

1520 W. Cameron Ave., Suite 103 ♦ West Covina, CA 91790 Ph. 626-962-4436 ♦ Fx. 626-962-4437 ♦ www.globalenvirotraining.com

#### Combustion By-Product / Testing / Analysis

Jobsite:

## CALIFORNIA STATE UNIVERSITY LOS ANGELES (CSULA) PUBLIC SAFETY 5151 STATE UNIVERSITY DR. LOS ANGELES, CA 90032

Prepared For:

MS. BARBARA L. QUEEN

CALIFORNIA STATE UNIVERSITY LOS ANGELES (CSULA)

5151 STATE UNIVERSITY DR.

LOS ANGELES, CA 90032

January 16, 2025

PROJECT №. **E225-004** 

Mario Virgen President

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Barbara L. Queen Planning, Design & Construction California State University, Los Angeles (CSULA) 5151 University Dr. Los Angeles, CA 90032

Re: Combustion By-Product Testing
California State University, Los Angeles (CSULA)
Public Safety
5151 University Dr.
Los Angeles, CA 90032

GETC Project №. E225-004

Dear Ms. Queen,

Global Environmental Training & Consulting (GETC) performed Ambient Air Testing for Combustion By-Product (Char, Soot, & Ash) at the above referenced property. GETC has reviewed the results from the accredited laboratory and based on the samples taken on January 13, 2025, throughout Public Safety, results have concluded that all areas identified are below the outside background sample for Combustion By-Products.

Thank you for choosing GETC as the consultant for this project. If you have any questions, or if we can be of service again in the future, please do not hesitate to contact our office at (626) 962-4436.

Respectfully submitted,

Global Environmental Training & Consulting, Inc.

Mario Virgen, I.H.

President

**Enclosures** 

#### 1.0 EXECUTIVE SUMMARY

#### 1.1 GENERAL INFORMATION

Global Environmental Training and Consulting, Inc. (GETC) was retained by the California State University, Los Angeles (CSULA) to conduct Ambient Air Quality Testing for Combustion By-Products at Public Safety located at 5151 University Dr., in Los Angeles, California.

Carbon Black is a fine-grained solid residue that results from incomplete combustion of hydrocarbons. This testing is designed for analysis of fire residues for presence of analytes of interest (Char, Black Carbon/Soot, & Ash). The results of this test offer the client valuable information related to the extent of contamination produced by a fire from a residence or wildfire. These results can be used for cleaning assessment.

The sample collection was performed by GETC Industrial Hygienist Mr. Chris Virgen.

#### 1.2 TASKS

GETC Performed Ambient Air Quality Testing for Combustion By-Product that included the following tasks:

- ◆ Collect Air Samples using Allergenco Cassettes within Public Safety (6 Total) For Combustion By-Product Analysis.
- ♦ Air Samples were collected following the ASTM D6602-13 Standards, "Standard Practices for sampling and testing of possible Carbon Black Fugitive Emissions or Environmental Particulates."

#### SAMPLING TABLE COMBUSTION BY-PRODUCT (CHAR, SOOT, & ASH)

PUBLIC SAFETY											
SAMPLE NO.	LOCATION	CHAR PARTICULATES	SOOT PARTICULATES	ASH	TOTAL						
01	OUTSIDE (CONTROL)	65,460	687	2,660	68,807						
02	ROOM 0101 (ENTRANCE LOBBY)	3,420	47	193	3,660						
03	ROOM 0106	93	0	40	133						
04	HALLWAY NEAR ROOM 0136	727	27	73	827						
05	HALLWAY NEAR ROOM 0115	1,407	40	147	1,594						
06	HALLWAY NEAR ROOM 0125	1,140	60	127	1,327						

#### 2.0 METHODOLOGY

This section includes the description of the methodologies used to perform the Combustion By-Product Sampling and Analysis. These methodologies include air sampling analysis.

#### 2.1 AIR SAMPLING

 Collect and submit for analysis samples for Combustion By-Product from within Public Safety.

