

LEAD-BASED PAINT RISK ASSESSMENT REPORT

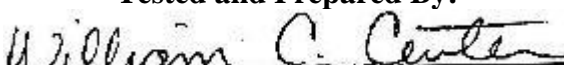
FOR THE PROPERTY LOCATED AT:

**118 N Walnut Street
South Bend, IN 46628**



Owner/Tenant
Vacant

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Date of Inspection: March 28, 2022

Re-evaluation Date: 6-12 Months from March 28, 2022

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1.0 PURPOSE

The purpose of the investigation was to determine the existence of lead-based paint hazards at the subject property and to determine the location, type, and severity of existing or potential health hazards associated with exposures to lead.

The following report details the results of the investigation. A summary of this report must be provided to each new lessee (tenant) or purchaser of this property under Federal law (24 CFR part 35 and 40 CFR part 745) before they become obligated under a lease or sales contract. The complete report must also be provided to purchasers and made available to tenants. Landlords (lessors) and sellers are also required to distribute an educational pamphlet approved by the U.S. Environmental Protection Agency (EPA), entitled "*Renovate Right*," and include standard warning language in their leases or sales contracts to ensure that parents have the information they need to protect their children from lead-based paint hazards. For more information regarding your obligations under federal lead-based paint regulations, contact 800-424-LEAD (5323).

EPA Certified Firms using Certified Renovators who have successfully completed the EPA-approved Renovation, Repair and Painting course should remove any lead-based paint hazards identified on this property. Refer to the EPA/State Laws that may have additional requirements, depending on scope of work. For any federally funded project, all personnel disturbing the lead-based paint must be a Certified Renovator.

2.0 CONCLUSIONS

2.1 Report Summary

The building and its paint are in relatively **good condition** overall. The risk assessment showed that lead hazards **do exist**.

As lead-based paint hazards were identified, the risk assessor recommends that the homeowner/tenant/client contact their local health department to have all children in the household under the age of 7 and anyone you feel at risk be tested for lead poisoning. It is also recommended that, as soon as possible, the residence be cleaned following the recommendations in the EPA brochure *Renovate Right*. Other recommendations for safe ways to minimize your child's exposure to lead-based paint are also found throughout the report.

2.2 Determination of Lead-based Paint Hazards

Dust wipe sample results summary:

- *Lead dust is assumed to be present around all positive components noted in the following charts.*
- *There are lead dust levels around all windows and all floors (including all stairwell stair treads) that exceed HUD guidelines.*

Soil sample results summary:

- *No Soil Sample Taken (Upstairs unit only)*

Lead paint in *deteriorated condition* is listed in the charts below. Either stabilization or abatement is required.

EXTERIOR				
<i>General note: If any exterior inaccessible components are ever removed, all painted surfaces must be assumed positive.</i>				
Room/Location	Component(s)	Square Feet	Quantity	Assumed Positive (check if yes)
Front entry A	Door components	10	1	
Front entry AD	Windows and components	3	2	
2 nd floor stairway D	Window and components	5	1	
Room 1 A	Windows and components	5	3	
Room 2 AB	Windows and components	5	2	
Bathroom B	Window and components	5	1	
Rear stairway B	Window and components	5	1	
Kitchen C	Windows and components	5	2	
Room 3 D	Windows and components	5	2	

INTERIOR				
<i>General note: If any interior inaccessible components (paneling, drop ceiling, wall boards, etc.) are ever removed, all painted surfaces must be assumed positive.</i>				
Room/Location	Component(s)	Square Feet	Quantity	Assumed Positive (check if yes)
Front entry A	Door and components	25	1	
Front entry	Baseboard	6		
Front entry D	Stringer	18		
Front entry AD	Windows and components	5	2	
2 nd floor stairway	Window and components	8	1	
2 nd floor stairway	Stair stringer	4		
2 nd floor stairway	Baseboard	25		
2 nd floor stairway B	Doors and components including dormers	22	4	
2 nd floor stairway D	Door and components	18	1	
2 nd floor stairway D	Closet door and components	18	1	
2 nd floor stairway D	Closet components	8		
2 nd floor stairway C	Door components	10	1	
Bathroom B	Cabinet out and in including shelves	20		
Bathroom D	Door and jamb including dormer	20	1	
2 nd floor stairway AC	Trim (corner)	2	3	
Rear stairway AC	Trim (corner)	2	2	

INTERIOR

General note: If any interior inaccessible components (paneling, drop ceiling, wall boards, etc.) are ever removed, all painted surfaces must be assumed positive.

