



www.bdsenvironmental.com

13845 East Nine Mile
Warren, Michigan
48089

Tel: (586) 755-9030
Fax: (586) 755-9068

LIMITED ASBESTOS NESHAP SURVEY REPORT

BUILDING LOCATION

Former Parks and Recreation Building
318 West Lake Street
South Lyon, Michigan 48178

INSPECTION DATE

August 27, 2019

CLIENT

City of South Lyon
335 South Warren
South Lyon, Michigan 48178

BDS PROJECT NUMBER

19-711

INTRODUCTION

The city of South Lyon has retained BDS Environmental to conduct an asbestos inspection on a located at 318 West Lake Street, South Lyon, Oakland County, Michigan. The objective of the survey was to confirm the presence or absence of non-friable and friable asbestos-containing materials present in the building. BDS's scope of work was based on the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) as they relate to asbestos-containing materials present in building structures that are to be renovated or demolished. This inspection is "limited" in scope because it was not practical to penetrate all floors, walls and ceiling surfaces in order to identify potential ACM. However, reasonable efforts were made to try to identify all currently inaccessible ACM within the building.

This is a 1,950 square foot commercial structure built on a slab with a single floor. This structure is heated with forced air heating and has an original build date circa 1950.

METHODOLOGY

BDS's Asbestos Inspector Kevin T. Vayko (MLARA Accreditation No. A52844) performed the inspection on August 27, 2019. BDS's Inspector collected thirty-three (33) bulk samples during the inspection. The inspection was performed in a manner to attempt to identify all suspect asbestos materials, i.e. "Hammer in Hand". However, potential suspect materials within or above hard plaster or cinder block walls, partitions, and ceilings may not have been identified due to the lack of access to those potential suspect materials.

BDS's inspector began by identifying building materials, which possibly contain asbestos. These materials can be floor tiles, mastic, wallboard, ceiling tiles, thermal system insulation, et cetera. Once these were located, homogeneous sampling areas were delineated and the suspect materials were sampled and analyzed from representative areas.

A homogeneous area is a material that is similar in color, texture, construction, or general appearance. Bulk samples of suspected asbestos-containing building materials were collected using the recommended procedures outlined in the EPA guidance publication Simplified Sampling Scheme for Friable Surfacing Materials (EPA 560/5-85-030a-Oct. 1985). The methods described in the publication were adapted to include the sampling of thermal system insulations. Samples were collected utilizing plastic containers which were sealed air tight and labeled with a unique sample number. Chain of custody forms were then completed and priority mailed along with the samples to the laboratory for analysis.

Collected bulk samples were analyzed by SanAir Technologies Laboratory, Inc. using Polarized Light Microscopy (PLM) technique according to EPA Method 600/R-93/116. This method requires that each heterogeneous layer of a bulk sample be analyzed for the presence of asbestos. Analysis of floor tiles and other resin bound materials by PLM may yield false negative results because of method limitations in separating closely bound fibers and in detecting fibers of short length and smaller diameter. When analysis of such materials by PLM yields negative results for the presence of asbestos, BDS may recommend utilizing confirmatory methods of identification, i.e. point counting.

SAMPLE COLLECTION AND IDENTIFICATION

A total thirty-three (33) bulk samples of suspected asbestos-containing materials were collected from selected locations identified throughout the site. The bulk samples were further delineated into forty-eight (48) distinct layers which were all analyzed for asbestos content. **Drywall joint compound and white aluminum window frame caulk samples were further analyzed using the "Point Count Method" to confirm accuracy of the initial testing results. This additional analysis confirmed that these homogeneous areas are asbestos-containing materials.** The approximate sample location, material type, and asbestos content for each sample are listed on the following page.

BULK SAMPLE DATA

SAMPLE NUMBER	HOMOGENEOUS AREA	SAMPLE LOCATION	ASBESTOS CONTENT
01A	White Aluminum Frame Caulk	South - Front Entry	2% Chrysotile (PC 1.25% Chrysotile)
01B	White Aluminum Frame Caulk	South - Front Entry	DNA
01C	White Aluminum Frame Caulk	South - Front Entry	DNA
02A	Black Aluminum Frame Caulk	Southwest	NAD
02B	Black Aluminum Frame Caulk	North	NAD
02C	Black Aluminum Frame Caulk	East	NAD
03A	White Brick Ledge Caulk	Southwest - Front Entry	NAD
03B	White Brick Ledge Caulk	Southeast - Front Entry	NAD
04A	Black Foundation Caulk	Southwest - Front Entry	10% Chrysotile
04B	Black Foundation Caulk	Southeast - Front Entry	DNA
05A	Metal Door Frame Caulk	East	5% Chrysotile
05B	Metal Door Frame Caulk	East	DNA
06A	Transite Duct	South - Reception Area	40% Chrysotile
06B	Transite Duct	North - Stock/Play Area	DNA
07A	2' x 2' Suspended Ceiling Grid - Pinhole-Gouge	East - Reception Area	NAD
07B	2' x 2' Suspended Ceiling Grid - Pinhole-Gouge	West - Conference Room	NAD
08A	12" x 12" Pinhole Ceiling Tile with Brown Glue Pod	South - Reception Area	NAD/NAD
08B	12" x 12" Pinhole Ceiling Tile with Brown Glue Pod	North - Stock/Play Area	NAD/NAD
08C	12" x 12" Pinhole Ceiling Tile with Brown Glue Pod	West - Conference Room	NAD/NAD
09A	12" x 12" Rainbow Pattern Floor Tile/Yellow Glue	South - Reception Area	NAD/NAD
09B	12" x 12" Rainbow Pattern Floor Tile/Yellow Glue	North - Stock/Play Area	NAD/NAD

