

March 7, 2024

Ms. Melinda Pure, Director Rosemead School District 3907 Rosemead Boulevard Rosemead, California 91770

#### **RE: Pre-Demolition Asbestos and Lead in Paint Survey Report**

Shuey Elementary School Playground Demolition Project 8472 Wells Street Rosemead, California 91770

CES Project No.: 24-RSMD.03

Dear Ms. Pure:

At the request of the Rosemead School District, Inc. CES Environmental Consultants, Inc. (CES) completed a pre-demolition asbestos and lead in paint survey for the Playground Demolition Project to be completed at Shuey Elementary School located at 8472 Wells Street, Rosemead, California 91770.

The survey included the Kindergarten Playground, and Playground areas 1 and 2. All areas included in our scope of work were accessible for this inspection.

The survey was conducted prior to demolition of the asphalt paving from the Kindergarten Playground, and Playground areas 1 and 2 and included all accessible suspect asbestos-containing materials (ACMs) and lead painted surfaces. CES conducted destructive sampling and included all layers under asphalt paving down to the substrate.

#### Summary of Findings:

- Asbestos-Containing Materials (ACMs): All collected samples were reported as none-detected by the laboratory. Refer to Section 3.3, Table I for a summary of ACMs.
- Lead in Paint: All collected bulk samples were reported below the laboratory "Reporting Limit". All testing for lead using XRF was reported below lead-based paint level (less than 1.0 mg/cm2).

If you have any questions concerning the report, please contact me at the number listed below.

#### This report was prepared by:

Cesar Ruvalcaba Certified Asbestos Consultant (#95-1799) CDPH Lead Inspector/Assessor, Project Monitor CES Environmental Consultants, Inc. 6741 Friends Avenue, Suite B Whittier, California 90280 (323) 899-2488 Cesar.Ruvalcaba@cesenviron.com



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Appendix A: Analytical Data and Chain of Custody-Asbestos Appendix B: Analytical Data, Chain of Custody, XRF Field Sheets, XRF Calibration Form, CDPH Form, 8552-Lead in Paint Appendix C: Sample Diagrams Appendix D: Inspector Certifications

#### **1.0 PROJECT INFORMATION**

Shuey Elementary School Playground Demolition Project 8472 Wells Street Rosemead, California 91770

#### 2.0 INTRODUCTION AND BACKGROUND

At the request of the Rosemead School District, Inc. CES Environmental Consultants, Inc. (CES) completed a pre-demolition asbestos and lead in paint survey for the Playground Demolition Project to be completed at Shuey Elementary School located at 8472 Wells Street, Rosemead, California 91770.

The survey included the Kindergarten Playground, and Playground areas 1 and 2. All areas included in our scope of work were accessible for this inspection.

The survey was conducted prior to demolition of the asphalt paving from the Kindergarten Playground, and Playground areas 1 and 2 and included all accessible suspect asbestos-containing materials (ACMs) and lead painted surfaces. CES conducted destructive sampling and included all layers under asphalt paving down to the substrate.

On March 4, 2024, Nicky Gutierrez-Moreno, a Cal-OSHA Certified Site Surveillance Technician (CSST #20-6787) and CDPH Lead Sampling Technician (LRC 00006140) and Mr. Fabian Ruvalcaba a Cal-OSHA Certified Asbestos Consultant (CAC #15-5533) and CDPH Lead Inspector /Assessor (LRC00004100) conducted the survey.

#### 3.0 SUBJECT SITE, AREA DESCRIPTION, AND CONDITIONS

The Playground areas are asphalt paved areas.

No obvious signs of structural or fire damage were observed in the Playground areas.

#### 4.0 PROJECT SURVEY

CES's objective was to conduct the survey and sampling of suspect asbestos-containing materials (ACM) and lead in paint. The survey included the following:

- Survey of the building areas to locate suspect ACM, lead paint.
- Physical assessment of suspect ACM and painted surfaces.
- Collection of bulk samples from suspect ACM and painted surfaces.
- Submitted samples collected for laboratory analysis of all ACM and lead paint.

#### 5.0 ASBESTOS SURVEY AND SAMPLING

#### 5.1 Asbestos Laboratory Accreditation & Analytical Method

All collected samples were analyzed by a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory. Samples were analyzed by AIH Laboratory located at 2556 West Woodland Drive, Anaheim, California 92801 (562) 860-2201 (NVLAP Code No.: 500079-0).

Collected bulk samples were analyzed using polarized light microscopy (PLM) for asbestos content in accordance with the United States Environmental Protection Agency's (USEPA) *Determination of Asbestos in Bulk Building Materials: EPA/600/R-93/116, July 1993.* 

#### 5.2 Asbestos Sampling Protocol

The sampling was conducted using guidelines set forth in US Environmental Protection Agency (EPA) *Federal Register 40 CFR Part 763*. Based on the requirements of the EPA, (*40 CFR 763*), a homogeneous material is defined as "an area of surfacing material, thermal system insulation material or miscellaneous material that is uniform in color and texture." The regulation requires that a minimum number of samples be collected from each homogeneous material. If one sample in a homogeneous material is found to contain asbestos, the entire homogeneous material should be considered to be asbestos-containing.

The EPA and California Occupational Safety and Health Administration (Cal-OSHA) have defined building materials containing asbestos as follows:

- Asbestos-Containing-Material (ACM) any material containing greater than 1 percent (>1%) asbestos as determined by PLM, 40 Code of Federal Regulations (CFR) Part 61, Subpart M and The South Coast Air Quality Management District (SCAQMD) Rule 1403.
- Asbestos-Containing-Construction-Material (ACCM) any material containing less than one percent (<1%) asbestos and greater than one tenth of one percent (>0.1%) asbestos by 1000-point count analysis, *California Code of Regulations (CCR), Title 8, Section 1529.*

#### 5.3 Bulk Sample Results

Sample No.:	Material	Material Location	Asbestos Content	Condition	Friable	Est. Quantity
		KINDERGARTEN	PLAYGROUI	ND		
1, 2, 3	Asphalt	Kindergarten playground	None Detected	Intact	No	120 sq. ft.
4, 5, 6	Concrete curb	Kindergarten playground	None Detected	Intact	No	400 sq. ft.
7, 8, 9	Rubberized coating	Kindergarten playground (on stairs/floor for slides)	None Detected	Intact	No	120 sq. ft.
10, 11, 12	Felt paper under wood mulch	Kindergarten playground	None Detected	Intact	Yes	1,500 sq. ft.
		PLAYGRC	UND 1			
13, 14, 15	Concrete curb	Playground 1	None Detected	Intact	No	300 sq. ft.
16, 17, 18	White caulking	Playground 1	None Detected	Intact	No	30 ln. ft.
19, 20, 21	Asphalt	Playground 1	None Detected	Intact	No	200 sq. ft.
22, 23, 24	Felt paper under wood mulch	Playground 1	None Detected	Intact	Yes	1,200 sq. ft.
		PLAYGRC	UND 2			
25, 26, 27	Concrete curb	Playground 2	None Detected	Intact	No	300 sq. ft.

#### Table I: Summary of Bulk Sample Results

#### 5.4 Asbestos Recommendations

All collected samples were reported as none-detected by the laboratory.

If any additional suspect ACMs not identified in this report are found during the construction project, stop work and contact the District representative. All suspect ACMs which may be impacted during construction shall be sampled for asbestos content prior to conducting any disturbance work to the materials.