Room/Location	Component(s)	Square Feet	Quantity	Assumed Positive (check if yes)
Rear stairway B	Window and components	6	1	
Rear stairway C	Door casing	6	1	
Rear stairway ABCD	Stair stringers	40		
Rear stairway	Baseboard	6		
Kitchen AB	Trim (corner) (in closet)	2	2	
Kitchen ABCD	Baseboard	15		
Kitchen C	Windows and components	8	2	
Kitchen AB	Doors and components	15	2	
Kitchen A	Door components	10	1	
Kitchen B	Closet components	15	1	
Kitchen B	Closet door and components	20		
Attic stairway C	Door and jamb	15		
Room 1 A	Windows and components	8	3	
Room 1 ABCD	Baseboard	30		
Room 1 D	Arch casing	14		
Room 1 C	Door and components including dormer	22		
Room 1 D	Door and components	15		
Room 1 D	Closet door and components	15		
Room 1 D	Closet components	8		
Room 2 AB	Windows and components	8	2	
Room 2 ABCD	Baseboard	25		
Room 2 D	Door and components including dormer	22	1	
Room 3 B	Door and components including dormer	22	1	
Room 3 C	Door and components	15	1	
Room 3 C	Closet door and components	15	1	
Room 3 C	Closet components	10		
Room 3 D	Windows and components	5	2	
Room 3 ABCD	Baseboard	20		

Please remember that all identified LBP and LBP hazards should always be properly addressed by professionally certified lead workers.

2.3 Positive XRF Readings

Please note: This data is representative of the positive components determined via X-ray analysis at the time of the risk assessment. For a full determination of lead hazards, please see Section 2.2.