NAD = No Asbestos Detected DNA = Did Not Analyze PC = Point Count

BULK SAMPLE DATA
(Continued)

SAMPLE NUMBER	HOMOGENEOUS AREA	SAMPLE LOCATION	ASBESTOS CONTENT
10A	9" x 9" Light Brown Floor Tile/Black Mastic	East - Mechanical Room	5% Chrysotile/ NAD
10B	9" x 9" Light Brown Floor Tile/Black Mastic	East - Mechanical Room	DNA/NAD
11A	Brown Vinyl Base Cove/ Brown Adhesive	East - Mechanical Room	NAD/NAD
11B	Brown Vinyl Base Cove/ Brown Adhesive	North - Stock/Play Area	NAD/NAD
12A	Navy Blue Vinyl Base Cove/ Brown Adhesive	South - Reception Area	NAD/NAD
12B	Navy Blue Vinyl Base Cove/ Brown Adhesive	North - Stock/Play Area	NAD/NAD
13A	Drywall/Drywall Joint Compound	South - Reception Area	NAD/NAD
13B	Drywall/Drywall Joint Compound	North - Stock/Play Area	NAD/NAD
13C	Drywall/Drywall Joint Compound	East - Mechanical Room	NAD/2% Chrysotile (PC 1.25% Chrysotile)
14	Drywall Joint Compound - Patch	East - Mechanical Room	NAD
15A	Black Sink Undercoating	North - Stock/Play Area	5% Chrysotile
15B	Black Sink Undercoating	North - Stock/Play Area	DNA

NAD = No Asbestos Detected DNA = Did Not Analyze PC = Point Count

INTERPRETATION OF SURVEY RESULTS

The Environmental Protection Agency defines an asbestos-containing material (ACM) as any material containing more than one percent asbestos as determined using Polarized Light Microscopy. Asbestos materials are further defined as Friable ACM, Category I Nonfriable ACM, and Category II Nonfriable ACM.

All friable ACM must be removed prior to building renovation/demolition and any Category I or II nonfriable ACM must be removed prior to building renovation/demolition if these materials have a high probability of becoming friable during the renovation/demolition process.

The visual inspection of the interior and exterior of the building indicated that sixteen (16) building materials, known as homogeneous areas, were determined to be Presumed Asbestos Containing Materials (PACM), of which fifteen (15) were therefore were sampled to determine definitively whether the materials were asbestos or non-asbestos. The fire door and frame doors were assumed to be asbestos-containing. The subsequent sample analysis, as listed in the previous **Bulk Sample Data** tables, indicated that eight (8) of those building materials were proven to be non-asbestos and seven (7) were proven to be asbestos-containing.

The materials listed in bold print on the following table are asbestos-containing building materials (ACBM).

HOMOGENEOUS AREA DATA

Homogeneous Area Number	Homogeneous Area Description	Asbestos-Containing?
HA #1	White Aluminum Frame Caulk	YES
HA #2	Black Aluminum Frame Caulk	NO
HA #3	White Brick Ledge Caulk	NO
HA #4	Black Foundation Caulk	YES
HA #5	Metal Door Frame Caulk	YES
HA #6	Transite Duct Under Floor Slab	YES
HA #7	2' x 2' Suspended Ceiling Grid – Pinhole-Gouge	NO
HA #8	12" x 12" Pinhole Ceiling Tile with Brown Glue Pod	NO/NO
HA #9	12" x 12" Rainbow Pattern Floor Tile/ Yellow Glue	NO/NO
HA #10	9" x 9" Light Brown Floor Tile/ Black Mastic	YES/NO
HA #11	Brown Vinyl Base Cove/Brown Adhesive	NO/NO

HOMOGENEOUS AREA DATA
(Continued)

Homogeneous Area Number	Homogeneous Area Description	Asbestos-Containing?
HA #12	Navy Blue Vinyl Base Cove/Brown Adhesive	NO/NO
HA #13	Drywall/Drywall Joint Compound	NO/YES
HA #14	Drywall Joint Compound - Patch	NO
HA #15	Black Sink Undercoating	YES

CONCLUSION

The locations, type of asbestos materials and approximate quantities present in the building is listed in the table below.