#### 6.0 LEAD SURVEY AND SAMPLING

CES conducted bulk sampling for lead painted components. XRF testing was also conducted using an portable X-Ray Fluorescence (XRF) analyzer (Thermo Niton XLp 300). For the purpose of this survey and inspection, lead in paint is define as described below:

- Lead-based paint (LBP), according to the California Childhood Lead Poisoning Prevention Branch regulations (Title 17, Division 1, Chapter 8), US Environmental Protection Agency (EPA), and US Department of Housing and Urban Development (HUD) is defined as paint or other surface coating with lead content equal to or greater than 1.0 mg/cm<sup>2</sup> of surface area using X-Ray Fluorescence (XRF) testing or 5,000 parts per million (ppm) (0.5 percent by weight) by paint chip analysis. The County of Los Angeles Department of Public Health Services, Childhood Lead Poisoning Prevention Program, has defined "dangerous levels of lead-bearing substances" as paint or other surface coating with lead content greater than 0.7 mg.cm2 (Los Angeles County). Lead related work impacting LBP is subject to the requirements of all the above-mentioned regulations, furthermore, when disturbed for construction purposes, the work is also subject to the Cal/OSHA Title 8 CCR, Section 1532.1(d) requirements.
- Lead-containing paints (LCP) according to Cal/OSHA *Title 8 CCR, Section 1532.1(d)* are defined as paints reported with any detectable levels of lead by paint chip analysis. Disturbance to LCP is subject to Cal/OSHA *Title 8 CCR, Section 1532.1(d)* regulatory requirements.

#### 6.1 Lead Paint Chip Sampling Protocol

The paint chip samples were collected to determine the weight percent concentration in the painted surfaces for construction safety as defined by Title 8 CCR Section 1532.1. The Paint chip sample analysis was conducted as per EPA Method SW846/7420 by a laboratory accredited by the Environmental Laboratory Accreditation Program.

The survey consisted of the following:

- Visual assessment of painted surfaces,
- Collection of bulk paint chip samples down to the substrate,
- Documentation of the physical condition and location of suspect materials,
- Submitting bulk paint chip samples to a laboratory for analysis on lead content,
- Direct analysis using an XRF unit for ceramic coated suspect lead coated components; and
- Preparing a report of findings and conclusions.

## 6.2 Summary of Lead-Paint Chip Analysis

Sample No.	Color	Substrate	Component	Location	Level of Lead (ppm)	Condition
		KI	NDERGARTEN	PLAYGROUND		
PC1	Light grey	Metal	Handrail	Kindergarten playground	<200	Damaged (weathered & worn) 10 sq. ft.
PC2	Light grey	Metal	Guardrail	Kindergarten playground	<300	Damaged (weathered & worn) 10 sq. ft.
PC3	Light grey	Metal	Climbing ladder	Kindergarten playground	<200	Damaged (weathered & worn) 10 sq. ft.
PC4	Green	Metal	Support post	Kindergarten playground	<800	Intact
PC5	Brown	Metal	Rail	Kindergarten playground	<300	Damaged (weathered & worn) 2 sq. ft.
PC6	Green	Metal	Swing set	Kindergarten playground	<300	Intact
PC7	Red	Metal	Fire truck	Kindergarten playground	<200	Damaged (weathered & worn) 10 sq. ft.
		•	PLAYGR	OUND 1		· · ·
PC8	Red	Metal	Handrail	Playground 1	<400	Intact
PC9	Red	Metal	Post	Playground 1	<300	Intact
PC10	Red	Metal	Ladder	Playground 1	<800	Intact
PC11	Blue	Metal	Post	Playground 1	<300	Intact
		1	PLAYGR	OUND 2		
PC12	Green	Metal	Pull up set	Playground 2	<200	Damaged (weathered & worn)
PC13	Green	Metal	Slide support post	Playground 2	<200	Damaged (weathered & worn)
PC14	Green	Metal	Slide handrail	Playground 2	<200	Damaged (weathered & worn)

#### Table II

PC15

Orange

Metal

Swing set

Playground 2

Intact

<500

All paints were reported below the laboratory Reporting limit. Reporting limit is reported in mg/kg based on the minimum sample weight per laboratory SOP. "<" (less than) result signifies the analyte was not detected at or above the reporting limit. Due to the high reporting limit for these results, lead in paint that may be subject to Cal-OSHA worker exposure regulatory requirements may still be present.</li>

#### Summary of Lead-based Paint using XRF

All testing for lead using XRF was reported below lead-based paint level (less than 1.0 mg/cm2). Refer to XRF Data Sheet I Appendix B for a complete list of all painted components using XRF.

#### 6.3 Lead Recommendations

All collected bulk samples were reported below the laboratory "Reporting Limit". All testing for lead using XRF was reported below lead-based paint level (less than 1.0 mg/cm2).

#### 7.0 LIMITATIONS

The survey was conducted prior to demolition of the asphalt paving from the Kindergarten Playground, and Playground areas 1 and 2 and included all accessible suspect asbestos-containing materials (ACMs) and lead painted surfaces. CES conducted destructive sampling and included all layers under asphalt paving down to the substrate.

The survey was conducted prior to demolition of the Portable buildings and included all accessible suspect asbestos-containing materials (ACMs) and lead painted surfaces. CES conducted destructive sampling and included all layers down to the floor, walls, and ceiling joist and under asphalt paving down to the substrates. The exterior paint on Portables 42 and 43 has already been sampled and reported as a separate report (to be provided by the District). The previously completed exterior lead paint report should be used in conjunction with this report to complete the demolition project.

The survey is intended to be used for construction purposes only. The laboratory results included in Appendix A and B in this report supersede the results listed in Tables I and II if a conflict in the results is identified. CES recommends that the user of this report reviews, and understands the results, findings, and recommendations prior to conducting any work which may disturb any ACMs and lead paint impacted surfaces.

CES conducted the survey with the standard of care ordinarily exercised by qualified and reputable members of the environmental/industrial hygiene profession based on conditions and practices observed at the property and information provided to CES related to the project and/or purpose of the survey at the time of the investigation.

This report does not intend to identify all hazards or unsafe practices, nor to indicate that other hazards or unsafe conditions have been identified. As such, CES does not guarantee or warrant that the facility or workplace is safe; nor does CES's involvement in this property relieve the Client, building owner/operator or tenant of any continuing responsibility of providing a safe facility or living space.

We will not accept any liability for loss, injury claim, or damage arising directly or indirectly from any use or reliance on this report, expressed or implied.

#### PRE-DEMOLITION ASBESTOS and LEAD IN PAINT SURVEY SHUEY ELEMENTARY SCHOOL PLAYGROUND DEMOLITION PROJECT

This report was based on those conditions observed on the day the field evaluation was accomplished. In the event that changes in the nature of the property have occurred, or additional relevant information about the property is subsequently discovered, the findings contained in this report may not be valid unless these changes and additional relevant information are reviewed, and the conclusion of this report is modified and verified in writing.

Material quantities included in this report are of observed material and provided as a visual best estimate for information only and should not be used as a reliable quantity by any contractor for preparing removal bids. The Contractor is solely responsible for assessing the type, extent, and quantity of material to be removed in each area of the project in preparing each project bid.

The property owner is responsible for ensuring that the information, conclusions, and recommendations disclosed in this report are brought to the attention of all appropriate staff, contractors, regulatory agencies etc. as required.

If you have any questions or concerns, feel free to contact the undersigned at the number listed below.

#### This report was prepared by:

**Cesar Ruvalcaba** Senior Project Manager CES Environmental Consultants, Inc.

# **APPENDIX A:**

ANALYTICAL DATA AND CHAIN OF CUSTODIES-ASBESTOS



BY POLARIZED LIGHT MICROSCOPY



Client Name: CES Environmental Consultants, Inc Project Manager: Cesar Ruvalcaba Client Address: 6741 Friends Avenue, Suite B, Whittier, CA 90601 Project Number: No Information Provided Project Location: Rosemead, CA

Lab ID: 240413801		Client ID: 1		
Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
1.	Black asphaltic material with granules	None Detected	None Detected	Asphalt/Binder, Mineral Grains

Lab ID: 240413802		Client ID: 2		
Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
1.	Black asphaltic material with granules	None Detected	None Detected	Asphalt/Binder, Mineral Grains

Lab ID: 240413803		Client ID: 3			
Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material	
1.	Black asphaltic material with granules	None Detected	None Detected	Asphalt/Binder, Mineral Grains	

Lab ID: 240413804		Client ID: 4		
Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
1.	Grey hard cementitious material	None Detected	None Detected	Binder/Filler, Mineral Grains

Lab ID: 240413805		Client ID: 5			
	Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
-	1.	Grey hard cementitious material	None Detected	None Detected	Binder/Filler, Mineral Grains

Lab ID: 240413806		Client ID: 6		
Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
1.	Grey hard cementitious material	None Detected	None Detected	Binder/Filler, Mineral Grains



