five samples outside the work site, and three blanks. This report does not constitute and shall not be used to claim product certification, approval, or endorsement by NVLAP, NIST, AIHA LAP, LLC or any other agency of the U.S. government; and may not be certified by every local, state and federal regulatory agency. Clearance test for AHERA samples from abatement projects requires a minimum of five samples inside the work site, five samples outside the work site, and three blanks. Samples are retained for a period of 60 days. Prepared grids are retained for 3 years.

95% Confidence levels listing upper and lower concentration limits are available upon request.

Laboratory Relative Standard Deviation: 0.32

Analyst RSD:

M. Daigneault: 0.23

S. Scales: 0.41

1876 b Alternative Accuracy & Precision: 100%

See www.sanair.com for a full list of and copies of our accreditation certificates and scopes. Not all accreditations may cover the scope of testing performed in this final report.

Asbestos Accreditations, Licenses, or Certificates

NVLAP Lab Code 600227-0

State of Rhode Island Department of Health, Certification Number: PLM00144, TEM00144

State of West Virginia Bureau for Public Health, Analytical Laboratory Number: LT000637



1551 Oakbridge Dr. STE B
Powhatan, VA 23139
804.897.1177 / 888.895.1177
Fax 804.897.0070
sanair.com

Asbestos
Chain of Custody
Form 140, Rev 1, 1/20/2017

SanAir ID Number

23057808

Company: Northern Analytical Services, LLC		Project #: 230145	Collect by: Kevin Delancey
Address: 14870 225th Avenue		Project Name: Isabella County	Phone #: 231-679-0005
City, St., Zip: Big Rapids, MI 49307		Date Collected: 10-17-23	Fax #: 866-214-4739
State of Collection:	Account#: 2409	P.O. Number:	Email: kevin.delancey@northernas.com, john@northernas.com

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

** Available on 24-hr. to 5-day TAT

Water	
ABHE	EPA 100.2 <input type="checkbox"/>

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

Special Instructions	Point count if less than 1%
----------------------	-----------------------------

Sample #	Sample Identification/Location	Volume or Area	Sample Date	Flow Rate*	Start - Stop Time*	
9	FB	-	-	-	-	-
10	FB	-	-	-	-	-
11	Rock 125	1200L	10/17/23	10.0	9:10	11:10
12	Rock 121					
13	Rock 119					
14	Rock 116					
15	Rock 115					
16	Rock 111					
17	Rock 109					
18	Rock 101					
19	Rock 107					
20	Rock 102					

Relinquished by	Date	Time	Received by	Date	Time
RS	10-17-23	16:00	RMB	OCT 18 2023	9:40am

If no technician is provided, then the primary contact for your account will be selected. Unless scheduled, the turnaround time for all samples received after 3 pm EST Friday will begin at 8 am Monday morning. Weekend or holiday work must be scheduled ahead of time and is charged for rush turnaround time. SanAir covers Standard Overnight FedEx shipping. Shipments billed to SanAir with a faster shipping rate will result in additional charges.



The Identification Specialists

Analysis Report
prepared for
Northern Analytical Services, LLC

Report Date: 10/19/2023

Project Name: Isabella County

Project #: 230145

SanAir ID#: 23057904



NVLAP LAB CODE 200870-0

10501 Trade Court | North Chesterfield, Virginia 23236
888.895.1177 | 804.897.1177 | fax: 804.897.0070 | IAQ@SanAir.com | SanAir.com



SanAir ID Number
23057904
FINAL REPORT
10/19/2023 11:12:58 AM

Name: Northern Analytical Services, LLC
Address: 14870 225th Avenue
Big Rapids, MI 49307
Phone: 231-679-0005

Project Number: 230145
P.O. Number:
Project Name: Isabella County
Collected Date: 10/17/2023
Received Date: 10/18/2023 10:40:00 AM

Dear Josh Christie,

We at SanAir would like to thank you for the work you recently submitted. The 15 sample(s) were received on Wednesday, October 18, 2023 via UPS. The final report(s) is enclosed for the following sample(s): 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41.

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

Sincerely,

A handwritten signature in black ink that reads "Sandra Sobrino".