#### 2.2 SAMPLING PROCEDURES AND ANALYSIS

Sampling Procedure

The inspector collected Six (6) air samples from Public Safety. Methods & Equipment:

- ♦ Polarized Light Microscopy (PLM)
- epi-Reflected Light Microscopy (RLM)

The samples were numbered and shipped to a laboratory accredited under the American Industrial Hygiene Association (AIHA) and Environmental Proficiency Analytical Testing Program (EPAT).

Chain-of-Custody Procedures

Chain-of-Custody documents possession of the samples from the time they are collected until they have been analyzed and are stored. Custody documentation must be followed whenever materials are received, collected, transferred, stored, analyzed, or destroyed.

The original Chain-of-Custody is to accompany the materials at all times. Custody documentation will begin at the time a sample is collected. Each transferor should retain a copy of the Chain-of-Custody record.

#### Laboratory Quality Control Program

Pasteur Laboratory maintains an in-house quality control program. This program involves precision and accuracy controls, use of standard bulk reference materials, maintenance of national and state accreditation, participation in external and internal proficiency testing programs, and confirmation of analyst experience and qualification in compliance with specific internal training and competency requirements.

#### 2.3 REPORT FORMAT

This report has been organized in a manner that presents the data in several forms to best suit the needs of the property. The "Executive Summary" provides a description of the facility and analytical results for each area tested. The Air Sampling Log, Appendix A, contains detailed information on the locations of areas sampled. The "Analytical Reports", Appendix B, is a listing of samples taken and their Combustion By-Product Content.

#### 3.0 FINDINGS AND RECOMMENDATIONS

#### 3.1 GENERAL SUMMARY

- ◆ Sampling Logs & COC in Appendix A.
- ♦ Complete lab analyses for Combustion By-Products are given in Appendix B.
- ♦ Sampling Scheme is given in Appendix C.

#### 3.2 RECOMMENDATIONS

Since all indoor air samples are below the Outside (Control) sample, Global Environmental Training & Consulting, Inc. (GETC) has no recommendations at this time.

#### 4.0 WARRANTY

The field and laboratory results reported herein are considered sufficient in detail and scope to determine the presence of airborne Combustion By-Product Compounds in Public Safety. Global Environmental Training & Consulting, Inc. warrants that the findings contained herein have been prepared in general accordance with accepted professional practices at the time of its preparation as applied by similar professionals in the community. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in the report.

The air sampling and analytical methods have been used to provide the client with information regarding the presence of Combustion By-Product Compounds existing in Public Safety at the time of sampling. Test results are valid only for the areas tested. There is a distinct possibility that conditions may exist which could not be identified within the scope of the study of which were not apparent during the site visit.

No other warranties are implied or expressed.

# APPENDIX A AIR SAMPLING LOG

# Chain of Custody / Microbiology Sample Log



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Pasteur Laboratory	158 N. Glendora Ave Suite S (2nd floor)	Glendora CA 04744	Tel: (626) 963-8686	E-mail: microbiology99@aol.com		CONTACT INFORMATION	Contact: Mais Viscon Lanvironmental Training & Consulting	Contact: Mario Vilgen / Miguel Virgen		PROJECT INFORMATION	EDDE ON	Sampling Date: January 13, 2025			Sample Location	Outside Contra	Down 0/2 (6. 1 1) 1	Reman 0106	hive M	100 m	Hallet apper Wasse No.	STIC WAS LOND SITES							CANAL PLANTED	SAMPLE TYPE CODES	1 1	12 - Allegro M2 - Multimold Cassette					
REQU Non - Cultura					Company: Globa	Shone: 626 062	1 IIOIIE. 020-302-4430	No record Marcine	Project Number: E225,004	Sampling Date: J		4	Sample ID	0 10	20	. 03	00	0.50	90									P - Andersen Plate	- Zefon Air-O-Cell	12 - Allegro M.							

# APPENDIX B ANALYTICAL REPORTS

#### Char / Soot / Ash Particulate Report (Aerosol Samples)

1520 W. Cameron Ave., Suite 103, West Covina, CA 91790

1/14/2025

Global Environmental Training & Consulting

Tel: 626-962-4436 Fax: 626-962-4437

E-mail: staff@globalenvirotraining.com

Mario Virgen/Miguel Virgen



158 N. Glendora Ave., Suite S Glendora, CA 91741 Tel: (626) 963-8686

E-mail: microbiology99@aol.com

Lab Reference No.: Date Collected:

00028-25-0047 January 13, 2025

Date Received:

January 13, 2025

Date Analyzed:

January 13, 2025

Client's Project: CSULA - P	ublic Sa	fety E22	5-004			Samp	le(s) and	alyzed:	6					
Laboratory Sample ID		12426			12427			12428	- Re-	1	12429	Annual Street		
Client Sample ID		01			02			03		04  Hallway near Rm 0136  150  Moderate  AllergencoD				
Location	Ou	tside / Co	ntrol	Rm	0101 (En lobby)	trance		Rm 0106						
Volume (L)		150			150			150						
Background Debris*		Heavy			Moderate	e		Moderate	í					
Sample Description	1	Allergenco	D D	1	Allergence		11	llergenco						
	Raw ct	No./m°	%	Raw ct No. /m°			Raw cts		%	Raw cts	No. /m°	%		
Char particulate:	9819	65,460	95.14	513	3420	93.44	14	93	69.92	109	727	87.91		
												-		
-														
											27	2.20		
Soot particulate	103	687	1.00	7	47	1.28	0	0	0.00	4	27	3.26		
												-		
								- 100						
												├		
Ash:	399	2,660	3.87	29	193	5.27	6	40	30.08	11	73	8.83		
Total numbers / m³		68,807			3,660			133		827				
Comments														
Limit of Detection		7			7			7			7			

\*Background debris is an indication of amounts of biological and non-biological particulate matters present on the sample and is characterized as very light, light, moderate, heavy or very heavy. Very heavy background debris may obscure particulate matters, reducing visibility during analysis. Consequently, counts from very heavy background debris should be considered minimal. The laboratory and its personnel shall not be held liable for any misinformation provided to us by the client regarding these samples or for any misuse or interpretation of information supplied by us This report relates only to samples submitted and analyzed

Sample(s) were analyzed by: P. Chakravarty, Ph.D., Sr. Environmental Microbiologist

Page 1 of 1

#### Char / Soot / Ash Particulate Report (Aerosol Samples)

1/14/2025



158 N. Glendora Ave., Suite S Glendora, CA 91741 Tel: (626) 963-8686

E-mail: microbiology99@aol.com

Mario Virgen/Miguel Virgen Lab Reference No.: Global Environmental Training & Consulting Date Collected: 1520 W. Cameron Ave., Suite 103, West Covina, CA 91790

Tel: 626-962-4436 Fax: 626-962-4437 E-mail: staff@globalenvirotraining.com

00028-25-0047 January 13, 2025 Date Received: January 13, 2025 Date Analyzed: January 13, 2025

Client's Project: CSULA - P	ublic Sa	fety E22	5-004			Sampl	le(s) analyz	ed: 6			
Laboratory Sample ID		12430			12431				1	100-7-00-7-0	
Client Sample ID		05			06						
Location	Hallwa	ay near R	m 0115	Hallwa	y near R	m 0125					
Volume (L)		150		1	150				1		
Background Debris*		Moderate	<del></del>		Moderate	е			1		
Sample Description		Allergence			llergence				1		
		No./m	%		No./m°	%					
Char particulate:	211	1,407	88.27	171	1140	85.91					
				P S							
		4.									
Soot particulate	6	40	2.51	9	60	4.50					
Ocot particulate	0	40	2.51	9	60	4.52			-		
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Ash:	22	147	9.22	19	127	9.57					_
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Total numbers / m³		1,594			1,327						
Comments											
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Background debris is an indica	ion of an	nounts of	biologica	al and no	n-biolog	ical parti			n the sar	nnle and	ic

Background debris is an indication of amounts of biological and non-biological particulate matters present on the sample and is characterized as very light, light, moderate, heavy or very heavy. Very heavy background debris may obscure particulate matters, reducing visibility during analysis. Consequently, counts from very heavy background debris should be considered minimal. The laboratory and its personnel shall not be held liable for any misinformation provided to us by the client regarding these samples or for any misuse or interpretation of information supplied by us. This report relates only to samples sp. Characteristics

## APPENDIX C SAMPLING SCHEME

### PUBLIC SAFETY

## CAL STATE LA PLENDING, DESIGN & CONSTRUCTION