BY POLARIZED LIGHT MICROSCOPY



Client Name: CES Environmental Consultants, Inc Project Manager: Cesar Ruvalcaba Client Address: 6741 Friends Avenue, Suite B, Whittier, CA 90601 Project Number: No Information Provided Project Location: Rosemead, CA

Lab Batch Number:	2404138
Samples Submitted:	27
Samples Analyzed:	27
Analysis Method:	EPA 600/R-93-116 &
	EPA 600/M4-82-020

Lab ID: 240413807		Client ID: 7		
Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
1.	Black rubbery material	None Detected	None Detected	Binder/Filler

Lab ID: 240413808		Client ID: 8		
Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
1.	Black rubbery material	None Detected	None Detected	Binder/Filler

Lab ID: 240413809		Client ID: 9			
	Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
	1.	Black rubbery material	None Detected	None Detected	Binder/Filler

Lab ID: 240413810		Client ID: 10			
	Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
	1.	Black fibrous felt	None Detected	Synthetic Fibers 80%	Binder/Filler
-	2.	Brown mastic	None Detected	None Detected	Mastic/Binder

Lab ID: 240413811		Client ID: 11		
Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
1.	Black fibrous felt	None Detected	Synthetic Fibers 80%	Binder/Filler
2.	Brown mastic	None Detected	None Detected	Mastic/Binder



BY POLARIZED LIGHT MICROSCOPY



Client Name: CES Environmental Consultants, Inc Project Manager: Cesar Ruvalcaba Client Address: 6741 Friends Avenue, Suite B, Whittier, CA 90601 Project Number: No Information Provided Project Location: Rosemead, CA

Lab ID: 240413812		Client ID: 12		
Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
1.	Black fibrous felt	None Detected	Synthetic Fibers 80%	Binder/Filler
2.	Brown mastic	None Detected	None Detected	Mastic/Binder

Lab ID: 240413813		Client ID: 13			
	Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
_	1.	Grey hard cementitious material	None Detected	None Detected	Binder/Filler, Mineral Grains

Lab ID: 240413814		Client ID: 14			
	Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
	1.	Grey hard cementitious material	None Detected	None Detected	Binder/Filler, Mineral Grains

Lab ID: 240413815		Client ID: 15			
La	ayer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
	1.	Grey hard cementitious material	None Detected	None Detected	Binder/Filler, Mineral Grains

Lab ID: 240413816		Client ID: 16		
Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
1.	Grey rubbery material	None Detected	None Detected	Binder/Filler

Lab ID: 240413817		Client ID: 17		
Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
1.	Grey rubbery material	None Detected	None Detected	Binder/Filler



BY POLARIZED LIGHT MICROSCOPY



Client Name: CES Environmental Consultants, Inc Project Manager: Cesar Ruvalcaba Client Address: 6741 Friends Avenue, Suite B, Whittier, CA 90601 Project Number: No Information Provided Project Location: Rosemead, CA

Lab ID: 240413818		Client ID: 18		
Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
1.	Grey rubbery material	None Detected	None Detected	Binder/Filler

Lab ID: 240413819		Client ID: 19		
Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
1.	Black asphaltic material with granules	None Detected	None Detected	Asphalt/Binder, Mineral Grains

Lab ID: 240413820		Client ID: 20			
	Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material
	1.	Black asphaltic material with granules	None Detected	None Detected	Asphalt/Binder, Mineral Grains

Lab ID: 240413821			Client ID: 21			
Layer Layer Description		Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material	
	1.	Black asphaltic material with granules	None Detected	None Detected	Asphalt/Binder, Mineral Grains	

	Lab ID: 240413822	Client ID: 22			
Layer	Layer Description	er Description Asbestos Type % Other Fibrous Material %		Other Non Fibrous Material	
1.	Black fibrous felt	None Detected	Synthetic Fibers 80%	Binder/Filler	
2.	Brown mastic	None Detected	Cellulose <1%	Mastic/Binder	

	Lab ID: 240413823	Client ID: 23				
Layer	Layer Description	tion Asbestos Type % Other Fibrous Material %		Other Non Fibrous Material		
1.	Black fibrous felt	None Detected	Synthetic Fibers 80%	Binder/Filler		
2.	Brown mastic	None Detected	Cellulose <1%	Mastic/Binder		



BY POLARIZED LIGHT MICROSCOPY



Client Name: CES Environmental Consultants, Inc Project Manager: Cesar Ruvalcaba Client Address: 6741 Friends Avenue, Suite B, Whittier, CA 90601 Project Number: No Information Provided Project Location: Rosemead, CA

	Lab ID: 240413824	Client ID: 24			
Layer	Layer Description	ayer Description Asbestos Type % Other Fibrous Material %		Other Non Fibrous Material	
1.	Black fibrous felt	None Detected	Synthetic Fibers 80%	Binder/Filler	
2.	Brown mastic	None Detected	Cellulose <1%	Mastic/Binder	

	Lab ID: 240413825	Client ID: 25			
Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material	
1.	Grey hard cementitious material	None Detected	None Detected	Binder/Filler, Mineral Grains	

		Lab ID: 240413826	Client ID: 26			
Layer		Layer Description	Asbestos Type % Other Fibrous Material %		Other Non Fibrous Material	
	1.	Grey hard cementitious material	None Detected	None Detected	Binder/Filler, Mineral Grains	

	Lab ID: 240413827	Client ID: 27			
Layer	Layer Description	Asbestos Type %	Other Fibrous Material %	Other Non Fibrous Material	
1.	Grey hard cementitious material	None Detected	None Detected	Binder/Filler, Mineral Grains	



BY POLARIZED LIGHT MICROSCOPY



Client Name: CES Environmental Consultants, Inc Project Manager: Cesar Ruvalcaba Client Address: 6741 Friends Avenue, Suite B, Whittier, CA 90601 Project Number: No Information Provided Project Location: Rosemead, CA Lab Batch Number: 2404138 Samples Submitted: 27 Samples Analyzed: 27 Analysis Method: EPA 600/R-93-116 & EPA 600/M4-82-020

Analyzed by: Lynsey Ninh

Reviewed by: Vivian Le

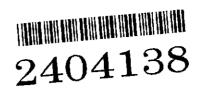
Signature: Lynery Signature: Wind

Date: 03-05-2024

Date: 03-05-2024

Reporting limit is 1%. If the sample was not collected by AIH Laboratory then the accuracy of the results is limited by the methodology and experience of the sample collector. Clients can verify specific reporting limit requirement from local regulatory agencies. Liability limited to cost of samples analysis. This report shall not be reproduced except in full, without written approval of AIH Laboratory. It shall not be used to claim product endorsement by NVLAP or any other agency of the government. Reported results relate only to the samples tested and may not be the representative of the sample area. AIH Laboratory shall dispose of the Customer's samples 14 days after receiving the samples unless instructed to store them for an alternate period of time in writing.





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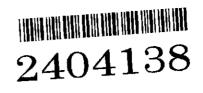
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Analysis Requested:	FLM		<u> </u>	Turnaround Time:	18hrs	ي ا
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# ASBESTOS BULK SAMPLE INVENTORY AND CHAIN OF CUSTODY

Client:	Rogeneent School District	Project Name:	ShveyES - Plugground 1	Technician:	Niday betterner	r Moruno
Location:	Rosemank, (19	Project-Number:	rojectNumber		03/04/2014	M
Sample No.:	Material Sampled:	Sample Location:	Material Location	Est et	y: Erlable:	Condition
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# ASBESTOS BULK SAMPLE INVENTORY AND CHAIN OF CUSTODY

Client:	Noxement School District	Project Name:	SLURY E.S Playground 2	Technician:	Nicky WHein	2-Moreno
Location:	Rosewad, CA	Project Number:		Dates	03/04/2021	1
Sample No.:	Material Sampled:	Sample Location:	Material Location:	Est Ciy	: Friable:	Condition:
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Analysis Req		· · ·	Turnaround	Fime: · · /	18625	
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Received By:	Chretse		Date & Time:	수학 방법 방법 문화한 방법이	714/2029 714/24	15:43