Sandra Sobrino
Asbestos & Materials Laboratory Manager
SanAir Technologies Laboratory

Final Report Includes:

- Cover Letter
- Analysis Pages
- Disclaimers and Additional Information

Sample conditions:

- 15 samples in Good condition.



SanAir ID Number
23057904
FINAL REPORT
10/19/2023 11:12:58 AM

Name: Northern Analytical Services, LLC
Address: 14870 225th Avenue
Big Rapids, MI 49307
Phone: 231-679-0005

Project Number: 230145
P.O. Number:
Project Name: Isabella County
Collected Date: 10/17/2023
Received Date: 10/18/2023 10:40:00 AM

Analyst: Hayes, Dillon | Sobrino, Sandra

Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E

Sample	Volume (Liters)	Area Analyzed	Non Asb	Asbestos Type(s)	# Structures		Analytical Sensitivity (S/cc)	Reporting Limits	Asbestos Concentration	
					$\geq 0.5\mu$	< 5		LCL - UCL (S/cc)	(S/mm ²)	(S/cc)
23057904-001 27 Room 313	1200	0.0650 mm ²	0	Chrysotile	1	0	0.0049	0.0001 - 0.0273	15.00	0.0049
23057904-002 28 Room 310	1200	0.0650 mm ²	0	None Detected			0.0049		<15.00	<0.0049
23057904-003 29 Room 319	1200	0.0650 mm ²	0	None Detected			0.0049		<15.00	<0.0049
23057904-004 30 Room 302	1200	0.0650 mm ²	0	Chrysotile	0	1	0.0049	0.0001 - 0.0273	15.00	0.0049
23057904-005 31 Room 303	1200	0.0650 mm ²	0	None Detected			0.0049		<15.00	<0.0049
23057904-006 32 Room 324	1200	0.0650 mm ²	2	None Detected			0.0049		<15.00	<0.0049
23057904-007 33 Room 331	1200	0.0650 mm ²	1	None Detected			0.0049		<15.00	<0.0049
23057904-008 34 Room 334	1200	0.0650 mm ²	0	None Detected			0.0049		<15.00	<0.0049
23057904-009 35 Room 339	1200	0.0650 mm ²	0	None Detected			0.0049		<15.00	<0.0049

Analyst: *Dillon Hayes*

Approved Signatory:

Sandra Sobrino

Analysis Date: 10/19/2023

Date: 10/19/2023



SanAir ID Number
23057904
FINAL REPORT
10/19/2023 11:12:58 AM

Name: Northern Analytical Services, LLC
Address: 14870 225th Avenue
Big Rapids, MI 49307
Phone: 231-679-0005

Project Number: 230145
P.O. Number:
Project Name: Isabella County
Collected Date: 10/17/2023
Received Date: 10/18/2023 10:40:00 AM

Analyst: Hayes, Dillon | Sobrino, Sandra

Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E

Sample	Volume (Liters)	Area Analyzed	Non Asb	Asbestos Type(s)	# Structures		Analytical Sensitivity (S/cc)	Reporting Limits	Asbestos Concentration	
					$\geq 0.5\mu$	< 5		LCL - UCL (S/cc)	(S/mm ²)	(S/cc)
23057904-010 36 Room 320	1200	0.0650 mm ²	0	None Detected			0.0049		<15.00	<0.0049
23057904-011 37 Room 301	1200	0.0650 mm ²	1	Chrysotile	0	1	0.0049	0.0001 - 0.0273	15.00	0.0049
23057904-012 38 Room 232	1200	0.0650 mm ²	0	None Detected			0.0049		<15.00	<0.0049
23057904-013 39 Room 220	1200	0.0650 mm ²	0	None Detected			0.0049		<15.00	<0.0049
23057904-014 40 Room 218	1200	0.0650 mm ²	0	None Detected			0.0049		<15.00	<0.0049
23057904-015 41 Room 213	1200	0.0650 mm ²	0	None Detected			0.0049		<15.00	<0.0049

Analyst: *Dillon Hayes*

Approved Signatory:

Sandra Sobrino

Analysis Date: 10/19/2023

Date: 10/19/2023



SanAir ID Number
23057904
FINAL REPORT
10/19/2023 11:12:58 AM

Name: Northern Analytical Services, LLC
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Project Number: 230145
P.O. Number:
Project Name: Isabella County
Collected Date: 10/17/2023
Received Date: 10/18/2023 10:40:00 AM

Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

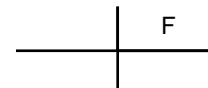
SanAir Sample ID: 23057904-001

Grid Box ID: 23-280

Grid Orientation

Client Sample ID: 27

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1


No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Hayes, Dillon

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
b4	f1	1		Yes			4.5	0	0.2	Bundle	Chrysotile	2313	
b4	f3	NSD									None		
b4	f5	NSD									None		
b5	b10	NSD									None		
b5	d9	NSD									None		
23057904-001		Total:	0	1	0	Count:	1	0					



Name: Northern Analytical Services, LLC
Address: 14870 225th Avenue
Big Rapids, MI 49307
Phone: 231-679-0005

Project Number: 230145
P.O. Number:
Project Name: Isabella County
Collected Date: 10/17/2023
Received Date: 10/18/2023 10:40:00 AM

Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

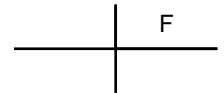
SanAir Sample ID: 23057904-002

Grid Box ID: 23-280

Grid Orientation

Client Sample ID: 28

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1

No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Hayes, Dillon

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
c1	d1	NSD									None		
c1	d3	NSD									None		
c1	d5	NSD									None		
c2	e10	NSD									None		
c2	e7	NSD									None		
23057904-002		Total:	0	0	0	Count:	0	0					



Name: Northern Analytical Services, LLC
Address: 14870 225th Avenue
Big Rapids, MI 49307
Phone: 231-679-0005

Project Number: 230145
P.O. Number:
Project Name: Isabella County
Collected Date: 10/17/2023
Received Date: 10/18/2023 10:40:00 AM

Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

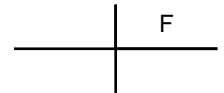
SanAir Sample ID: 23057904-003

Grid Box ID: 23-280

Grid Orientation

Client Sample ID: 29

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1

No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Hayes, Dillon

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
c3	f1	NSD									None		
c3	f3	NSD									None		
c3	f5	NSD									None		
c4	c1	NSD									None		
c4	c3	NSD									None		
23057904-003		Total:	0	0	0	Count:	0	0					



Name: Northern Analytical Services, LLC
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Big Rapids, MI 49307
Phone: 231-679-0005

Project Number: 230145
P.O. Number:
Project Name: Isabella County
Collected Date: 10/17/2023
Received Date: 10/18/2023 10:40:00 AM

Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

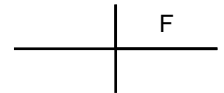
SanAir Sample ID: 23057904-004

Grid Box ID: 23-280

Grid Orientation

Client Sample ID: 30

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1


No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Hayes, Dillon

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
c5	d1	1		Yes			0	30.1	0.5	Bundle	Chrysotile	0	
c5	d3	NSD									None		
c5	d5	NSD									None		
d1	h1	NSD									None		
d1	h3	NSD									None		
23057904-004		Total:	0	1	0	Count:	0	1					



Name: Northern Analytical Services, LLC
Address: 14870 225th Avenue
Big Rapids, MI 49307
Phone: 231-679-0005

Project Number: 230145
P.O. Number:
Project Name: Isabella County
Collected Date: 10/17/2023
Received Date: 10/18/2023 10:40:00 AM

Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

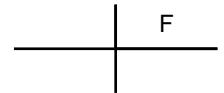
SanAir Sample ID: 23057904-005

Grid Box ID: 23-280

Grid Orientation

Client Sample ID: 31

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1

No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Hayes, Dillon

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
d2	i1	NSD									None		
d2	i3	NSD									None		
d2	i5	NSD									None		
d3	g10	NSD									None		
d3	g8	NSD									None		
23057904-005		Total:	0	0	0	Count:	0	0					



SanAir ID Number
23057904
FINAL REPORT
10/19/2023 11:12:58 AM

Name: Northern Analytical Services, LLC
Address: 14870 225th Avenue
Big Rapids, MI 49307
Phone: 231-679-0005

Project Number: 230145
P.O. Number:
Project Name: Isabella County
Collected Date: 10/17/2023
Received Date: 10/18/2023 10:40:00 AM

Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

SanAir Sample ID: 23057904-006

Grid Box ID: 23-280

Grid Orientation

Client Sample ID: 32

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1



No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Hayes, Dillon

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
d4	f1	NSD									None		
d4	f3	NSD									None		
d4	f5	1	N								Non-Asbestos	0	
d5	a10	2	N								Non-Asbestos	0	
d5	a8	NSD									None		
23057904-006		Total:	2	0	0	Count:	0	0					



SanAir ID Number
23057904
 FINAL REPORT
 10/19/2023 11:12:58 AM

Name: Northern Analytical Services, LLC
Address: 14870 225th Avenue
 Big Rapids, MI 49307
Phone: 231-679-0005

Project Number: 230145
P.O. Number:
Project Name: Isabella County
Collected Date: 10/17/2023
Received Date: 10/18/2023 10:40:00 AM

Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

SanAir Sample ID: 23057904-007

Grid Box ID: 23-280

Grid Orientation

Client Sample ID: 33

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1


No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Hayes, Dillon

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
e1	e10	NSD									None		
e1	e6	NSD									None		
e1	e8	NSD									None		
e2	i1	NSD									None		
e2	i3	1	N								Non-Asbestos	0	
23057904-007		Total:	1	0	0	Count:	0	0					



SanAir ID Number
23057904
FINAL REPORT
10/19/2023 11:12:58 AM

Name: Northern Analytical Services, LLC
Address: 14870 225th Avenue
Big Rapids, MI 49307
Phone: 231-679-0005

Project Number: 230145
P.O. Number:
Project Name: Isabella County
Collected Date: 10/17/2023
Received Date: 10/18/2023 10:40:00 AM

Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

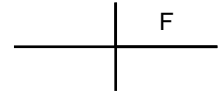
SanAir Sample ID: 23057904-008

Grid Box ID: 23-280

Grid Orientation

Client Sample ID: 34

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1

No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Hayes, Dillon

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
e3	g1	NSD									None		
e3	g3	NSD									None		
e3	g5	NSD									None		
e4	j1	NSD									None		
e4	j3	NSD									None		
23057904-008		Total:	0	0	0	Count:	0	0					



Name: Northern Analytical Services, LLC
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Phone: 231-679-0005

Project Number: 230145
P.O. Number:
Project Name: Isabella County
Collected Date: 10/17/2023
Received Date: 10/18/2023 10:40:00 AM

Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

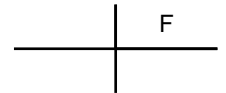
SanAir Sample ID: 23057904-009

Grid Box ID: 23-280

Grid Orientation

Client Sample ID: 35

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1

No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Hayes, Dillon

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
a6	i1	NSD									None		
a6	i3	NSD									None		
e5	e9	NSD									None		
e5	g10	NSD									None		
e5	g8	NSD									None		
23057904-009		Total:	0	0	0	Count:	0	0					



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Project Number: 230145
P.O. Number:
Project Name: Isabella County
Collected Date: 10/17/2023
Received Date: 10/18/2023 10:40:00 AM

Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

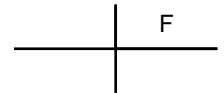
SanAir Sample ID: 23057904-010

Grid Box ID: 23-280

Grid Orientation

Client Sample ID: 36

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1

No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Hayes, Dillon

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
a7	h1	NSD									None		
a7	h3	NSD									None		
a7	j2	NSD									None		
a8	a8	NSD									None		
a8	d8	NSD									None		
23057904-010		Total:	0	0	0	Count:	0	0					



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Project Number: 230145
P.O. Number:
Project Name: Isabella County
Collected Date: 10/17/2023
Received Date: 10/18/2023 10:40:00 AM

Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

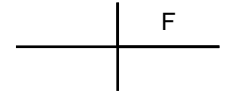
SanAir Sample ID: 23057904-011

Grid Box ID: 23-280

Grid Orientation

Client Sample ID: 37

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1

No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Hayes, Dillon

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
a10	e2	2		Yes			0	41	0.25	Bundle	Chrysotile	0	
a10	e4	NSD									None		
a9	b10	NSD									None		
a9	b8	NSD									None		
a9	d10	1	N								Non-Asbestos	0	
23057904-011		Total:	1	1	0	Count:	0	1					