LOCATION	TYPE OF MATERIAL	QUANTITY	REQUIRED ASBESTOS RESPONSE ACTION
South – Front Entry	White Aluminum Frame Caulk	2 SF (28 LF)	Category II Non-friable ACM door frame caulk requires removal if renovation/demolition activities will disturb the caulk.
South – Front Entry	Black Foundation Caulk	1 SF (18 LF)	Category II Non-friable ACM door frame caulk requires removal if renovation/demolition activities will disturb the caulk.
East Man Door	Metal Door Frame Caulk	3 SF (21 LF) [1 Double Door]	Category II Non-friable ACM door frame caulk requires removal if renovation/demolition activities will disturb the caulk.
Interior perimeter underneath concrete slab	Transite Duct	505 SF	Category II Non-friable ACM Transite duct requires removal after concrete floor slab has been removed.
East – Mechanical Room	9" x 9" Light Brown Floor Tile	36 SF	Category I Non-friable ACM floor tile requires removal if rendered non-intact during renovation/demolition activities.
East – Mechanical Room	Drywall Joint Compound	350 SF	Friable ACM drywall joint compound must be removed if renovation/demolition activities will disturb the drywall.
North - Stock/Play Area	Black Sink Undercoating	1 Sink	Category II Non-friable ACM black sink undercoating must be removed if demolition activities will disturb the undercoating on the sink.
North - Stock/Play Area	Fire Door & Frame	2 Doors; 1 Frame	Category II Non-friable ACM fire door & frame requires removal if renovation/demolition activities will puncture the fire door & frame.

SF = Square Feet

All asbestos-containing response activities must be conducted in accordance to the requirements of the OSHA Class II Asbestos work requirements found in 29 CFR 1926.1101 prior to renovation or demolition activities.

Intact means that the ACM has not crumbled, been pulverized, or otherwise deteriorated so that it is no longer likely to be bound with its matrix. Each contractor will have to make the decision on whether they feel that they can renovate/demolish the building while maintaining the asbestos-containing materials in good condition (intact). It is the opinion of BDS Environmental that the liability of the building owner and renovation/demolition contractor is much lower if the asbestos-containing materials, excluding bituminous roofing, are removed prior to renovation/demolition activities.

The information and opinions rendered in this report are exclusively for use by the city of South Lyon and it's agents. BDS will not distribute this report without your consent except as required by law or court order. The information and opinions are given in light of a limited assignment and should be implemented in light of that assignment. BDS accepts responsibility for the competent performance of its duties in execution of the assignment and preparing reports in accordance with the normal standards of the profession, but disclaims any responsibility for consequential damages.

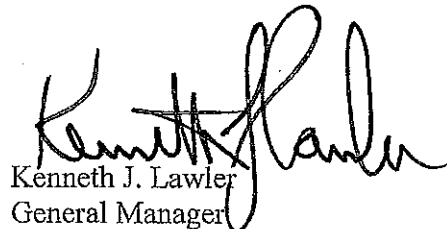
It has been a pleasure to be of service to you. If you have any questions, or require additional information, please contact us at (586) 755-9030.

Thank You,

BDS ENVIRONMENTAL



Kevin T. Vayko
MI Asbestos Inspector A#52844



Kenneth J. Lawler
General Manager

CERTIFICATE OF LABORATORY ANALYSIS

SanAir Technologies Laboratory

Analysis Report

prepared for

BDS Environmental

Report Date: 8/29/2019
Project Name: 318 West Lake, South
Lyon
Project #: 19-711B
SanAir ID#: 19043572



NVLAP LAB CODE 200870-0



Certification # 652931



License # LAB0166



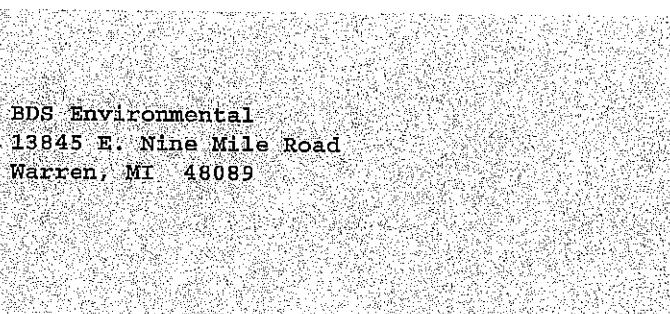
804.897.1177

www.sanair.com



SanAir Technologies Laboratory, Inc.

1551 Oakbridge Drive, Suite B, Powhatan, VA 23139
804.897.1177 Toll Free: 888.895.1177 Fax: 804.897.0070
Web: <http://www.sanair.com> E-mail: laq@sanair.com



August 29, 2019

SanAir ID # 19043572
Project Name: 318 West Lake, South Lyon
Project Number: 19-711B

Dear Ron Lawler,

We at SanAir would like to thank you for the work you recently submitted. The 33 sample(s) were received on Wednesday, August 28, 2019 via FedEx. The final report(s) is enclosed for the following sample(s): 01A, 01B, 01C, 02A, 02B, 02C, 03A, 03B, 04A, 04B, 05A, 05B, 06A, 06B, 07A, 07B, 08A, 08B, 08C, 09A, 09B, 10A, 10B, 11A, 11B, 12A, 12B, 13A, 13B, 13C, 14, 15A, 15B.