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# **APPENDIX B:**

ANALYTICAL DATA, CHAIN OF CUSTODIES, XRF FIELD SHEET, XRF CALIBRATION, AND CDPH FORM 8552



# **Analysis Report**

Total Lead (Pb)

Client: CES Environmental Consultants, Inc Address: 6741 Friends Avenue, Suite B, Whittier, CA 90601

Project Manager: Cesar Ruvalcaba Project #: No Information Provided Project Location: Rosemont E.S. Report Status: Final Report Lab Batch #: 2404132 Matrix: Paint Method: EPA 7000B Samples Submitted: 15 Samples Analyzed: 15 Bench Run No: 59333

Lab ID	Client Sample ID	Sample Weight (g)	RL in percent	Results in mg/kg	Results in percent
240413201	PC-1	0.1059	0.02	<200	<0.02
240413202	PC-2	0.0730	0.03	<300	<0.03
240413203	PC-3	0.0920	0.02	<200	<0.02
240413204	PC-4	0.0250	0.08	<800	<0.08
240413205	PC-5	0.0800	0.03	<300	<0.03
240413206	PC-6	0.0750	0.03	<300	<0.03
240413207	PC-7	0.0990	0.02	<200	<0.02
240413208	PC-8	0.0550	0.04	<400	<0.04
240413209	PC-9	0.0610	0.03	<300	<0.03
240413210	PC-10	0.0255	0.08	<800	<0.08
240413211	PC-11	0.0732	0.03	<300	<0.03
240413212	PC-12	0.1010	0.02	<200	<0.02
240413213	PC-13	0.1011	0.02	<200	<0.02
240413214	PC-14	0.0926	0.02	<200	<0.02
240413215	PC-15	0.0440	0.05	<500	<0.05



# **Analysis Report**

Total Lead (Pb)

Client: CES Environmental Consultants, Inc	Repo	rt Status: Final Report
Address: 6741 Friends Avenue, Suite B, Whitt	ier, CA Lab	Batch #: 2404132
90601		Matrix: Paint
		Method: EPA 7000B
Project Manager: Cesar Ruvalcaba	Samples St	ubmitted: 15
Project #: No Information Provided	Samples A	Analyzed: 15
Project Location: Rosemont E.S.	Bench	Run No: 59333
Sampled By: Client		
Analyzed by: Trinh Pham	Signature: flan	Date: 03-06-2024
Reviewed by: Zubair Ahmed	Signature: English Co	Date: 03-06-2024

Notes:

Units: mg/kg = milligrams per kilogram; percent = milligrams per kilogram/10000

RL = Reporting limit; "<" = below the reporting limit; mg/kg = ppm

Samples were prepared in accordance with EPA 3050B and analyzed with **EPA 7420** unless stated otherwise. Condition of all samples and method QC results are acceptable unless stated otherwise. Reported results relate only to the samples tested and may not be the representative of the sample area.

CA ELAP, Certification# 3070





6741 Friends Avenue, Suite B Whittier, California 90601 562-693-3055 cesenviron.com



# LEAD PAINT BULK SAMPLE INVENTORY AND CHAIN OF CUSTODY

Client:	Corane	nd School	Distrat	roject Name:	ey ES Maygrounds Technician	Fab. cr flu	des	
Location	forme	eat E.s.		roject Number:	Date	3-04-202	24	J
Sample No.:	Color:	Substrate:	Component:	Sample Location:	Material Location:	Condition:	Est. Qty:	
PC-1	4. Gray	Metal	Hand roil	Kinde Play ground-el/cl	Kinde Playground	·Danged	10 50/4	weather
1 -2.	<u> </u>		Gual all	- ukt			10 saft	
- 3	d		climbing hedder			4	10 54/2	
-4	Every		Support Post	· - 1/10		Interet		weather
- 5	Blown		rail			Danged	2 5g/L	الماس وورس للسبي م
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1	Red	<b>√</b>	Five truck	- c/dr		Danjed	10 54/2	
PC - 8	Red	<u>не 🖬 (</u>	Havidse !!	Pluygioud #1-ct	Mayground # 1	Inder +		
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1 13	heren k	1.	sh) s. to	Pluygrad HZ - N/CV	Playground #2	i	beathe	¢С
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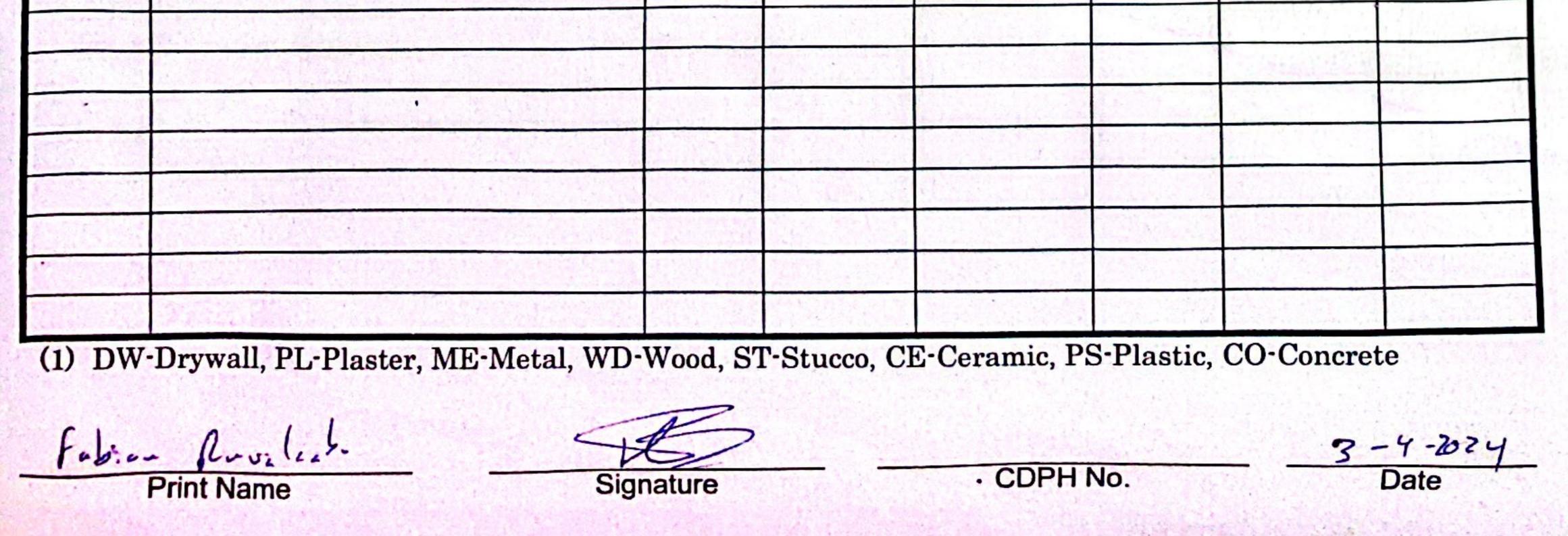
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6741 Friends Avenue, Suite B Whittier, California 90601 562-693-3055 cesenviron.com

# **XRF DATA SHEET**

Client:	Roseward School Dicke	Project Name:	Shuey E.I. Playgrouds	Technician:	Fabian Rus. 1. be
The second s	Rosener d La	<b>Project Number:</b>		Date:	7.04.2024

Sample No.	Sample Location - Room Description	Color	Substrate (1)	Component	Side A,B,C,D	Paint Condition	Sample Results (mg/cm2)
¥	Kinder Play ground (For)					-	and and
120	Calibratian		-	-	-		1.0
2		- /	-	- 1		1	1.1
3		-	-	-	-	1-1-11	1.1
4	Forder play grand	24. Way	metal	Handreil	0	D	0.00
5	roce pay good	1	r	huadrail	0	D	0.01
<u>(</u>		4		Ladde	D	D	6.00
7	AND	Brown		rail	0	D	0.01
¢		fucen	Sich Cont	Swugset	A	FI	0.01
C		Red		Fretruct	c	0	0.00
10		Green	4	Super+Pa		ī	0.00
11	playground #1	Red	Met-1	Head ail	* 12	I	0.02
. 12		1314	P.	Post	A	de la Caral	0.01
13		d		Ladde	A		0.01
14		Blue	d	Post	A	4	0.00
15	Play ground #2	Fuera	metal	Pullip Set	A	D	0.00
16	109 100-0			SI: de Port	B	D	0.05
17	Design of the second	+		stil. Handra.	B	D	0.05
18		asange	4	Swingset	C	I	0.09
14	C. i.b. t.k.	-			-	-	1.0
20	1	~	15.25766		-		1.0
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and the second							