#	Component	Substrate	Side	Condition of Paint	Room	Color	Floor	PbC	Result
4	Door Casing	Wood	A	DETERIORATED	Entry Front	Brown	1st	25.2	Positive
5	Door Jamb	Wood	A	DETERIORATED	Entry Front	Brown	1st	29.3	Positive
6	Door Threshold	Wood	A	DETERIORATED	Entry Front	Brown	1st	2.8	Positive
7	Win. Sash	Wood	A	DETERIORATED	Entry Front	Brown	1st	6.3	Positive
8	Win. Sash	Wood	A	DETERIORATED	Entry Front	White	1st	15.5	Positive
9	Win. Sill-Stool	Wood	A	DETERIORATED	Entry Front	White	1st	14.9	Positive
10	Win. Casing	Wood	A	DETERIORATED	Entry Front	White	1st	15	Positive
11	Win. Casing	Wood	A	DETERIORATED	Entry Front	White	1st	15	Positive
12	Door Jamb	Wood	A	DETERIORATED	Entry Front	White	1st	14.5	Positive
13	Door Casing	Wood	A	DETERIORATED	Entry Front	White	1st	14.5	Positive
14	Door	Wood	A	DETERIORATED	Entry Front	White	1st	12.5	Positive
15	Baseboard	Wood	B	DETERIORATED	Entry Front	White	1st	14	Positive
17	Stair Stringer	Wood	D	DETERIORATED	Entry Front	White	1st	10.3	Positive
23	Win. Casing	Wood	D	DETERIORATED	2nd Fl. Stair	White	2nd	11.6	Positive
24	Win. Sash	Wood	D	DETERIORATED	2nd Fl. Stair	White	2nd	9.8	Positive
25	Win. Sill-Stool	Wood	D	DETERIORATED	2nd Fl. Stair	White	2nd	10.9	Positive
26	Win. Sash	Wood	D	DETERIORATED	2nd Fl. Stair	Brown	2nd	9.5	Positive
27	Win. Well-Trough	Wood	D	DETERIORATED	2nd Fl. Stair	Brown	2nd	11.4	Positive
28	Win. Track	Wood	D	DETERIORATED	2nd Fl. Stair	Brown	2nd	10.3	Positive
29	Stair Stringer	Wood	C	DETERIORATED	2nd Fl. Stair	White	2nd	8.3	Positive
30	Baseboard	Wood	B	DETERIORATED	2nd Fl. Stair	White	2nd	13.6	Positive
31	Door	Wood	B	DETERIORATED	2nd Fl. Stair	White	2nd	12.8	Positive
32	Door Jamb	Wood	B	DETERIORATED	2nd Fl. Stair	White	2nd	21.4	Positive
33	Door Casing	Wood	B	DETERIORATED	2nd Fl. Stair	White	2nd	15.5	Positive
34	Door Dormer Wn.	Wood	B	DETERIORATED	2nd Fl. Stair	White	2nd	16.3	Positive
35	Clos. Door	Wood	D	DETERIORATED	2nd Fl. Stair	White	2nd	12.6	Positive
36	Clos. Dr. Jamb	Wood	D	DETERIORATED	2nd Fl. Stair	White	2nd	9.9	Positive
37	Clos. Baseboard	Wood	D	DETERIORATED	2nd Fl. Stair	White	2nd	5.1	Positive
38	Clos. Bracket	Wood	D	DETERIORATED	2nd Fl. Stair	Grey	2nd	6.3	Positive
39	Clos. Shelf	Wood	D	DETERIORATED	2nd Fl. Stair	Grey	2nd	5.8	Positive
45	Sink out	Glazed Ceramic	C	INTACT	Bathroom	White	2nd	2.9	Positive
46	Cabinet Out	Wood	B	DETERIORATED	Bathroom	White	2nd	10.1	Positive
47	Cabinet Shelf	Wood	B	DETERIORATED	Bathroom	White	2nd	8.8	Positive
48	Cabinet In	Wood	B	DETERIORATED	Bathroom	White	2nd	8.3	Positive
57	Win. Well-Trough	Wood	B	DETERIORATED	Bathroom	Brown	2nd	5.7	Positive
58	Win. Track	Wood	B	DETERIORATED	Bathroom	Brown	2nd	31	Positive
59	Win. Sash	Wood	B	DETERIORATED	Bathroom	Brown	2nd	14	Positive
60	Door	Wood	D	DETERIORATED	Bathroom	White	2nd	9.8	Positive
62	Door Jamb	Wood	D	DETERIORATED	Bathroom	White	2nd	11.4	Positive
63	Door Dormer Wn.	Wood	D	DETERIORATED	Bathroom	White	2nd	11.3	Positive
64	Win. Sill-Stool	Wood	B	DETERIORATED	Stair Rear	White	2nd	17.2	Positive
65	Win. Sash	Wood	B	DETERIORATED	Stair Rear	White	2nd	17.3	Positive
66	Win. Casing	Wood	B	DETERIORATED	Stair Rear	White	2nd	15	Positive
67	Win. Sash	Wood	B	DETERIORATED	Stair Rear	Brown	2nd	15.3	Positive
68	Win. Well-Trough	Wood	B	DETERIORATED	Stair Rear	Brown	2nd	15.9	Positive
69	Win. Track	Wood	B	DETERIORATED	Stair Rear	Brown	2nd	14.8	Positive
70	Trim	Wood	C	DETERIORATED	Stair Rear	White	2nd	11.7	Positive
71	Stair Stringer	Wood	C	DETERIORATED	Stair Rear	White	2nd	20	Positive
72	Baseboard	Wood	A	DETERIORATED	Stair Rear	White	2nd	17	Positive
74	Door Casing	Wood	C	DETERIORATED	Stair Rear	White	1st	19.3	Positive
75	Stair Stringer	Wood	D	DETERIORATED	Stair Rear	White	1st	18.4	Positive
79	Trim	Wood	C	DETERIORATED	2nd Fl. Stair	White	2nd	16.7	Positive
82	Door	Wood	A	DETERIORATED	Kitchen	White	2nd	6.5	Positive
83	Door Casing	Wood	A	DETERIORATED	Kitchen	White	2nd	6.6	Positive
84	Door Jamb	Wood	A	DETERIORATED	Kitchen	White	2nd	7	Positive
85	Door Jamb	Wood	B	DETERIORATED	Kitchen	White	2nd	6.9	Positive
86	Win. Casing	Wood	C	DETERIORATED	Kitchen	White	2nd	6.5	Positive
87	Win. Sill-Stool	Wood	C	DETERIORATED	Kitchen	White	2nd	5.5	Positive
88	Win. Sash	Wood	C	DETERIORATED	Kitchen	White	2nd	5.4	Positive
89	Trim	Wood	A	DETERIORATED	Kitchen	White	2nd	10.4	Positive
90	Baseboard	Wood	B	DETERIORATED	Kitchen	White	2nd	8.9	Positive
91	Win. Well-Trough	Wood	C	DETERIORATED	Kitchen	Brown	2nd	2	Positive
92	Win. Track	Wood	C	DETERIORATED	Kitchen	Brown	2nd	21.6	Positive
93	Win. Sash	Wood	C	DETERIORATED	Kitchen	Brown	2nd	15.8	Positive