Name: Northern Analytical Services, LLC
Address: 14870 225th Avenue
Big Rapids, MI 49307
Phone: 231-679-0005

Project Number: 230145
P.O. Number:
Project Name: Isabella County
Collected Date: 10/17/2023
Received Date: 10/18/2023 10:40:00 AM

Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

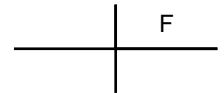
SanAir Sample ID: 23057904-012

Grid Box ID: 23-281

Grid Orientation

Client Sample ID: 38

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1

No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Hayes, Dillon

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
c5	i10	NSD									None		
c5	i6	NSD									None		
c5	i8	NSD									None		
d1	i1	NSD									None		
d1	i3	NSD									None		
23057904-012		Total:	0	0	0	Count:	0	0					



Name: Northern Analytical Services, LLC
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Big Rapids, MI 49307
Phone: 231-679-0005

Project Number: 230145
P.O. Number:
Project Name: Isabella County
Collected Date: 10/17/2023
Received Date: 10/18/2023 10:40:00 AM

Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

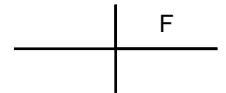
SanAir Sample ID: 23057904-013

Grid Box ID: 23-281

Grid Orientation

Client Sample ID: 39

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1

No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Hayes, Dillon

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
d2	a10	NSD									None		
d2	a6	NSD									None		
d2	a8	NSD									None		
d3	g10	NSD									None		
d3	g8	NSD									None		
23057904-013		Total:	0	0	0	Count:	0	0					



Name: Northern Analytical Services, LLC
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Project Number: 230145
P.O. Number:
Project Name: Isabella County
Collected Date: 10/17/2023
Received Date: 10/18/2023 10:40:00 AM

Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

SanAir Sample ID: 23057904-014

Grid Box ID: 23-281

Grid Orientation

Client Sample ID: 40

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1

No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Hayes, Dillon

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
c4	b1	NSD									None		
c4	b3	NSD									None		
c4	b5	NSD									None		
c5	i10	NSD									None		
c5	i8	NSD									None		
23057904-014		Total:	0	0	0	Count:	0	0					



Name: Northern Analytical Services, LLC
Address: 14870 225th Avenue
Big Rapids, MI 49307
Phone: 231-679-0005

Project Number: 230145
P.O. Number:
Project Name: Isabella County
Collected Date: 10/17/2023
Received Date: 10/18/2023 10:40:00 AM

Asbestos Air TEM AHERA, 40 CFR Part 763 Subpart E Worksheet

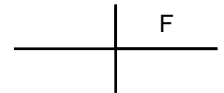
SanAir Sample ID: 23057904-015

Grid Box ID: 23-281

Grid Orientation

Client Sample ID: 41

G.O.A.: 0.013 mm sq.



Instrument ID: Hitachi TEM Scope #1

No. G.O. Analyzed: 5

Magnification: 20 K

Analyst: Hayes, Dillon

AV: 100Kv

Date: 10/19/2023

Grid ID	G.O. ID	Structure Number	ED Observation			Sketch	Length		Width	Structure Type	EDX Fiber Type	SAED Film ID	QC
			Non Asbestos	Chrysotile	Amphibole		≥ 0.5um < 5um	≥ 5um					
e1	b2	NSD									None		
e1	b4	NSD									None		
e1	b6	NSD									None		
e2	i1	NSD									None		
e2	i3	NSD									None		
23057904-015		Total:	0	0	0	Count:	0	0					

Disclaimer

U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods – Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found 40 CFR, Part 763, Subpart E, Appendix A.

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95% confidence levels are reported using the upper and lower concentrations limits.