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#### LEAD HAZARD EVALUATION REPORT

Section 1 — Date of Lead H	lazard Evaluation 3/4	<mark>l/24</mark>		
Section 2 — Type of Lead H	lazard Evaluation (Check o	ne box only)		
Lead Inspection	Risk assessment	arance Inspection 🖌 O	ther (specify) for constructi	on purposes
Section 3 — Structure Whe	re Lead Hazard Evaluation	Was Conducted		dan series and a series of the
Address [number, street, apartme		City	County	Zip Code
8472 Wells Street (Playgr	ound Demo. Job)	Rosemead	Los Angeles	91770
Construction date (year) of structure	Type of structure		Children living in structure	?
	Multi-unit building	School or daycare	🔄 Yes 🖌 No	
	Single family dwelling	Other	Don't Know	
Section 4 – Owner of Struc	ture (if business/agency, li	ist contact person)		
Name	an a	Т	elephone number	····
Rosemead School D	istrict			
Address [number, street, apartme	ent (if applicable)]	City	State	Zip Code
3907 Rosemead Blvc	<b>J.</b>	Rosemead	CA	91770
Section 5 - Results of Lea	d Hazard Evaluation (check	all that apply)		
Section 6 — Individual Con Name	ducting Lead Hazard Evalu	1	elephone number	
Fabian Ruvalcaba			951-448-1111	
Address [number, street, apartme		City	State	Zip Code
6741 Friends Avenue		Whittier	California	90601
CDPH certification number	Sigr	HE RUG		Date
LRC 00004100		F		3/4/24
Name and CDPH certification nu	mber of any other individuals cor	ducting sampling or testing (if	applicable)	
Section 7 — Attachments				
A. A foundation diagram or sk lead-based paint; B. Each testing method, devic C. All data collected, including	e, and sampling procedure ι	used;		
First copy and attachments retain	ed by inspector	Third copy only (no atta	chments) mailed or faxed to:	
Second copy and attachments re				
in the set of a set of a set of the set of t		California Department o		

California Department of Public Health Childhood Lead Poisoning Prevention Branch Reports 850 Marina Bay Parkway, Building P, Third Floor Richmond, CA 94804-6403 Fax: (510) 620-5656

CDPH 8552 (6/07)

## **Performance Characteristic Sheet**

EFFECTIVE DATE: September 24, 2004

**EDITION NO.: 1** 

#### MANUFACTURER AND MODEL:

Make:	Niton LLC
Tested Model:	XLp 300
Source:	<sup>109</sup> Cd
Note:	This PCS is also applicable to the equivalent model variations indicated below, for the Lead-in-Paint K+L variable reading time mode, in the XLi and XLp series:
	XLi 300A, XLi 301A, XLi 302A and XLi 303A.
	XLp 300A, XLp 301A, XLp 302A and XLp 303A.
	XLi 700A, XLi 701A, XLi 702A and XLi 703A.
	XLp 700A, XLp 701A, XLp 702A and XLp 703A.

Note: The XLi and XLp versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

#### FIELD OPERATION GUIDANCE

#### **OPERATING PARAMETERS:**

Lead-in-Paint K+L variable reading time mode.

#### XRF CALIBRATION CHECK LIMITS:

#### 0.8 to 1.2 mg/cm<sup>2</sup> (inclusive)

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm<sup>2</sup> in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm<sup>2</sup> film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

#### SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K+L variable reading time mode, substrate correction is not needed for:

Brick, Concrete, Drywall, Metal, Plaster, and Wood

#### INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE	SUBSTRATE	
READING DESCRIPTION		(mg/cm²)
Results not corrected for substrate bias on any	Brick	1.0
substrate	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

#### **BACKGROUND INFORMATION**

#### **EVALUATION DATA SOURCE AND DATE:**

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

#### **OPERATING PARAMETERS:**

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

#### SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-in-Paint K+L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate bias.

#### **EVALUATING THE QUALITY OF XRF TESTING:**

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use the K+L variable time mode readings.

Conduct XRF retesting at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family and multifamily housing, a result is defined as a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If

the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

#### **TESTING TIMES:**

For the Lead-in-Paint K+L variable reading time mode, the instrument continues to read until it is moved away from the testing surface, terminated by the user, or the instrument software indicates the reading is complete. The following table provides testing time information for this testing mode. The times have been adjusted for source decay, normalized to the initial source strengths as noted above. Source strength and type of substrate will affect actual testing times. At the time of testing, the instruments had source strengths of 26.6 and 36.6 mCi.

	Testing Times Using K+L Reading Mode (Seconds)						
	All Data			Median for laboratory-measured lead levels (mg/cm <sup>2</sup> )			
Substrate	25 <sup>th</sup> Percentile	Median	75 <sup>th</sup> Percentile	Pb < 0.25	0.25 ≤ Pb<1.0	1.0 ≤ Pb	
Wood Drywall	4	11	19	11	15	11	
Metal	4	12	18	9	12	14	
Brick Concrete Plaster	8	16	22	15	18	16	

#### CLASSIFICATION RESULTS:

XRF results are classified as positive if they are greater than or equal to the threshold, and negative if they are less than the threshold.

#### DOCUMENTATION:

A document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest Research Institute (MRI) and QuanTech, Inc., under a contract between MRI and the XRF manufacturer. HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.

#### EFFECTIVE DATE: April 17, 1998

**EDITION NO.: 4** 

#### MANUFACTURER AND MODEL :

Make: Niton Corporation
Models: XL-309, 701-A, 702-A, and 703-A Spectrum Analyzers
Source: <sup>109</sup>Cd (10 - 40 mCi initial source strength)
Note: This Performance Characteristic Sheet (PCS) is applicable to the listed Niton XRF instruments which have an operating software version of 5.1 (or equivalent) using a variable-time mode, and to Niton instruments having an operating software version of 1.2C (or equivalent) using a fixed-time mode. This sheet supersedes all previous sheets for the XRF instruments made by the Niton Corporation and the 1993 testing of XL prototypes reported in the document titled: A Field Test of Lead-Based Paint Testing Technologies: Technical Report (EPA Report No. 747-R-95-002b, May 1995).

#### FIELD OPERATION GUIDANCE

This PCS provides supplemental information to be used in conjunction with Chapter 7 (Lead-Based Paint Inspection) of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown in this sheet are applicable only when operating the instrument using the manufacturer's instructions and the procedures described in Chapter 7 of the HUD Guidelines.

#### **OPERATING PARAMETERS**

Use of variable-time paint test mode ("K & L + Spectra" mode) on instruments running software version 5.1 (or equivalent) using the "Combined Lead Reading" with the instrument's display of a 95%--confident (2-sigma) *Positive* or *Negative* determination versus the action-level as the stopping point of the measurement.

Use of nominal 20-second readings for L-shell results or 120-second readings for K-shell results on instruments running software version 1.2C (or equivalent) in a fixed-time mode.

#### **XRF CALIBRATION CHECK LIMITS**

0.9 to 1.2 mg/cm<sup>2</sup> (inclusive) for instruments running software version 5.1 (or equivalent) 0.9 to 1.1 mg/cm<sup>2</sup> (inclusive) for instruments running software version 1.2C (or equivalent)

#### SUBSTRATE CORRECTION :

(applicable to instruments running software versions 5.1 (or equivalent) or 1.2C (or equivalent))

For XRF results below 4.0 mg/cm<sup>2</sup>, substrate correction recommended for:

None.