#	Component	Substrate	Side	Condition of Paint	Room	Color	Floor	PbC	Result
94	Clos. Door	Wood	B	DETERIORATED	Kitchen	White	2nd	9.4	Positive
95	Clos. Dr. Casing	Wood	B	DETERIORATED	Kitchen	White	2nd	7.6	Positive
96	Clos. Bracket	Wood	B	DETERIORATED	Kitchen	White	2nd	8.7	Positive
97	Clos. Baseboard	Wood	B	DETERIORATED	Kitchen	White	2nd	9.1	Positive
98	Clos. Shelf	Wood	B	DETERIORATED	Kitchen	White	2nd	8	Positive
102	Door Jamb	Wood	C	DETERIORATED	Attic Stair	Grey	2nd	4.5	Positive
103	Door	Wood	C	DETERIORATED	Attic Stair	Grey	2nd	4.2	Positive
107	Win. Sash	Wood	A	DETERIORATED	Room 01	White	2nd	13	Positive
108	Win. Sill-Stool	Wood	A	DETERIORATED	Room 01	White	2nd	12.1	Positive
109	Win. Casing	Wood	A	DETERIORATED	Room 01	White	2nd	13.5	Positive
110	Baseboard	Wood	A	DETERIORATED	Room 01	White	2nd	11.3	Positive
111	Door	Wood	C	DETERIORATED	Room 01	White	2nd	15	Positive
112	Door Casing	Wood	C	DETERIORATED	Room 01	White	2nd	16.2	Positive
113	Door Jamb	Wood	C	DETERIORATED	Room 01	White	2nd	17.7	Positive
114	Door Dormer Wn.	Wood	C	DETERIORATED	Room 01	White	2nd	15.2	Positive
115	Clos. Door	Wood	D	DETERIORATED	Room 01	White	2nd	10.2	Positive
116	Clos. Dr. Jamb	Wood	D	DETERIORATED	Room 01	White	2nd	12.4	Positive
117	Clos. Baseboard	Wood	D	DETERIORATED	Room 01	White	2nd	9.2	Positive
118	Clos. Bracket	Wood	D	DETERIORATED	Room 01	Grey	2nd	11.1	Positive
119	Clos. Shelf	Wood	D	DETERIORATED	Room 01	Grey	2nd	6.5	Positive
121	Arch Casing	Wood	D	DETERIORATED	Room 01	White	2nd	12.4	Positive
122	Win. Well-Trough	Wood	A	DETERIORATED	Room 01	Brown	2nd	2.5	Positive
123	Win. Track	Wood	A	DETERIORATED	Room 01	Brown	2nd	25.3	Positive
124	Win. Sash	Wood	A	DETERIORATED	Room 01	Brown	2nd	19	Positive
125	Win. Sash	Wood	A	DETERIORATED	Room 02	Brown	2nd	17.2	Positive
126	Win. Track	Wood	A	DETERIORATED	Room 02	Brown	2nd	26.1	Positive
127	Win. Well-Trough	Wood	A	DETERIORATED	Room 02	Brown	2nd	1.3	Positive
132	Baseboard	Wood	B	DETERIORATED	Room 02	White	2nd	16	Positive
133	Win. Casing	Wood	B	DETERIORATED	Room 02	White	2nd	13.3	Positive
134	Win. Sill-Stool	Wood	B	DETERIORATED	Room 02	White	2nd	15.3	Positive
135	Win. Sash	Wood	B	DETERIORATED	Room 02	White	2nd	15.1	Positive
136	Door	Wood	D	DETERIORATED	Room 02	White	2nd	15.5	Positive
137	Door Casing	Wood	D	DETERIORATED	Room 02	White	2nd	16.5	Positive
138	Door Jamb	Wood	D	DETERIORATED	Room 02	White	2nd	14.8	Positive
139	Door Dormer Wn.	Wood	D	DETERIORATED	Room 02	White	2nd	16.3	Positive
140	Door Dormer Wn.	Wood	B	DETERIORATED	Room 03	White	2nd	16.6	Positive
141	Door Casing	Wood	B	DETERIORATED	Room 03	White	2nd	17.5	Positive
142	Door Jamb	Wood	B	DETERIORATED	Room 03	White	2nd	16.1	Positive
143	Door	Wood	B	DETERIORATED	Room 03	White	2nd	13.7	Positive
144	Door	Wood	C	DETERIORATED	Room 03	White	2nd	15.1	Positive
145	Clos. Door	Wood	C	DETERIORATED	Room 03	White	2nd	12.8	Positive
146	Clos. Dr. Casing	Wood	C	DETERIORATED	Room 03	White	2nd	6.9	Positive
147	Clos. Baseboard	Wood	C	DETERIORATED	Room 03	White	2nd	7	Positive
148	Clos. Bracket	Wood	C	DETERIORATED	Room 03	Grey	2nd	7	Positive
149	Clos. Shelf	Wood	C	DETERIORATED	Room 03	Grey	2nd	6.9	Positive
150	Baseboard	Wood	D	DETERIORATED	Room 03	White	2nd	18.6	Positive
155	Win. Sill-Stool	Wood	D	DETERIORATED	Room 03	White	2nd	15.7	Positive
156	Win. Sash	Wood	D	DETERIORATED	Room 03	Brown	2nd	22.1	Positive
157	Win. Well-Trough	Wood	D	DETERIORATED	Room 03	Brown	2nd	16.7	Positive
158	Win. Track	Wood	D	DETERIORATED	Room 03	Brown	2nd	17.8	Positive

2.4 Dust Wipe Sample Results

Please note: This data is representative of the dust condition determined via dust wipe sample analysis at the time of the risk assessment. Testing data in **bold red** indicates lead levels at or above the EPA Hazardous Levels of Lead regulations that were published on January 5, 2001, as amended, and constitutes a dust-lead hazard in that room. For a full determination of lead hazards, please see Section 2.2.