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,

Sandra Sobrino
Asbestos & Materials Laboratory Manager
SanAir Technologies Laboratory

Final Report Includes:

- Cover Letter
- Analysis Pages
- Disclaimers and Additional Information

sample conditions:

33 sample(s) in Good condition



1551 Oakbridge Drive Suite B
Powhatan, VA 23139
804-897-1177 / 888-895-1177
Fax 804-897-0070
www.sanair.com

Asbestos Chain of Custody

SanAir ID Number

19043572

Company: BDS Environmental		Project #: 19-711B		Collected by: Kevin Vayko	
Address: 13845 East Nine Mile Rd.		Project Name: 318 West Lake, South Lyon		Phone #: 586-755-9030	
City, St., Zip: Warren, MI 48089		Date Collected: 08/27/2019		Fax #: 586-755-9068	
State of Collection: MI Account#: 2451		P.O. Number:		Email: riawler@BDSenvironmental.com	

Bulk			Air			Soil/Vermiculite		
ABB	PLM EPA 600/R-93/116	<input checked="" type="checkbox"/>	ABA	PCM NIOSH 7400	<input type="checkbox"/>	ABSE	PLM EPA 600/R-93/116 (Qual.)	<input type="checkbox"/>
	Positive Stop	<input checked="" type="checkbox"/>	ABA-2	OSHA w/ TWA*	<input type="checkbox"/>	ABSP	PLM CARB 435 (LOD <1%)	<input type="checkbox"/>
ABEPA	PLM EPA 400 Point Count	<input type="checkbox"/>	ABTEM	TEM AHERA	<input type="checkbox"/>	ABSP1	PLM CARB 435 (LOD 0.25%)	<input type="checkbox"/>
ABB1K	PLM EPA 1000 Point Count	<input type="checkbox"/>	ABATN	TEM NIOSH 7402	<input type="checkbox"/>	ABSP2	PLM CARB 435 (LOD 0.1%)	<input type="checkbox"/>
ABBEN	PLM EPA NOB	<input type="checkbox"/>	ABT2	TEM Level II	<input type="checkbox"/>			
ABBCH	TEM Chatfield	<input type="checkbox"/>						
ABBTM	TEM EPA NOB	<input type="checkbox"/>						

Water			New York ELAP			Dust		
ABHE	EPA 100.2	<input type="checkbox"/>	PLM NY	PLM 600/M4 82 020	<input type="checkbox"/>	ABWA	TEM Wipe ASTM D-6480	<input type="checkbox"/>
			ABEPA2	NY ELAP 198.1	<input type="checkbox"/>	ABDMV	TEM Microvac ASTM D-5755	<input type="checkbox"/>
			ABENY	NY ELAP 198.6 PLM NOB	<input type="checkbox"/>	Matrix Other		
			ABBNY	NY ELAP 198.4 TEM NOB	<input type="checkbox"/>			<input type="checkbox"/>

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

Special Instructions

Sample #	Sample Identification/Location	Volume or Area	Sample Type	Flow Rate*	Time* Start - Stop
	See Sheet				

Relinquished by	Date	Time	Received by	Date	Time
<i>[Signature]</i>	08/27/2019	18:30			

Unless scheduled, the turn around 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 turn around time. Work with standard turn around time sent Priority Overnight and Billed to Recipient will be charged a \$10 shipping fee.

19043572

SAMPLE NUMBER	HOMOGENEOUS AREA	SAMPLE LOCATION
01A	White Aluminum Frame Caulk	South - Front Entry
01B	White Aluminum Frame Caulk	South - Front Entry
01C	White Aluminum Frame Caulk	South - Front Entry
02A	Black Aluminum Frame Caulk	Southwest
02B	Black Aluminum Frame Caulk	North
02C	Black Aluminum Frame Caulk	East
03A	White Brick Ledge Caulk	Southwest - Front Entry
03B	White Brick Ledge Caulk	Southeast - Front Entry
04A	Black Foundation Caulk	Southwest - Front Entry
04B	Black Foundation Caulk	Southeast - Front Entry
05A	Metal Door Frame Caulk	East
05B	Metal Door Frame Caulk	East
06A	Transite Duct	South - Reception Area
06B	Transite Duct	North - Stock/Play Area
07A	2' x 2' Suspended Ceiling Grid - Pinhole-Gouge	East - Reception Area
07B	2' x 2' Suspended Ceiling Grid - Pinhole-Gouge	West - Conference Room
08A	12" x 12" Pinhole Ceiling Tile with Brown Glue Pod	South - Reception Area
08B	12" x 12" Pinhole Ceiling Tile with Brown Glue Pod	North - Stock/Play Area
08C	12" x 12" Pinhole Ceiling Tile with Brown Glue Pod	West - Conference Room
09A	12" x 12" Rainbow Pattern Floor Tile	South - Reception Area
09B	12" x 12" Rainbow Pattern Floor Tile	North - Stock/Play Area
10A	9" x 9" Light Brown Floor Tile	East - Mechanical Room
10B	9" x 9" Light Brown Floor Tile	East - Mechanical Room
11A	Brown Vinyl Base Cove	East - Mechanical Room
11B	Brown Vinyl Base Cove	North - Stock/Play Area
12A	Navy Blue Vinyl Base Cove	South - Reception Area
12B	Navy Blue Vinyl Base Cove	North - Stock/Play Area
13A	Drywall Joint Compound	South - Reception Area
13B	Drywall Joint Compound	North - Stock/Play Area
13C	Drywall Joint Compound	East - Mechanical Room
14	Drywall Joint Compound - Patch	East - Mechanical Room
15A	Black Sink Undercoating	North - Stock/Play Area
15B	Black Sink Undercoating	North - Stock/Play Area