Substrate correction is <u>not</u> recommended for:

Brick, Concrete, Drywall, Metal, Plaster, and Wood

#### THRESHOLDS: (applicable to instruments running software versions 5.1 (or equivalent) or 1.2C (or equivalent))

DESCRIPTION	SUBSTRATE	THRESHOLD <sup>*</sup> (mg/cm <sup>2</sup> )
Results not corrected for substrate bias	Brick Concrete Drywall Metal Plaster Wood	1.0 1.0 1.0 1.0 1.0 1.0

<sup>\*</sup>For instruments running software version 1.2C (or equivalent), application of the decision making methodology recommended in this PCS can result in inconclusive results regardless of whether decisions are based on L-shell readings, K-shell readings, or both.

## BACKGROUND INFORMATION

#### EVALUATION DATA SOURCE AND DATE

Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Three rounds of tests were conducted on approximately 150 test locations in each round.

One round of testing was conducted March 1995 using a single instrument with an October 1994 source at 10 mCi initial strength while running software version 1.2C in a fixed-time mode with nominal 20-second readings for L-shell results or 120-second readings for K-shell results.

The two other rounds of testing were conducted December 1997 using three different instruments, each running software version 5.1. Two of these instruments had new sources installed November 1997, the other instrument had a new source installed December 1997, all with 10 mCi initial strength. The December 1997 testing was performed in the variable-time paint test mode "K & L + Spectra" using the "Combined Lead Reading" with 2-sigma confidence interval as the stopping point of the measurement.

#### **XRF CALIBRATION CHECK:**

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm<sup>2</sup> in the NIST Standard Reference Material (SRM) (e.g., for NIST SRM 2579, use the 1.02 mg/cm<sup>2</sup> film). Measurements should be bracketed by successful XRF calibration check readings. XRF calibration checks are performed at the beginning and end of the day's inspections or at extended delays in testing, and (at least) every four hours during inspections or at a frequency recommended by the manufacturer, whichever is more stringent. If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instrument into control before XRF testing proceeds. Measurements which are not bracketed by successful calibration checks should be considered suspect.

#### **EVALUATING THE QUALITY OF XRF TESTING**

Randomly select ten testing combinations for re-testing from each house or from two randomly selected units in multifamily housing. (A testing combination is a location on a painted surface as defined in Chapter 7 of the HUD Guidelines.) For testing combinations involving up to four walls in a room, each wall is classified on its individual XRF reading. (See Chapter 7 for testing procedures if there are more than four walls in a room, and for testing exterior walls.)

For instruments running software version 5.1 (or equivalent), conduct the test in the variable-time paint test mode "K & L + Spectra" using the "Combined Lead Reading" with 2-sigma confidence interval as the

stopping point of the measurement. For instruments running software version 1.2C (or equivalent) in the fixed-time mode, use either 20-second readings for the L-shell results or 120-second readings for the K-shell results, as described in the "Classifications of Results" section below.

Conduct XRF re-testing at the ten testing combinations selected for re-testing.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family and multifamily housing, a result is defined as a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten retest XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

#### **BIAS AND PRECISION**

Bias and precision data were not computed for instruments using software version 5.1 and taking variable mode readings. (See Appendix B, Section B.3.2 of the document titled *Methodology for XRF Performance Characteristic Sheets*, EPA-747-R-45-008, September 1997). During the 1997 testing, there were 12 testing locations with laboratory-measured lead levels equal to or greater than 4.0 mg/cm<sup>2</sup> lead which were tested using two instruments in the variable-time paint test mode. None of these testing locations had XRF readings less than 1.0 mg/cm<sup>2</sup>. These data are for illustrative purposes only. Substrate correction is not recommended for this XRF instrument.

The bias and precision data given below are for instruments running software version 1.2C (or equivalent) and were computed without substrate correction using the 20-second L-shell readings from samples with

reported laboratory results less than 4.0 mg/cm<sup>2</sup> lead. Readings reported by the instrument in the "x" or ">>x" format were not used in the computation. During the 1995 testing there were 15 test locations with a laboratory reported result equal to or greater than 4.0 mg/cm<sup>2</sup> lead. Of these, 12 readings were reported in the ">x" or ">>x" format, but of the 3 remaining, 1 had an XRF reading less than 1.0 mg/cm<sup>2</sup>.

MEASURED AT	SUBSTRATE	BIAS (mg/cm²)	PRECISION <sup>*</sup> (mg/cm <sup>2</sup> )			
0.0 mg/cm <sup>2</sup>	All	0.0	<0.1			
0.5 mg/cm <sup>2</sup>	All	0.0	0.2			
1.0 mg/cm <sup>2</sup>	All	0.0	0.3			
2.0 mg/cm <sup>2</sup> All -0.1 0.5						
*Precision at 1 standard deviation						

Bias & Precision Results for Niton Model XL-309 Instruments Using Software Version 1.2C (or equivalent)

#### CLASSIFICATION OF RESULTS

This section describes how to apply information displayed by this instrument to determine the presence or absence of lead in paint using the procedures recommended in Chapter 7 of the HUD Guidelines. These guidelines recommend classifying XRF results as positive, negative, or inconclusive compared to the lead-based paint 1.0 mg/cm<sup>2</sup> standard.

For Niton Model XL-309, 701-A, 702-A, and 703-A instruments running software version 5.1 (or equivalent), XRF results are classified using a threshold. There is no inconclusive classification when using the threshold for instruments running software version 5.1. In single-family and multifamily housing, an XRF result is a single reading taken on each testing combination. (A testing combination is a location on a painted surface as defined in Chapter 7 of the HUD Guidelines.) For testing combinations involving up to four walls in a room, each wall is classified on its individual XRF reading. (See Chapter 7 for testing procedures if there are more than four walls in a room, and for testing exterior walls.) For computing the XRF result, use all digits that are displayed by the instrument as the "Combined Lead Reading." Results are classified as positive (i.e.,  $\geq 1.0 \text{ mg/cm}^2$ ), if greater than or equal to the threshold, or negative (< 1.0 mg/cm<sup>2</sup>) if less than the threshold. Threshold values, provided in the tables above, were determined by comparing XRF test results to the 1.0 mg/cm<sup>2</sup> standard.

**For Niton Model XL-309 instruments running software version 1.2C (or equivalent)**, additional procedures are needed to classify readings because this software displays readings <u>and</u> ancillary information useful for classification purposes. An algorithmic procedure is described that makes use of the XRF reading and other displayed information.

The algorithm for classifying results is first applied to 20-second nominal L-shell readings followed by 120second nominal K-shell readings to resolve inconclusive results, or to recommend laboratory analysis of paint-chip samples, if necessary. A listing of laboratories recognized by the EPA National Lead Laboratory Accreditation Program (NLLAP) for the confirmational analysis of inconclusive results is available from the National Lead Clearinghouse at 1-800-424-LEAD.

XRF results are classified using threshold values for the Model XL-309 software version 1.2C (or equivalent). Results are classified as positive if greater than or equal to the threshold, and as negative if less than the threshold. There is no inconclusive classification when using threshold values. However, in some cases, inconclusive results still may be obtained regardless of whether decisions are based on L-shell readings, K-shell readings, or both, as described below. Use all digits that are reported by the instrument. Threshold values, which were determined for comparing results to the 1.0 mg/cm<sup>2</sup> standard, are provided in the table above.

This instrument displays its lead-based paint measurements as both L-shell and K-shell readings based on

the corresponding L-shell and K-shell X-ray fluorescence (refer to Chapter 7 of the HUD Guidelines for more details). The L-shell readings (or L-readings) are displayed as a numerical result alone, or as a numerical result preceded by either one greater-than symbol (">") or preceded by two greater-than symbols (">>"). The two greater-than symbols will only be displayed when the detected lead level is greater than 5.0 mg/cm<sup>2</sup>. Since the maximum lead level reported by this instrument is 5.0 mg/cm<sup>2</sup>, lead levels greater than 5.0 mg/cm<sup>2</sup> are displayed as ">>5.0". Other examples of how L-readings can be displayed (in mg/cm<sup>2</sup> units) are "0.6" and ">0.9". The numerical display alone implies that the instrument measured the lead in the paint at the displayed level using L-shell X-ray fluorescence; 0.6 mg/cm<sup>2</sup> in the example. A number preceded by a single greater than the displayed value. In the example, >0.9 indicates that the instrument detected lead deeply buried in paint at a level greater than 0.9 mg/cm<sup>2</sup>. K-shell readings (or K-readings) are displayed in one of two ways: 1) as a single K-reading plus and minus a "precision" value or 2) as an upper K-reading and lower K-reading.