HUD reporting limits – floors=10 µg/ft², window sills=100µg/ft², window wells/troughs=400 µg/ft²,

Sample Number	Room Location	Component	Pb Concentration in $\mu\text{g}/\text{ft}^2$	Pass/Fail
1	Kitchen	Floor	340.1 $\mu\text{g}/\text{ft}^2$	Fail
2	Bathroom	Floor	225.1 $\mu\text{g}/\text{ft}^2$	Fail
3	Room 1	Floor	67.4 $\mu\text{g}/\text{ft}^2$	Fail
4	Room 2	Floor	140.3 $\mu\text{g}/\text{ft}^2$	Fail
5	Room 3	Floor	100.8 $\mu\text{g}/\text{ft}^2$	Fail
6	Kitchen	Window sill	72900.0 $\mu\text{g}/\text{ft}^2$	Fail
7	Bathroom	Window sill	3413.0 $\mu\text{g}/\text{ft}^2$	Fail
8	Room 1	Window sill	60490.0 $\mu\text{g}/\text{ft}^2$	Fail
9	Room 2	Window sill	119300.0 $\mu\text{g}/\text{ft}^2$	Fail
10	Room 3	Window sill	46580.0 $\mu\text{g}/\text{ft}^2$	Fail

Area wiped in square feet - Floors: 144 in², Window Sills: 36 in², Window Wells/Troughs: 36 in²

WARNING: Dust samples were not taken by every window or in every room. All areas not sampled should be assumed to contain lead dust and should be dusted frequently by occupant, particularly around positive components that are in deteriorated condition.

2.5 Soil Sample Results

Please note: This data is representative of the soil content determined via soil sample analysis at the time of the risk assessment. Testing data in **bold red** indicates soil lead levels at or above the EPA Hazardous Levels of Lead regulations that were published on January 5, 2001, as amended. For a full determination of lead hazards, please see Section 2.2.

HUD reporting limits - Lead in soil is considered a hazard at 1200 ppm or greater or 400 ppm or greater in children's play areas.

Sample Number	Location	Results in mg/Kg
	No Soil Sample Taken	mg/Kg

Soil samples were collected from around the dripline/perimeter of the home and/or from various other locations.

2.6 Additional Lead-based Paint Findings

Lead paint in *intact condition* is listed in the charts below. No treatment is required at this time; however, the condition of the positive component(s) should be monitored for signs of deterioration.

Room/Location	Component(s)	Assumed Positive (check if yes)
Bathroom C	Sinks	

2.7 Recommended Corrective Actions

Lead abatement, interim controls, lead-safe work practices and worker/occupant protection practices complying with current EPA, HUD and OSHA standards will be necessary to safely

complete all work involving the disturbance of LBP coated surfaces and components. In addition, any work considered lead hazard control will enlist the use of interim control (temporary) methods and/or abatement (permanent) methods. It should be noted that all lead hazard control activities have the potential of creating additional hazards or hazards that were not present before. Properly trained and certified persons, as well as properly licensed firms (as mandated) should accomplish all abatement/interim control activities conducted at this residence.

Details for the listed lead hazard control options and issues surrounding occupant/worker protection practices can be found in the publication entitled: *Guidelines for the Evaluation and Control of LBP Hazards in Housing* published by HUD, the EPA lead-based paint regulations, and the Occupational Safety and Health Administration (OSHA) regulations found in its Lead in Construction Industry Standard.

Interim controls, as defined by HUD, means a set of measures designed to temporarily reduce human exposure to LBP hazards and/or lead-containing materials. These activities include but are not limited to component and/or substrate stabilization, paint and varnish stabilization, and tilling and placement of appropriate ground cover over bare soil areas.

Abatement, as defined by HUD, means any set of measures designed to permanently eliminate LBP and/or LBP hazards. The product manufacturer and/or contractor must warrant abatement methods to last a minimum of twenty (20) years, or these methods must have a design life of at least twenty (20) years. These activities include, but are not necessarily limited to: the removal of LBP from substrates and components; the replacement of LBP components; the permanent enclosure of LBP with construction materials; the encapsulation of LBP with approved products; and the removal or permanent covering (concrete or asphalt) of soil-lead hazards.

FOR INTERIOR WINDOW COMPONENTS (EX: SASH, CASING, SILL, TROUGH, TRIM)	
<i>Interim Controls</i>	<i>Abatement</i>
<ul style="list-style-type: none"> * Conduct paint stabilization * Eliminate friction areas by: <ul style="list-style-type: none"> * Repairing component to good working condition * Planing the sash * Installing window channel guides * Cover window troughs with aluminum coil stock or flashing to make a smooth and cleanable surface * Drill drain holes through bottom of the storm window frame * Clean weep holes * If evidence of child chewing on any of the window components (i.e. window stool/sill): <ul style="list-style-type: none"> * Cover area with vinyl or aluminum * Move a piece of furniture in front of the window making the component inaccessible 	<ul style="list-style-type: none"> * Replace components with a lead-free building component * Remove all of the paint or coating * Encapsulate the component