Relinquished by

Ken V

Date 08/27/2019

Time 18:30

Received by

Date

Time

TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B, Midlothian, VA 23112 • 804-739-1751 • fax: 804-739-1753

ASBESTOS 400 POINT COUNT ANALYSIS SUMMARY

CLIENT: SanAir Technologies Laboratory, Inc.
1551 Oakbridge Dr, Suite B
Powhatan, VA 23139

TESC LOGIN #: 190829Y

DATE OF RECEIPT: 08/28/2019

DATE OF ANALYSIS: 08/29/2019

DATE OF REPORT: 08/29/2019

CLIENT JOB #: 19043572

JOB SITE: 19-711B

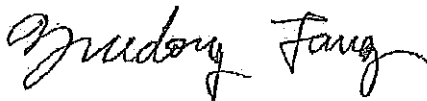
ANALYST: M. Steiniger

REPORTING LIMIT 0.25% Asbestos

TESC SAMPLE #	CLIENT SAMPLE #	GROSS DESCRIPTION	% ASBESTOS
1	01A	White chalky	1.25% Chrysotile
2	13C - Joint compound	White chalky	1.25% Chrysotile

Total Sample(s) Analyzed: 2

Reviewed By Authorized Signatory:



Feng Jiang, MS Senior Geologist, Laboratory Director
Yuedong Fang, Senior Geologist

Samples are analyzed in accordance with "interim Method for the Determination of Asbestos in Bulk Insulation Samples," EPA/600/R-93-116, July 1993 (EPA-600/M4-82-020, Dec 1982), or the current US EPA method for the analysis of asbestos in building material. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested. NVLAP Lab Code: 200794-0 [LEGEND NAD = No Asbestos Detected]

August 29, 2019

Page 1 of 1

Page 5 of 16

~~108281~~ 1908294

ENTER

762

RM

Technologies Laboratory

akbridge Drive, Sullivan, NY 13153

Duration: 24 Hour ☒ 48 Hour ☐ 3 Day ☐ 5 Day ☐ Ever ☐

Phone: 804-897-1177

Chabris

Sandra Sobrino

1904357
407410

fr:com:ssobrinho@sanair.com

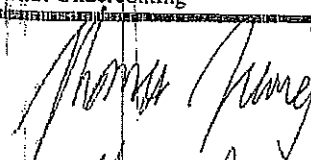
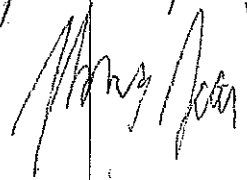
See Attached	Sample number	Sample Date	Asbestos	Lead	Other Metals	Air Quality/Mold	Comments
X	Bulk ID by PLM						Point Count 3% or Less
	PCM Fiber Count						
	PLM Point Count 400						
	PLM Point Count 1000						
	PLM Gravimetric						
	CARB 435 (Soil only)						
	TEM AHRA Air						
	TEM Bulk Chatfield						
	Air						
	Paint(% & PPM)						
	Soil(PPM)						
	Wipe						
	TCLP (Pb)						
	Waster Water						
	Drinking Water (Pb)						
	TCLP RCRA 8						
	CAM 17						
	Welding Fume						
	Toxic Metal Profile						
	Biocassette						
	Slide						
	Surface Tape						
	Surface Swab						
	Bulk						
	Air Volume (L)						
	Wipe Area (ft ²)						
	Scrape Area (cm ²)						

10

190828 1908294

19043572

FLOOR FINISH AREA		SAMPLE LOCATION
01	White Aluminum Frame Caulk	South - Front Entry
02	White Aluminum Frame Caulk	South - Front Entry
03	White Aluminum Frame Caulk	South - Front Entry
04	Black Aluminum Frame Caulk	Southwest
05	Black Aluminum Frame Caulk	North
06	Black Aluminum Frame Caulk	East
07	White Brick Ledge Caulk	Southwest - Front Entry
08	White Brick Ledge Caulk	Southeast - Front Entry
09	Black Foundation Caulk	Southwest - Front Entry
10	Black Foundation Caulk	Southeast - Front Entry
11	Metal Door Frame Caulk	East
12	Metal Door Frame Caulk	East
13	Transite Duct	South - Reception Area
14	Transite Duct	North - Stock/Play Area
15	2" x 2" Suspended Ceiling Grid - Pinhole-Gouge	East - Reception Area
16	2" x 2" Suspended Ceiling Grid - Pinhole-Gouge	West - Conference Room
17	1" Pinhole Ceiling Tile with Brown Glue Pod	South - Reception Area
18	1" Pinhole Ceiling Tile with Brown Glue Pod	North - Stock/Play Area
19	2" x 2" Pinhole Ceiling Tile with Brown Glue Pod	West - Conference Room
20	2" x 12" Rainbow Pattern Floor Tile	South - Reception Area
21	2" x 12" Rainbow Pattern Floor Tile	North - Stock/Play Area
22	9" x 9" Light Brown Floor Tile	East - Mechanical Room
23	9" x 9" Light Brown Floor Tile	East - Mechanical Room
24	Brown Vinyl Base Cove	East - Mechanical Room
25	Brown Vinyl Base Cove	North - Stock/Play Area
26	Navy Blue Vinyl Base Cove	South - Reception Area
27	Navy Blue Vinyl Base Cove	North - Stock/Play Area
28	Drywall Joint Compound	South - Reception Area
29	Drywall Joint Compound	North - Stock/Play Area
30	Drywall Joint Compound	East - Mechanical Room
31	Drywall Joint Compound - Patch	East - Mechanical Room
32	Black Sink Undercoating	North - Stock/Play Area
33	Black Sink Undercoating	North - Stock/Play Area


 AUG 28 2019 2:30pm

 AUG 29 2019 2:30pm

TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B, Midlothian, VA 23112
804-739-1751 • fax: 804-739-1753

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: SanAir Technologies Laboratory, Inc.
1551 Oakbridge Dr, Suite B
Powhatan, VA 23139

TESC LOGIN #: 190828T

DATE OF RECEIPT: 08/28/2019

DATE OF ANALYSIS: 08/29/2019

DATE OF REPORT: 08/29/2019

CLIENT JOB/ #: 19043572

JOB SITE: 19-711B

ANALYST: M. Steiniger

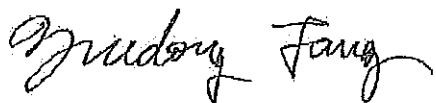
TESC SAMPLE #	CLIENT SAMPLE ID & GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
1	01A / White chalky	2% Chrysotile		98%
2	01B /	Positive Stop		100%
3	01C /	Positive Stop		100%
4	02A / Black vinyl	NAD		100%
5	02B / Black vinyl	NAD		100%
6	02C / Black vinyl	NAD		100%
7	03A / White chalky	NAD		100%
8	03B / White chalky	NAD		100%
9	04A / Black tar-like	10% Chrysotile		90%
10	04B /	Positive Stop		100%
11	05A / Gray vinyl	5% Chrysotile		95%

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (EPA-600/M4-82-020, Dec 1982), or the current US EPA method for the analysis of asbestos in building material. None Detected: not detected at/or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested.

NVLAP Lab Code: 200794-0

[LEGEND NAD=No Asbestos Detected, Lino.=Linoleum, JC=Joint Compound]

Reviewed By Authorized Signatory:



Feng Jiang, MS Senior Geologist, Laboratory Director
Yuedong Fang, Senior Geologist

TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B, Midlothian, VA 23112
804-739-1751 • fax: 804-739-1753

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: SanAir Technologies Laboratory, Inc.
1551 Oakbridge Dr, Suite B
Powhatan, VA 23139

TESC LOGIN #: 190828T

DATE OF RECEIPT: 08/28/2019
DATE OF ANALYSIS: 08/29/2019
DATE OF REPORT: 08/29/2019

CLIENT JOB/ #: 19043572

JOB SITE: 19-711B

ANALYST: M. Steiniger

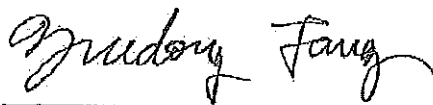
TESC SAMPLE #	CLIENT SAMPLE ID & GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
12	05B /	Positive Stop		100%
13	06A / Gray cement	40% Chrysotile		60%
14	06B /	Positive Stop		100%
15	07A / Tan fibers	NAD	40% Cellulose 40% Fiberglass	20%
16	07B / Tan fibers	NAD	40% Cellulose 40% Fiberglass	20%
17A	08A - Ceiling tile / Brown fibers	NAD	95% Cellulose	5%
17B	08A - Mastic / Brown adhesive	NAD	3% Cellulose	97%
18A	08B - Ceiling tile / Brown fibers	NAD	95% Cellulose	5%
18B	08B - Mastic / Brown adhesive	NAD	3% Cellulose	97%

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (EPA-600/M4-82-020, Dec 1982), or the current US EPA method for the analysis of asbestos in building material. None Detected: not detected at/or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested.