The same method is used for testing in single-family and multifamily housing. The HUD Guidelines recommend taking a single XRF reading on a testing combination. (A testing combination is a location on a painted surface as defined in Chapter 7 of the HUD Guidelines.) For testing combinations involving up to four walls in a room, each wall is classified on its individual XRF reading. (See Chapter 7 for testing procedures if there are more than four walls in a room, and for testing exterior walls.)

- A. Take a single 20-second nominal reading on each testing combination.
- B. Classify the L-reading based on the type of information displayed.

#### If two greater-than symbols are displayed then:

- Classify the >>5.0 L-reading as POSITIVE

If one greater-than symbol is displayed then:

- Classify the L-reading as POSITIVE if the numerical result that follows the greater than symbol is equal to or greater than 1.0.
- Classify the L-reading as INCONCLUSIVE if the numerical result that follows the greater than symbol is less than 1.0.

# If the numerical L-reading is displayed alone (that is, without any preceding greater-than symbols) then:

- Classify the L-reading as POSITIVE if the numerical result is equal to or greater than 1.0.
- Classify the L-reading as NEGATIVE if the numerical result is less than 1.0.
- C. Resolution of results classified as inconclusive.

All results classified as inconclusive above require further investigation. Take a 120-second nominal XRF reading and use the K-shell reading. In multifamily housing, resolve the inconclusive classification with a single K-shell reading or laboratory analysis as described below.

- Classify the result as POSITIVE if either the K-reading minus the displayed precision value <u>or</u> the lower K-reading is equal to or greater than 1.0.
- Classify the result as NEGATIVE if either the K-reading plus the displayed precision value <u>or</u> the upper K-reading is less than 1.0.
- Classify the result as INCONCLUSIVE if neither of the above decision rules using the K-reading provided a classification which can occur when the upper K-reading is equal to or greater than 1.0 or the lower K-reading is less than 1.0.

- To resolve a remaining INCONCLUSIVE classification, remove a paint-chip sample as described in Chapter 7 of the HUD Guidelines and have it analyzed by a qualified laboratory as described in Chapter 7.

#### TESTING TIMES (FOR SOFTWARE VERSION 5.1)

For the variable-time paint test mode "K & L + Spectra," the instrument continues measuring until a positive or negative result is indicated relative to an action level  $(1.0 \text{ mg/cm}^2 \text{ for archive testing})$  and the current precision, or until the reading is terminated by moving the instrument away from the testing surface. None of the variable mode readings were terminated because of the two-minute limit used for archive testing. The following table provides testing time information for this testing mode. Source strength and type of substrate will affect actual testing times.

	Testing Times for Instruments Running Software Version 5.1							
	Variable mode testing times (seconds)							
	All data			Median for laboratory—measured lead levels (mg/cm <sup>2</sup> )				
	25 <sup>th</sup>		75 <sup>th</sup>					
Substrate	Percentile	Median	Percentile	Pb < 0.25	0.25 <= Pb < 1.0	1.0 <= Pb		
Wood Drywall	6	8	15	6	20	5		
Metal	6	13	20	13	20	6		
Brick Concrete Plaster	6	11	20	9	18	6		

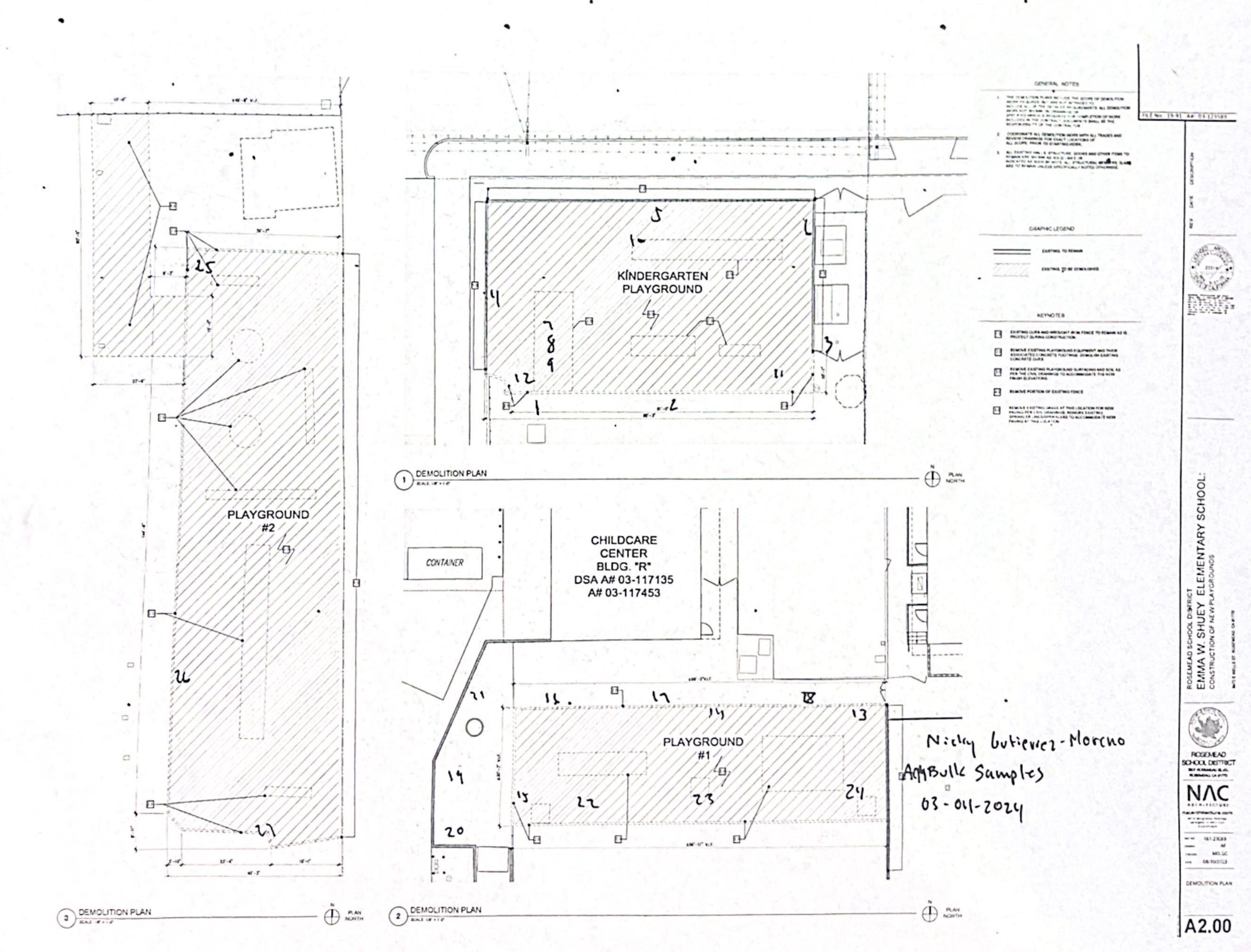
#### DOCUMENTATION:

This PCS was developed in accordance with the methodology in the EPA report titled *Methodology for XRF Performance Characteristic Sheets* (EPA 747-R-95-008, September 1997). This report provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest Research Institute (MRI) under a grant from the U. S. Environmental Protection Agency and a separate contract between MRI and the XRF manufacturer. The U.S. Department of Housing and Urban Development (HUD) has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*. While MRI reserves the right to revise this XRF Performance Characteristic Sheet at any time, HUD's statement of acceptance would not apply to a revision until HUD has reviewed the revision and made a determination of its acceptability.