Laboratory Relative Standard Deviation: 0.2

Analyst RSD: J. Tallert 0.2, S. Sobrino 0.2, D. Hayes 0.3

1876 b Alternative Accuracy and Precision

J. Tallert: 100%

S. Sobrino: 100%

D. Hayes: 100%

Asbestos Accreditations

National Voluntary Laboratory Accreditation Program (NVLAP) Lab Code 200870-0

City of Philadelphia Department of Public Health Air Management Services, Certification#ALL-460

Commonwealth of Pennsylvania Department of Environmental Protection Number 68-05397

California State Environmental Laboratory Accreditation Program Certificate Number 2915

Colorado Department of Public Health and Environment Registration Number AL-23143

Connecticut Department of Public Health Environmental Laboratory Registration Number PH-0105

Massachusetts Department of Labor Standards Asbestos Analytical Services License Number:

AA000222 State of Maine Department of Environmental Protection License Number: LB-0075, LA-0084

New York State Department of Health Laboratory ID: 11983

State of Rhode Island Department of Health Certification No.: PCM00126, PLM00126, TEM00126 Texas

Department of State Health Services License Number: 300440

Commonwealth of Virginia Department of Professional and Occupational Regulation Number:

3333000323

State of Washington Department of Ecology Laboratory ID: C989

State of West Virginia Bureau for Public Health Analytical Laboratory Number: LT000616

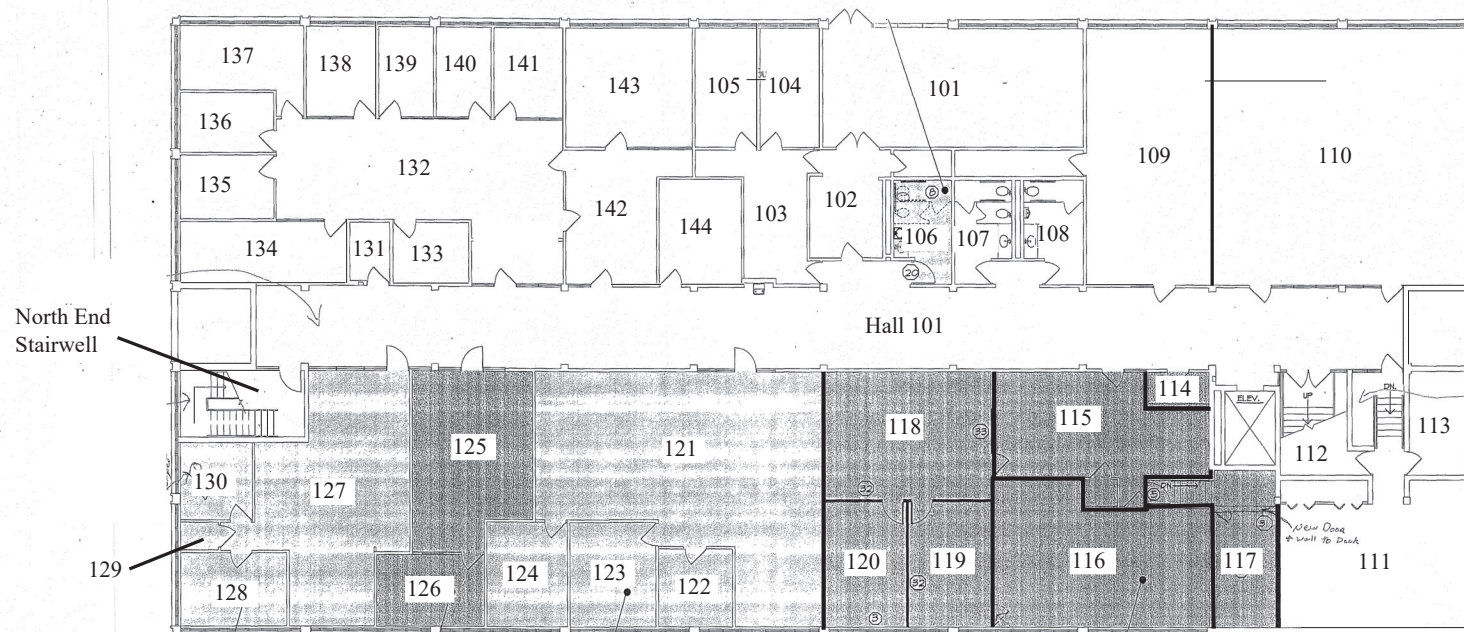
Vermont Department of Health License Number: Asb-Co-An-000006

Louisiana Department of Environmental Quality AI Number 212253, Certificate #05088

Form 140, Revision 1, 1/20/2017

Appendix B

Floor Plan



BUILDING USE MASTER PLAN
FIRST LEVEL FLOOR PLAN



SCALE: 1/8" = 1'-0"

Isabella County Administration Building

