



**Survey of School Building for Lead-Based Paint:
Superior Elementary, 1500 W. Sunset Drive, Superior AZ**

Prepared for: Michael Crow
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Fiberquant Job #202004628 (XRF)

Introduction

At the client's request, a school building was screened for lead-based paint (LBP). The analytical methodology was to test the exterior and the roof of the building. The property surveyed was located at 1500 W. Sunset Drive in Superior, AZ.

The survey was conducted and interpreted by Uwe Steimle under the employment of Fiberquant Analytical Services (EPA firm certification number AZ-LBP-2033-1, expires 02/25/2021). Uwe has successfully completed the Federal EPA course and testing for lead-based paint for the State of Arizona (EPA certification #LBP-R-4375-2, Expires 10/12/2023).

Executive Summary

One of the components tested was found to be positive for lead-based paint (i.e., containing ≥ 1.0 mg Pb/cm² with 95% confidence).

Procedures

The site was visited on May 12th, 2020. The exterior and the roof of the building were surveyed for the presence of lead-based-paint (LBP) using a spectrum analyzer portable X-ray fluorescence (XRF) paint tester, Viken Detection Corporation model Pb200i, serial number 02627 (cobalt 57 source assay date 2/12/2020). The performance characteristic sheet for this instrument is available on the Internet at https://www.hud.gov/sites/documents/HEURESISPCS_JUNE17.PDF. The spectrum analyzer automatically subtracts from a spectrum the fluorescence from the substrate of the paint so as to give an accurate reading of lead content without taking of samples or stripping of paint. This is performed via a computer program stored in the analyzer, which gives an instantaneous readout of the lead content of a site in mg/cm². The instrument performance is checked before and after the job or unit (minimum every 4 hours) by reading a 1.0 mg/cm² sample three times.

The LPA-1 operates in two modes, 1) time corrected, for performing calibrations and comparisons to physical samples, and 2) quick, for normal testing. According to the EPA Performance Characteristics Sheet for the LPA-1, the quick mode gives correct threshold-type readings needing

no substrate corrections. That is, the instrument counts a sufficient amount of time to determine to 95% confidence whether a given site is >1.0 mg/cm². The closer the site is to 1.0, the longer the counting time. If a 95% confidence statement cannot be made after 60 sec., the instrument indicates an inconclusive. If inconclusive, a physical sample may be taken for testing in the lab if the result of the site is important. However, in a room or unit showing a mixture of positive and negative samples, it is unimportant whether one more site is positive or negative, and in that case the inconclusive will be left as inconclusive.

A report of data is attached.

Results

One of the components tested was found to be positive for lead-based paint (i.e., containing ≥ 1.0 mg Pb/cm² with 95% confidence. The component was a green wooden beam on the D-wall of building 2. Two readings were taken in different spots on the beam and both yielded positive results.

It is important to note that the *HUD Guidelines for the Reduction of Lead Hazards in Public and Indian Housing, 2012 revision*, stipulates that one of each component/substrate combination be tested in each room equivalent with the exception of the walls, in which case all four are to be tested. There are many occasions where a particular component/substrate combination tests positive in one room and then negative in another room despite indistinguishable construction histories. In these cases it is impossible to positively ascertain whether or not every member of a component/substrate combination is positive or negative for lead-based paint without actually testing every member in the home. As such, one can assume that if a combination is found to be positive for lead-based paint in a home, then every similar but untested combination is also positive unless proven otherwise.

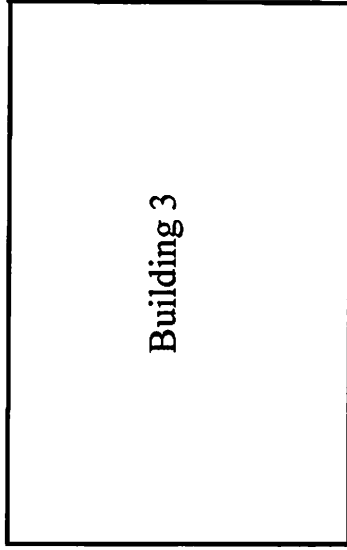
The Occupational Safety and Health Administration (OSHA) Lead in Construction Standard states that "negative" readings (i.e. those below the HUD/EPA definition of what constitutes LBP (1.0 mg/cm²) do not relieve contractors from performing exposure assessments (personal air monitoring) on their employees per the OSHA Lead Standard, and should not be interpreted as lead free. Although a reading may indicate "negative", airborne lead concentrations still may exceed the OSHA Action Level or the OSHA Permissible Exposure Limit (PEL) depending on the work activity.



5/12/2020

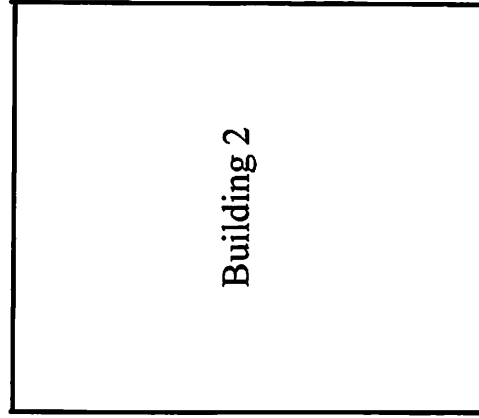
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C



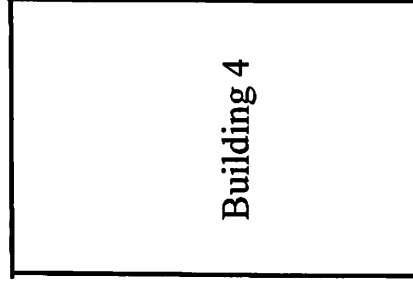
Building 3

B



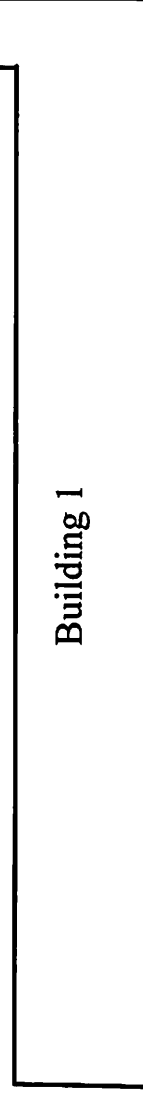
Building 2

D



Building 4

Building 1



A

N



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Superior Element.
School
1500 W. Sunset
Superior, AZ

Company Heuresis Corp.

Model Pb200i

Instrument XRF Lead Paint Analyzer

202004628 1500 W. Sunset Drive, Superior AZ

Serial Num 2627

App Versio Pb200i-4.1-11

Reading #	Concentrat	Units	Result	Action Lev	Mode	Analytic M	Job Id	Interior/ex	Room	Member	Componer	Substrate	Wall	Condition	Color
1	0.9	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Calibration				Wood		Intact	
2	0.9	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Calibration				Wood		Intact	
3	0.9	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Calibration				Wood		Intact	
4	0.1	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Calibration				Wood		Intact	
5	0.1	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Calibration				Wood		Intact	
6	0.2	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Calibration				Wood		Intact	
7	0.5	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building1	Wall		Stucco	A	Intact	White
8	-0.1	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building1	Wall		Block	B	Intact	Pink
9	-0.1	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building1	Wall		Block	C	Intact	Pink
10	0.5	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building1	Wall		Stucco	C	Intact	White
11	0.1	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building1	Wall		Block	D	Intact	Pink
12	0	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building1	Door	Door	Metal	D	Intact	Green
13	0.5	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building1	Door	L casing	Metal	D	Intact	Green
14	0	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building1	Wall		Block	A	Intact	Gray
15	0	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building1	Panel		Wood	A	Intact	Gray
16	0	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building1	Door	Door	Metal	A	Intact	Gray
17	0.5	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building1	Exterior		Wood	A	Intact	Gray
18	0.6	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building1	Exterior	Eave	Wood	A	Intact	White
19	1.3	mg/cm2	Positive	1.00	Action Lev	Lead Paint	202004628	Exterior	Building2	Exterior	Beam	Wood	D	Intact	Green
20	1	mg/cm2	Positive	1.00	Action Lev	Lead Paint	202004628	Exterior	Building2	Exterior	Beam	Wood	D	Intact	Green
21	0.4	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building2	Exterior	Fascia	Wood	D	Intact	Green
22	0.2	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building2	Exterior	Eave	Drywall	D	Intact	White
23	0.2	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building2	Door	Door	Metal	D	Intact	Green
24	0.5	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building2	Door	R Casing	Metal	D	Intact	Green
25	0.2	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building2	Exterior	Beam	Metal	C	Intact	Green
26	0.1	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building2	Exterior	Post	Metal	C	Intact	Green
27	0.6	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building3	Exterior	Wall	Stucco	A	Intact	Pink
28	0.4	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building3	Exterior	Wall	Stucco	B	Intact	Pink
29	0.4	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building3	Exterior	Wall	Stucco	C	Intact	Pink
30	0.5	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building3	Exterior	Wall	Stucco	D	Intact	Pink
31	-0.1	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building3	Exterior	Eave	Stucco	D	Intact	White
32	0	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building3	Door	Door	Metal	D	Intact	Green
33	0	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building3	Door	Header	Metal	D	Intact	Green
34	0.1	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building3	Exterior	Beam	Metal	A	Intact	Green
35	0.1	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building4	Exterior	Gutter	Metal	B	Intact	Green
36	0.1	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building4	Door	Door	Metal	A	Intact	Green
37	0.5	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Exterior	Building4	Door	L casing	Metal	A	Intact	Green
38	0.9	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Calibration				Wood		Intact	Green
39	0.9	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Calibration				Wood		Intact	Green
40	0.9	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Calibration				Wood		Intact	Green
41	0.1	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Calibration				Wood		Intact	Green
42	0.1	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Calibration				Wood		Intact	Green
43	-0.1	mg/cm2	Negative	1.00	Action Lev	Lead Paint	202004628	Calibration				Wood		Intact	Green