# **APPENDIX C:**

SAMPLE DIAGRAMS





6741 Friends Avenue, Suite B Whittier, California 90601 562-693-3055 cesenviron.com

PC-1

PC.7

Playmond

Pe.s

PC-G

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Date:	3-04-2024	CES Representative(s):	Fabian Revelector
Project No.:		Project Name:	Shury E.S.
Project Location:	Rosenad Lu	Project Area:	Playguounds

wells

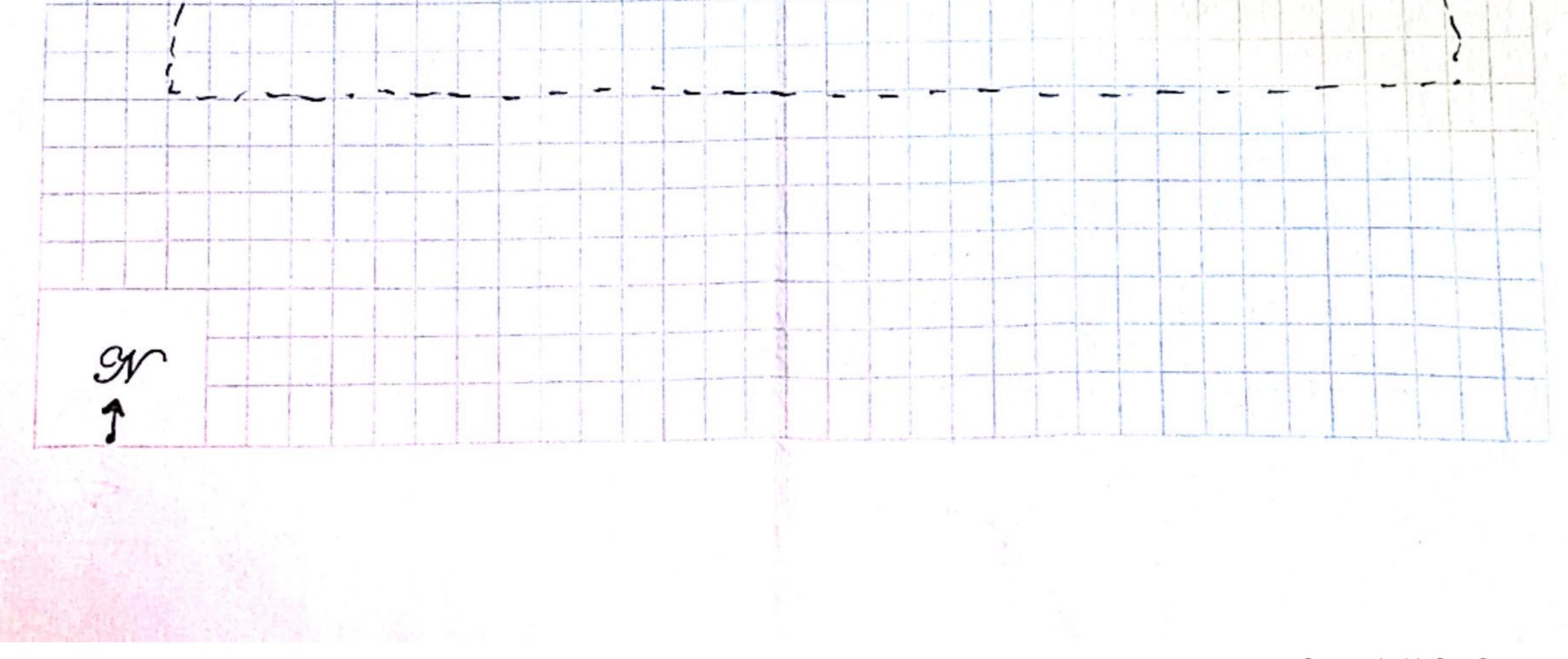
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street

PC-4

PC-2

Pc-11 Pc-10 Pc-9 PC-3 PC-8 Park:4 Play ground # 1 PC-12 ... Caupas Playgrad # Z Grass Field Pc-13 Pc - 14 PC-15



# **APPENDIX D:**

INSPECTOR CERTIFICATIONS

#### STATE OF CALIFORNIA

Gavin Newsom, Governor

DEPARTMENT OF INDUSTRIAL RELATIONS
Division of Occupational Safety and Health-Asbestos Certification
1750 Howe Avenue, Suite 460
Sacramento, CA 95825
(916) 574-2993 Office http://www.dir.ca.gov/dosh/asbestos.html actu@dir.ca.gov



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CES Environmental Consultants Cesar Ruvalcaba 6741 Friends Avenue, Suite B Whittier CA 90601 October 09, 2023

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. To maintain your certification, you must abide by the rules printed on the back of the certification card.

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days <u>before</u> the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address or email w any changes in your contact/mailing information within 15 days of the change.

Sincerely,

L' Dunlit

Kevin Graulich Principal Safety Engineer

Attachment: Certification Card

cc: File

State of California Division of Occupational Safety and Health Certified Asbestos Consultant

**Cesar Ruvalcaba** 

Certification No. 95-1799

Expires on 10/27/24

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.



#### STATE OF CALIFORNIA DEPARTMENT OF PUBLIC HEALTH



# **LEAD-RELATED CONSTRUCTION CERTIFICATE**

INDIVIDUAL:	CERTIFICATE TYPE:	NUMBER:	<b>EXPIRATION DATE:</b>
	Lead Inspector/Assessor	LRC-00003922	1/16/2025
	Lead Project Monitor	LRC-00003921	1/16/2025

Cesar Ruvalcaba

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at <a href="https://www.cdph.ca.gov/programs/clppb">www.cdph.ca.gov/programs/clppb</a> or calling (800) 597-LEAD

State of California Division of Occupational Safety and Health Certified Asbestos Consultant

#### Elmer | Castro



# Certification No. \_\_\_\_13-5074

Expires on <u>07/17/24</u> This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.



government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at <u>www.cdph.ca.gov/programs/clppb</u> or calling (800) 597-LEAD

#### STATE OF CALIFORNIA

Gavin Newsom, Governor

DEPARTMENT OF INDUSTRIAL RELATIONS **Division of Occupational Safety and Health-Asbestos Certification** 1750 Howe Avenue, Suite 460 Sacramento, CA 95825 (916) 574-2993 Office <u>http://www.dir.ca.gov/dosh/asbestos.html</u> <u>actu@dir.ca.gov</u>



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October 18, 2023

Fabian Ruvalcaba 6741 Friends Avenue, Suite B Whittier CA 90601

CES Environmental Consultants, Inc.

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. To maintain your certification, you must abide by the rules printed on the back of the certification card.

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days <u>before</u> the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address or email w any changes in your contact/mailing information within 15 days of the change.

Sincerely,

Kitchenlik

Kevin Graulich Principal Safety Engineer

Attachment: Certification Card

cc: File

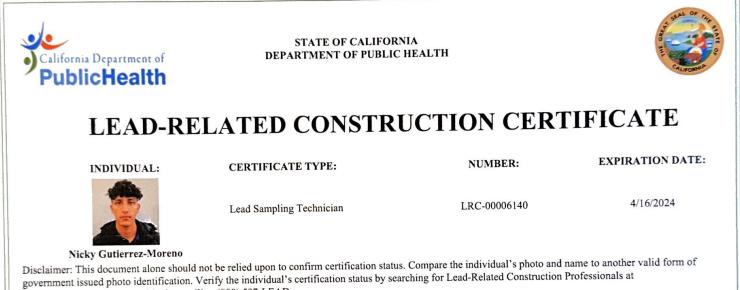


## State of California Division of Occupational Safety and Health Certified Site Surveillance Technician

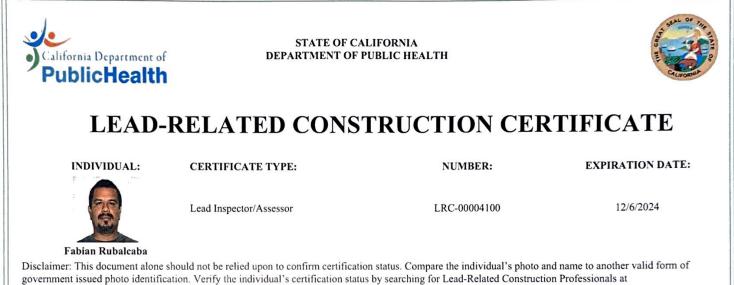
Nicky Gutierrez-Moreno Name



Certification No. <u>20-6787</u> Expires on <u>09/20/24</u> This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.



government issued photo identification. Verify the individual's www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD



www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD