2828 Coral Way, Suite 202
Miami, Florida 33145

Sampling for Airborne Fibers at Cayman Brac High School

Survey Date: June 23, 2025

Prepared for:

Mr. Craig Maitland
Cayman Islands Department of Education Services

Prepared by:

CIH Environmental Solutions, Inc.
2828 Coral Way, Suite 202
Miami, FL 33145
305.860.0101

Project ID #: C25-112

Report Date: July 2, 2025

Signed by:

Board Certified Industrial Hygienist
Certified Building Commissioning Professional
LEED Accredited Professional
CIH Environmental Solutions Inc.

Ruth Otero
Board Certified Industrial Hygienist
CIH Environmental Solutions, Inc., President

EXECUTIVE SUMMARY

CIH Environmental Solutions, Inc. (CIHES), performed sampling for airborne fibers at Cayman Brac High School, Cayman Islands. The purpose of this sampling was to evaluate the potential presence of airborne asbestos fibers and to provide recommendations, if needed.

The survey was conducted by Mr. Armando Chamorro, Board Certified Industrial Hygienist, on June 23, 2025 and consisted of air sampling for fibers in five (5) select locations.

The results of the airborne fiber sampling were below the OSHA PEL and NIOSH REL of 0.1 f/cm³ as well as the more conservative *New York City Department of Environmental Protection* clearance, the *United States Asbestos Hazard Emergency Response Act* (US AHERA) and the limits that will be required from 2025 by the *European Agency for Safety and Health at Work* through Directive 2023/2668/EU, all of them of 0.01 f/cm³. CIHES recommends establishing and executing a proactive site-specific Asbestos Operations and Maintenance Program.

1 PURPOSE

The purpose of this assessment is to determine the indoor air fiber content thoughought the client designated building and to compare the findings to applicable guidelines.

2 LIMITATIONS

Limited to the rooms of the Cayman Brac buildings under study.

3 METHODOLOGY

Samples for airborne fibers were collected in the area of concern and submitted for analysis in accordance with the NIOSH Method 7400. A sample volume of air is drawn through a cellulose ester filter mounted in a 25mm, three-piece, electrically conductive cassette with a vacuum pump. The sample filter is rendered transparent by the Acetone/Triacetin method and analyzed under phase contrast microscopy. Fiber concentration is calculated with the adjusted total fiber count and the total volume of the air sampled. A blank sample was also submitted.

4 AIR SAMPLING

The evaluation process was carried out on June 23, 2025. During this period, air sampling was carried out with the following quantities:

(a) Music Room: 1 sample
(b) Hallway: 1 sample
(c) Copy Room: 1 sample
(d) Carpentry Storage Room: 2 samples

5 RESULTS

All samples were evaluated at a certified laboratory located in Ft. Lauderdale, Florida (NVLAP LAB CODE: 102053-0).

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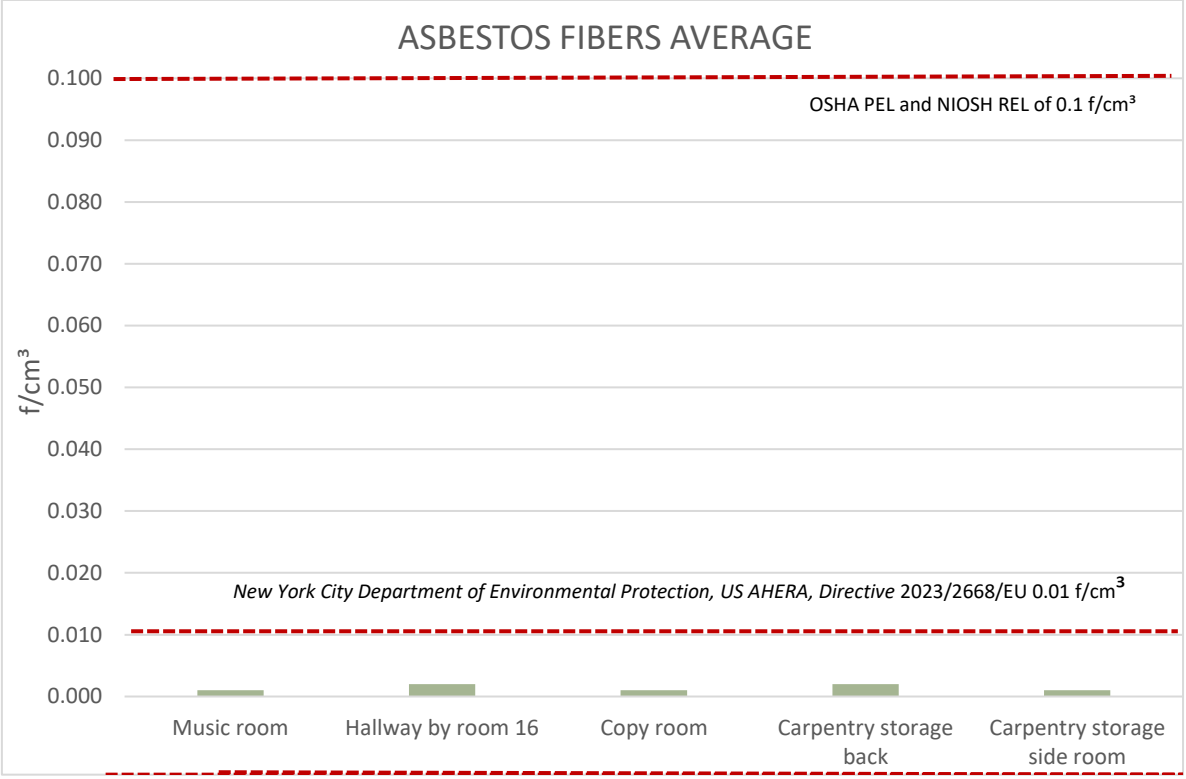
The analytical values reported by the laboratory ranged between <0.001 f/cm³ y 0.002 f/cm³. The following chart shows the results for each location.



6 CONCLUTIONS

The results of the air sampling for asbestos fibers should be considered acceptable.

7 APPENDIX I: LIMITATIONS, THIRD PARTY USE AND CONDITIONS

7.1 LIMITATIONS

The field observations and measurements conducted during the inspection are considered sufficient in detail and scope to determine the amount of asbestos and other airborne fibers in the areas evaluated at the subject property. The evaluation, conclusions and recommendations presented are based on data specific to the inspection conducted. This inspection does not represent the overall conditions at the subject property, as they only reflect information based on the area assessed. CIH guarantees the results and conclusions contained in this report in accordance with the industrial hygiene methodologies used.

7.2 THIRD PARTY USE

This report has been prepared in accordance with the contract that CIH has with the client. This contractual relationship includes an exchange of information about the subject property between CIH and its client and serves as the basis on which this report was prepared. Due to the importance of communication between CIH and its client, any use of this report by anyone other than the client for whom the report was prepared is prohibited.

7.3 CONDITIONS

This report is intended to provide the client with information on the conditions related to the subject property. The appraisal is limited to the conditions observed and information available at the time of the appraisal.

8 APPENDIX II: LABORATORY RESULTS AND CHAINS OF CUSTODY

385226995

LABORATORY CHAIN OF CUSTODY

CIH ENVIRONMENTAL SOLUTIONS, INC. 2828 CORAL WAY, SUITE 202, MIAMI, FL 33145
TEL: (305) 860-0101

Client:	Cayman Islands School Support	Project ID:	
Project Address:	Cayman Brac High School	Date:	6/23/25
		Sampled By:	AC
City, State, ZIP:	Cayman Brac	Project Type:	ACBM

	Sample ID	Type	Sample Location / Description	Time	(A=Air) (W=Water) (B=Bulk) (S=Swab) (D=Settled Dust) (G=Suspected Growth)	Pump #	# of minutes	Air flow (LPM)	Air volume (L)	Temp (°F)	NIOSH 7400	
1	D0222041	PCM	Music room	9:15:00 -11:15	A	77	120	15.2	1824	74.0	X	1/100
2	D0222011	PCM	hallway by room 16	9:27-11:27	A	82	120	13.9	1668	74.0	X	1/100
3	D0222055	PCM	Copy room	11:20:00 13:20	A	77	120	15.2	1824	76.0	X	3.5/100
4	D0222040	PCM	carpentry storage back	13:40 15:40	A	82	120	13.9	1668	76.0	X	6/100
5	D0222016	PCM	carpentry storage side room	13:30- 15:30	A	77	120	15.2	1824	75.0	X	5/100
6	D0222053	PCM	Field blank	17:14	A						X	0/100

EG 6/25

Relinquished by (signature)	Received by (signature)	TRH Unit:	Pump #:	Qi	Qf	Qx	Notes
Date 6/24/25	Date	Vaisala	77	15.20	15.20	15.20	
Time 22:15	Time	Calibrator #:	82	13.90	15.60	15.60	
Relinquished by (signature)	Received by (signature)		-				
Date	Date						
Time	Time						

Page 1 of 1

Received by: EG **Date:** 6.25.25
Prepared by: **Date:** 6/27/25
Analyzed by: **Date:** 7/1/25
Released by: **Date:** 7/1/25

52996098
CIH Environmental
Ruth Otero - (305) 860-0101 - Samples: 6
Date Received: 06/25/25 12:33 PM

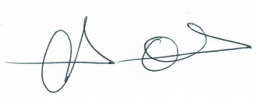
3301 NW 55th Street, Ft. Lauderdale, FL 33309
Tel: (888) 854-0477
NVLAP LAB CODE: 102053-0 | Scope of Accreditation to ISO/IEC 17025:2017

PRIORITYLAB

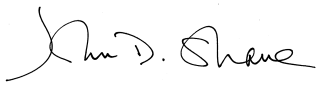
Certificate of Airborne Fiber Analysis

Prepared for:	CIH Environmental 2828 Coral Way 202 Coral Gables, FL 33145	**Phone:** **Email:**	(305) 860-0101 rotero@cihenvironmental.com nnguyen@cihenvironmental.com
Test Address:	Cayman Islands School Support Cayman Brac High School Cayman Brac, FL	**Lab COC #:**	52996098
Date Collected:	06/23/25	**Receive Date:**	06/25/25
Analysis Date:	07/01/25	**Report Date:**	07/01/25

Sample ID	Sample Location	Volume in Liters	Fibers Counted	Fields Counted	LOD F/cc	Fibers/cc
D0222041	MUSIC ROOM	1824	1.0	100	0.001	<0.001
D0222011	HALLWAY BY ROOM 16	1668	1.0	100	0.002	<0.002
D0222055	COPY ROOM	1824	3.5	100	0.001	0.001
D0222040	CARPENTRY STORAGE BACK	1668	6.0	100	0.002	0.002
D0222016	CARPENTRY STORAGE SIDE ROOM	1824	5.0	100	0.001	0.001



Analyst



Laboratory Director

 The analysis was performed using Phase Contrast Microscopy (PCM) as described in NIOSH Method 7400. NIOSH 7400 method only reports fibers >5µm in length and a 3:1 length to width ratio. Fibers meeting this criteria can interfere with total count, e.g., cellulose dust, fibrous wood and paper fibers will also be counted.

The results are not field blank corrected unless noted.

Any action taken on the basis of this report is the full responsibility of the client for which this report was written. Furthermore, PriorityLab's liability is limited to the cost of the analysis.

Limit of Detection (LOD) is 7 fibers/mm2. PriorityLab is not responsible for data reported in fibers/cc that is dependent on volume collected by non-laboratory personnel.

EPA clearance criteria = 0.01 asbestos fibers/cc (f/cc).
OSHA Excursion Level (30 minutes) = 1.0 asbestos fibers/cc (f/cc).

If fiber concentration is over the acceptable limit you may want to consider a TEM (transmission electron microscopy) analysis.This analysis method involves further cost and a longer turn around time.

Green = location has less fibers than EPA clearance criteria or OSHA Excursion Level.
Red = location has more fibers than EPA clearance criteria or OSHA Excursion Level.

For more information please contact PriorityLab at 888-854-0477.

9 APPENDIX III: CERTIFICATION OF PROFESSIONAL EXPERIENCE

UF | TREEO Center
UNIVERSITY of FLORIDA

Center for Training, Research and Education for Environmental Occupations

certifies

Armando Luis Chamorro

CIH Environmental Solutions Inc., 2828 Coral Way Miami, FL 33145

Having passed a 25-question exam with a score of 70% or higher has successfully met training requirements for

Asbestos Refresher: Inspector Online

FDBPR Asbestos Licensing Unit: Provider #0000995; Course #FL49-0006389 (½ Day; 3.40 Contact Hours)

(Reaccreditation for Inspector under TSCA Title II/AHERA)

Conducted

01/18/2022

Certificate #: 220085-1657
***Exam Date:* 01/18/2022**
***EPA accreditation expires:* 01/18/2023**
Principal Instructor: Brian Duchene, PE, LAC
CEUs: 0.4
FBPR LAC: #0000995; Course ## 0006389
FBPE CEHs: #0004021; Course #0009083/Educational Institutions: 4 CEHs

Andrew Campbell, Director

University of Florida TREEO Center · 3900 SW 63 Blvd Gainesville FL 32608-3800 · 352.392.9570 · train@treeo.ufl.edu · www.treeo.ufl.edu

The Board for Global EHS Credentialing (BGC)

through its vested authority, hereby confirms that

Armando L. Chamorro

has met all requirements of education, experience, and examination, and on-going maintenance set forth through the BGC's American Board of Industrial Hygiene® (ABIH®) credentialing division for re-certification in the Comprehensive Practice of Industrial Hygiene and is thereby conferred the credential of

Certified Industrial Hygienist® (CIH®)

The aforenamed individual is given all rights, privileges, and responsibilities as both a diplomate of the BGC and holder of the CIH credential, provided that the credential is not suspended or revoked, and it is renewed annually. Moreover, the holder must meet all recertification requirements, including the obligation to practice ethically as prescribed by the BGC.

Credential Number:	7314 CP
Award Date:	June 25, 1997
Expiration Date:	December 1, 2027

Thomas G. Grumbles, CIH, CPPS, FAIHA
Chair of the Board of Directors

Ulric K. Chung, MCS, PhD
Chief Executive Officer and Secretary

The Association of Energy Engineers

certifies that

Armando Chamorro

has completed the prescribed standards for certification, has demonstrated a high level of competence and ethical fitness, and is hereby granted the title of

Certified Building Commissioning Professional

ASSOCIATION OF ENERGY ENGINEERS CORPORATE SEAL 1977

Valid: January 1, 2022 - December 31, 2024 | Certification ID: 952

Certification Board Chair

Certification Director

CBCP

The Board for Global EHS Credentialing® (BGC®)

through its vested authority hereby confirms that

Ruth C Otero

has met all applicable requirements such as education, experience, examination, and on-going maintenance, set forth through the BGC's American Board of Industrial Hygiene® (ABIH®) credentialing division for certification in Comprehensive Industrial Hygiene Practice and is thereby conferred the credential of

Certified Industrial Hygienist® (CIH®)

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Certification Number: CIH-CP 13117
Award Date: November 30, 2023
Expiration Date: December 31, 2028

Subena Colligan

Subena Colligan, CIH, CSP
Chair of the Board of Directors

Scan QR code or visit GoBGC.org/Verify for information.

J. David Rozas

J. David Rozas, FAIHA, CAE, ICE-CCP, ACA
Executive Director