NVLAP Lab Code: 200794-0

[LEGEND NAD=No Asbestos Detected, Lino.=Linoleum, JC=Joint Compound]

Reviewed By Authorized Signatory:



Feng Jiang, MS Senior Geologist, Laboratory Director
Yuedong Fang, Senior Geologist

TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B, Midlothian, VA 23112
804-739-1751 • fax: 804-739-1753

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: SanAir Technologies Laboratory, Inc.
1551 Oakbridge Dr, Suite B
Powhatan, VA 23139

TESC LOGIN #: 190828T

DATE OF RECEIPT: 08/28/2019
DATE OF ANALYSIS: 08/29/2019
DATE OF REPORT: 08/29/2019

CLIENT JOB/ #: 19043572

JOB SITE: 19-711B

ANALYST: M. Steiniger

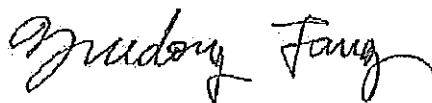
TESC SAMPLE #	CLIENT SAMPLE ID & GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
19A	08C - Ceiling tile / Brown fibers	NAD	95% Cellulose	5%
19B	08C - Mastic / Brown adhesive	NAD	3% Cellulose	97%
20A	09A - Tile / Tan vinyl	NAD		100%
20B	09A - Mastic / Yellow/black adhesive	NAD		100%
21A	09B - Tile / Tan vinyl	NAD		100%
21B	09B - Mastic / Yellow/black adhesive	NAD		100%
22A	10A - Tile / Beige tile	5% Chrysotile		95%
22B	10A - Mastic / Black adhesive	NAD		100%
23A	10B - Tile /	Positive Stop		100%
23B	10B - Mastic / Black adhesive	NAD		100%

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (EPA-600/M4-82-020, Dec 1982), or the current US EPA method for the analysis of asbestos in building material. None Detected; not detected at/or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested.

NVLAP Lab Code: 200794-0

[LEGEND NAD=No Asbestos Detected, Lino.=Linoleum, JC=Joint Compound]

Reviewed By Authorized Signatory:



Feng Jiang, MS Senior Geologist, Laboratory Director
Yuedong Fang, Senior Geologist

TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B, Midlothian, VA 23112
804-739-1751 • fax: 804-739-1753

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: SanAir Technologies Laboratory, Inc.
1551 Oakbridge Dr, Suite B
Powhatan, VA 23139

TESC LOGIN #: 190828T

DATE OF RECEIPT: 08/28/2019
DATE OF ANALYSIS: 08/29/2019
DATE OF REPORT: 08/29/2019

CLIENT JOB/ #: 19043572

JOB SITE: 19-711B

ANALYST: M. Steiniger

TESC SAMPLE #	CLIENT SAMPLE ID & GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
24A	11A - Basecove / Brown vinyl	NAD		100%
24B	11A - Mastic / Yellow/brown adhesive	NAD		100%
25A	11B - Basecove / Brown vinyl	NAD		100%
25B	11B - Mastic / Yellow/brown adhesive	NAD		100%
26A	12A - Basecove / Blue vinyl	NAD		100%
26B	12A - Mastic / Yellow/brown adhesive	NAD		100%
27A	12B - Basecove / Blue vinyl	NAD		100%
27B	12B - Mastic / Yellow/brown adhesive	NAD		100%
28A	13A - Drywall / White chalky, tan fibers	NAD	10% Cellulose	90%
28B	13A - Joint compound / White chalky	NAD		100%

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (EPA-600/M4-82-020, Dec 1982), or the current US EPA method for the analysis of asbestos in building material. None Detected: not detected at/or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested.

NVLAP Lab Code: 200794-0

[LEGEND NAD=No Asbestos Detected, Lino.=Linoleum, JC=Joint Compound]

Reviewed By Authorized Signatory:



Feng Jiang, MS Senior Geologist, Laboratory Director
Yuedong Fang, Senior Geologist

TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B, Midlothian, VA 23112
804-739-1751 • fax: 804-739-1753

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: SanAir Technologies Laboratory, Inc.
1551 Oakbridge Dr, Suite B
Powhatan, VA 23139

TESC LOGIN #: 190828T

DATE OF RECEIPT: 08/28/2019
DATE OF ANALYSIS: 08/29/2019
DATE OF REPORT: 08/29/2019

CLIENT JOB/ #: 19043572

JOB SITE: 19-711B

ANALYST: M. Steiniger

TESC SAMPLE #	CLIENT SAMPLE ID & GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
29A	13B - Drywall / White chalky, tan fibers	NAD	10% Cellulose	90%
29B	13B - Joint compound / White chalky	NAD		100%
30A	13C - Drywall / White chalky, tan fibers	NAD	20% Cellulose	80%
30B	13C - Joint compound / White chalky	2% Chrysotile		98%
31A	14A - Drywall / White chalky, tan fibers	NAD	20% Cellulose	80%
31B	14A - Joint compound / White chalky	NAD		100%
32	15A / Black tar-like	5% Chrysotile		95%
33	15B /	Positive Step		100%

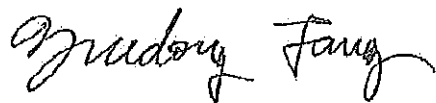
Total Samples/Layers Analyzed: 41

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (EPA-600/M4-82-020, Dec 1982), or the current US EPA method for the analysis of asbestos in building material. None Detected: not detected at/or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested.

NVLAP Lab Code: 200794-0

[LEGEND NAD=No Asbestos Detected, Lino.=Linoleum, JC=Joint Compound]

Reviewed By Authorized Signatory:



Feng Jiang, MS Senior Geologist, Laboratory Director
Yuedong Fang, Senior Geologist

10828T

TRIANGLE ENVIRONMENTAL SERVICE CENTER

13509 East Boundary Road, Suite B • Midlothian • VA • 23112 • Tel: 804-739-1751 • Fax: 804-739-1753

CHAIN-OF-CUSTODY FORM

LAB CUSTOMER: SanAir Technologies Laboratory

ADDRESS:

1551 Oakbridge Drive, Suite B

CITY, STATE, ZIP-Powhatan, Virginia, 23139

TAT: 2 Hour:

6 Hour: _____ 24 Hour: _____

CONTACT METHOD: Phone: 804-897-1177

Fax:

3 Day: _____ 5 Day: _____

5-Day:

DATE:08/28/2019

CONTACT NAME:

PROJECT #1

19043572

PROJECT SITE:

Email: ladq@sanair.com ssobrinho@sanair.com

		Asbestos	Lead	Other Metals	Air Quality/Mold	
Released by _____ Signature: _____ Date/Time: AUG 28 2009 2:27 PM	Sample number	Sample Date 8/27/19	Bulk ID by PLM <input checked="" type="checkbox"/>	PCM Fiber Count	PLM Point Count 400	PLM Point Count 1000
						PLM Gravimetric
						CARB 435 (Soil only)
						TEM AHERA Air
						TEM Bulk Chatfield
						Air
						Paint(% & PPM)
						Soil(PPM)
						Wipe
						TCLP (Pb)
						Waster Water
						Drinking Water (Pb)
						TCLP RCRA 8
						CAM 17
						Welding Fume
						Toxic Metal Profile
						Biocassette
						Slide
						Surface Tape
						Surface Swab
						Bulk
						Air Volume (L) Wipe Area (ft²) Scrape Area (cm²)
	See Attached					Point Count 3% or Less
						Comments

Prepared by: TE 90

1000

20

Print Form

[illegible]

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

[illegible]

AUG 28 2019 2:30pm

19108287

19043572

SAMPLE NUMBER	HOMOGENEOUS AREA	SAMPLE LOCATION
01A	White Aluminum Frame Caulk	
01B	White Aluminum Frame Caulk	South - Front Entry
01C	White Aluminum Frame Caulk	South - Front Entry
02A	Black Aluminum Frame Caulk	South - Front Entry
02B	Black Aluminum Frame Caulk	Southwest
02C	Black Aluminum Frame Caulk	North
03A	White Brick Ledge Caulk	East
03B	White Brick Ledge Caulk	Southwest - Front Entry
04A	Black Foundation Caulk	Southeast - Front Entry
04B	Black Foundation Caulk	Southwest - Front Entry
05A	Metal Door Frame Caulk	Southeast - Front Entry
05B	Metal Door Frame Caulk	East
06A	Transite Duct	East
06B	Transite Duct	South - Reception Area
07A	2" x 2" Suspended Ceiling Grid - Pinhole-Gouge	North - Stock/Play Area
07B	2" x 2" Suspended Ceiling Grid - Pinhole-Gouge	East - Reception Area
08A	12" x 12" Pinhole Ceiling Tile with Brown Glue Pod	West - Conference Room
08B	12" x 12" Pinhole Ceiling Tile with Brown Glue Pod	South - Reception Area
08C	12" x 12" Pinhole Ceiling Tile with Brown Glue Pod	North - Stock/Play Area
09A	12" x 12" Rainbow Pattern Floor Tile	West - Conference Room
09B	12" x 12" Rainbow Pattern Floor Tile	South - Reception Area
10A	9" x 9" Light Brown Floor Tile	North - Stock/Play Area
10B	9" x 9" Light Brown Floor Tile	East - Mechanical Room
11A	Brown Vinyl Base Cove	East - Mechanical Room
11B	Brown Vinyl Base Cove	East - Mechanical Room
12A	Navy Blue Vinyl Base Cove	East - Mechanical Room
12B	Navy Blue Vinyl Base Cove	North - Stock/Play Area
13A	Drywall Joint Compound	South - Reception Area
13B	Drywall Joint Compound	North - Stock/Play Area
13C	Drywall Joint Compound	South - Reception Area
14	Drywall Joint Compound - Patch	North - Stock/Play Area
15A	Black Sink Undercoating	East - Mechanical Room
15B	Black Sink Undercoating	East - Mechanical Room
		North - Stock/Play Area
		North - Stock/Play Area

Thomas Wang

AUG 28 2019

2:30pm