* Coat with Bitrex paint or block the window sill	
FOR INTERIOR TRIM (EX: BASEBOARD, CHAIR RAIL, TRIM)	
<i>Interim Controls</i>	<i>Abatement</i>
* Conduct paint stabilization	<ul style="list-style-type: none"> * Replace components with a lead-free building component * Remove all of the paint or coating * Encapsulate the component
FOR INTERIOR FLOORS	
<i>Interim Controls</i>	<i>Abatement</i>
* Stabilize deteriorated paint on the component using lead safe work practices to repair current paint surface and resurface with lead-free paint or other	<ul style="list-style-type: none"> * Strip the paint or coating * Cover the floor with a smooth and cleanable surface (ex: tile, sheet vinyl, carpet)
FOR INTERIOR WALLS (EX: WALL, CEILING, CLOSET)	
<i>Interim Controls</i>	<i>Abatement</i>
<ul style="list-style-type: none"> * Conduct paint stabilization * Cover the component with new siding * Cover deteriorated walls with wallpaper * Install corner guards * Eliminate impact areas with barriers (ex: chair rail, baseboard, corner guard) 	<ul style="list-style-type: none"> * Replace components with a lead-free building component * Encapsulate the component * Build an enclosure system with drywall or paneling
FOR INTERIOR DOOR COMPONENTS (EX: DOOR, CASING, JAMB, THRESHOLD, TRIM)	
<i>Interim Controls</i>	<i>Abatement</i>
<ul style="list-style-type: none"> * Conduct paint stabilization * Wrap the component with vinyl or aluminum * Eliminate friction areas repairing component to good working condition * Protect impact surfaces with barriers or impact resistant materials * Plane the door or door jamb * Re-hang the door 	<ul style="list-style-type: none"> * Replace components with a lead-free building component * Remove all of the paint or coating * Encapsulate the component * Off-site paint removal which consists of removing paint through chemical or other means at a facility off-site
FOR INTERIOR STAIR COMPONENTS (EX: TREAD, RISER, BASEBOARD, STRINGER, NEWEL POST, BALUSTER, SPINDLES, HANDRAIL)	
<i>Interim Controls</i>	<i>Abatement</i>
<ul style="list-style-type: none"> * Conduct paint stabilization * Eliminate friction areas by repairing component to good working condition * Protect impact surfaces with barriers or impact-resistant materials * Cover the floor/landing/tread/riser with a durable material (ex: tread cover, carpet) 	<ul style="list-style-type: none"> * Replace components with a lead-free building component * Remove all of the paint or coating * Encapsulate the component
FOR INTERIOR MISCELLANEOUS COMPONENTS	

(EX: REGISTER/VENT COVER, RADIATOR, FIREPLACE COMPONENTS, CABINETS, BOOKCASE COMPONENTS, CLOSET COMPONENTS, BATHTUB, SINK, WALL SHELF)	
<i>Interim Controls</i>	<i>Abatement</i>
<ul style="list-style-type: none"> * Conduct paint stabilization * Re-glaze bathtub or sink * Put a liner in the tub 	<ul style="list-style-type: none"> * Replace tub or sink * Remove all of the paint or coating * Encapsulate the component * Build an enclosure system
FOR EXTERIOR MAJOR COMPONENTS (EX: SIDING, TRIM, SOFFIT, FASCIA)	
<i>Interim Controls</i>	<i>Abatement</i>
<ul style="list-style-type: none"> * Conduct paint stabilization and repaint 	<ul style="list-style-type: none"> * Replace components with a lead-free building component * Remove all of the paint or coating * Enclose the component by covering old siding with new siding and wrapping the trim with vinyl or aluminum
FOR EXTERIOR WINDOW COMPONENTS (EX: SASH, CASING, SILL, TROUGH, TRIM)	
<i>Interim Controls</i>	<i>Abatement</i>
<ul style="list-style-type: none"> * Conduct paint stabilization * Cover the component with vinyl or aluminum * Eliminate friction area by repairing sash to good working condition * Cover window troughs with aluminum coil stock or flashing to make a smooth and cleanable surface 	<ul style="list-style-type: none"> * Replace components with a lead-free building component * Remove all of the paint or coating * Encapsulate the component
FOR EXTERIOR DOOR COMPONENTS (EX: DOOR, CASING, JAMB, THRESHOLD, TRIM)	
<i>Interim Controls</i>	<i>Abatement</i>
<ul style="list-style-type: none"> * Conduct paint stabilization * Cover the component with vinyl or aluminum * Eliminate friction areas by repairing door to good working condition * Plane the door or door jamb * Re-hang the door * Clean up all visible paint chips and debris at the conclusion of each work day 	<ul style="list-style-type: none"> * Replace components with a lead-free building component * Remove all of the paint or coating * Encapsulate the component * Off-site paint removal which consists of removing paint through chemical or other means at a facility off-site
FOR EXTERIOR PORCH COMPONENTS (EX: CEILING, FLOOR, TRIM, SUPPORT COLUMN, RAIL BALUSTER/SPINDLE, SOFFIT/FASCIA, LATTICE, TREAD, RISER, BASEBOARD, STRINGER, NEWEL POST, HANDRAIL)	
<i>Interim Controls</i>	<i>Abatement</i>
<ul style="list-style-type: none"> * Conduct paint stabilization * Cover the component with new siding * Eliminate friction areas by repairing 	<ul style="list-style-type: none"> * Replace components with a lead-free building component * Remove all of the paint or coating

component to good working condition * Protect impact surfaces with barriers or impact-resistant materials * Plane the door or door jamb * Re-hang the door * Cover the porch floor and/or steps with a smooth and cleanable surface	* Encapsulate the component * Build an enclosure system * Off-site paint removal which consists of removing paint through chemical or other means at a facility off-site
FOR EXTERIOR MISCELLANEOUS COMPONENTS (EX: GUTTER SYSTEM, DOWNSPOUT, OVERHEAD GARAGE DOOR COMPONENT, DECK)	
<i>Interim Controls</i>	<i>Abatement</i>
* Conduct paint stabilization * Cover the component with new siding * Eliminate friction areas by repairing component to good working condition * Protect impact surfaces with barriers or impact-resistant materials * Clean out the gutter system * Restore gutters and downspouts to good working condition * Extend downspout away from the house (at least 5 feet) * Add a splash block under gutter to move water away from the house * Cover the porch floor and/or steps with a smooth and cleanable surface (ex: tile) * Clean up all visible paint chips and debris at the conclusion of each work day	* Replace components with a lead-free building component * Remove all of the paint or coating * Encapsulate the garage door * Replace gutters and/or downspouts
FOR EXTERIOR BARE SOIL AREAS (EX: DRIPLINE OF HOME, PLAY AREAS, GARDEN)	
<i>Interim Controls</i>	<i>Abatement</i>
* Do not use identified area of lead-contaminated bare soil for growing vegetables or feeding animals * Move any play areas * Move pets to an area where there is no bare or contaminated soil * Use temporary covering such as grass, gravel or mulch (HUD guidelines suggest 6 inches minimum) * Put a fence around the area with the high soil levels to keep children and pets out * Limit traffic on the bare soil by planting bushes and ground cover	* Permanently cover bare, lead-contaminated soil with concrete, asphalt or other permanent materials * If used around the house, be sure to slope the covering away from the foundation * Remove top 2 inches to 6 inches of the contaminated topsoil in those areas specified by the risk assessor and replace with non-contaminated topsoil (<400 micrograms/gram) or another type of ground cover (ex: grass, wood chips) * Do not use any of this soil in another part of the yard

The following are general lead hazard control and lead safe work practices guidelines set in place to protect the occupants and the workers involved in treating the affected areas:

LEAD HAZARD CONTROL PRACTICES ACCEPTED BY HUD

- ✓ Use wet methods or limited dry scraping and sanding. Mist surfaces before scraping and sanding. Continue to mist while working. Dry scraping or sanding of very small areas (for example, around light switches or outlets) may be done if flat surfaces below these areas are covered with protective sheeting. These methods should be avoided on areas larger than 10% of component, 2 square feet per room, or 20 square feet on exterior surfaces, and workers must have adequate respiratory protection.
- ✓ Mist before drilling and cutting to reduce dust creation and keep dust from becoming airborne and spreading beyond the work area. Due to it being dangerous to use water with electrical tools consider the use of foam (such as shaving cream) when cutting or drilling to reduce dust generation.
- ✓ Controlled sanding or grinding with HEPA vacuum attachment is required. Because some dust may still blow out around the perimeter, workers near the machine should wear half-mask respirators rated by NIOSH as N100, P100 or R100 (or HEPA) at a minimum. Also, the work area must be completely isolated if the machine is used inside. Because these tools can create high levels of dust and require additional precautions, it is advisable to receive further training, if not already received, before using this method.
- ✓ Chemical stripping is acceptable as long as the area is adequately ventilated. Chemical strippers can be dangerous and should be used with great caution. Types of strippers range from citrus-based (safer) to more dangerous caustic strippers. Use of chemical strippers may trigger additional training, notification, and record keeping requirements under the OSHA Hazard Communication Standard. Follow the manufacturer's directions when using any chemical stripper.
- ✓ The use of a heat gun set below 1100° F may be used with caution. It is recommended for small areas only, such as the edge of a door, the top of a window stool, or the friction surface of a window jamb.
- ✓ Scoring paint before separating components helps prevent paint from chipping when a paint seal is broken.
- ✓ Prying and pulling apart components and pulling nails instead of pounding create less dust and fewer paint chips. Vise grips may be useful when pulling nails.
- ✓ Removal of paint using contained pressure washing and/or contained abrasive blasting within a protective enclosure to prevent the spread of paint chips, dust, and debris may be done. This method requires additional precautions and should only be used by certified lead abatement workers.

LEAD HAZARD CONTROL PRACTICES PROHIBITED BY EPA AND HUD

- ✓ *Open flame burning or torching.* Open torches, infrared scorches, electric irons, and heat guns operating above 1,100° F all may cause the release of lead fumes, which can poison workers. The fallout from the volatilized lead can also be very difficult to clean up. Heat guns operating below 1,100° F are acceptable, although they are recommended only for small areas.
- ✓ *Power sanding, grinding or planing without HEPA vacuum attachments.*
- ✓ *Abrasive blasting or sandblasting without HEPA exhaust equipment.*
- ✓ *Uncontained hydroblasting or high-pressure washing.* Power washing often leaves leaded paint chips and dust on soil and exterior pathways. Hydroblasting should not be used unless all runoff will be contained and filtered.

- ✓ *Dry scraping/sanding* (except for one square foot of an electrical outlet). Extensive use of dry scraping or sanding generates a significant amount of lead dust, which is hard to contain. Surfaces should be wetted prior to scraping/sanding so that the dispersal of dust is limited. Of course, some areas, such as surfaces near electrical circuits, should not be wetted.
- ✓ *Methylene chloride paint strippers*. Methylene chloride can cause liver and kidney damage and carbon monoxide poisoning, and it is suspected to cause cancer. Air-purifying respirators with organic vapor cartridges do not provide adequate protection. (If respirators are required, they must be of the supplied-air or self-contained variety.) If chemical paint removers will be used, they should not contain methylene chloride and should preferably be used off-site.

WASTE MANAGEMENT

- ✓ All residential waste may go to a Class D or construction landfill in the State of Indiana. Refer to your state requirements if property is located outside of Indiana.

WORKER PROTECTION

- ✓ Job-appropriate respirator with fit testing
- ✓ Eye protection
- ✓ Clothing protection (Tyvek or other disposable suits)
- ✓ Gloves
- ✓ Shoe covers
- ✓ Disposable hats

OCCUPANT PROTECTION

- ✓ Clean up, HEPA vacuum, wet wash daily before leaving job particularly by windows and other hazard areas, including walkways.
- ✓ Occupants vacate unit when the only bath, kitchen, or sleep area are affected on interim controls, and the work and clean up cannot be completed in eight-hour shifts.
- ✓ Cover belongings with 6 mil plastic and seal with tape.
- ✓ Always seal off work areas and cover work areas with 6 mil plastic and seal off ductwork during work, particularly HVAC return covers.
- ✓ Abatement requires a written occupant protection plan, state notification, state worker and supervisor licenses.
- ✓ For rental and rehabilitation assistance properties, a hazard communication policy is recommended.

CLEARANCE TESTING

- ✓ Visual examination with no visible paint chips around interior or exterior of house.
- ✓ Wipe sampling with no visible dust on clearance examination and dust levels must be below the acceptable levels set by EPA in order to pass clearance.
- ✓ Soil testing applies to soils with lead levels above 5,000 ppm.

PRIORITY ATTENTION FOR IMMEDIATE HAZARDS

- ✓ **Lead dust is assumed to be present around all positive components in deteriorated condition. It is important to keep these areas clean.**
- ✓ **Dust levels exceed state & federal guidelines:**
 - **Kitchen floor**
 - **Bathroom floor**
 - **Room 1 floor**
 - **Room 2 floor**

- Room 3 floor
 - Kitchen window area
 - Bathroom window area
 - Room 1 window area
 - Room 2 window area
 - Room 3 window area
- ✓ NO Soil Samples Taken – Risk Assessment limited to upstairs unit only

*****If the detached garage will be disturbed, the Renovation, Repair and Painting rules apply to the components that were determined to be lead hazards. Also, the garage will be included in the clearance process. *****

NOTICE TO ALL OCCUPANTS AND HOMEOWNERS:

Not all surfaces in the dwelling were tested for lead. If any remodeling is done, painted surfaces should be analyzed before remodeling begins. If the test result of the component reads negative, this does not mean that lead-based paint is not present in that component. It simply means that the component is under the HUD action level of $1.0 \mu\text{g}/\text{cm}^2$; therefore, consult a lead professional before disturbing any painted surface. In addition, if your home is enrolled in a property rehabilitation project, you must contact the project office to determine which areas of your home will be involved in the rehab. Some areas listed on this report may be exempt from that project, particularly outbuildings (i.e. detached garage, barn, shed, etc.) or areas listed as being in "intact" condition.

NOTICE TO ALL CONTRACTORS:

Indiana state laws require that you have a lead abatement contractor's license if you conduct an abatement of lead-based paint. Abatement occurs when the project you conduct is designed to permanently eliminate lead-based paint hazards. Abatement is defined as component replacement, paint removal, encapsulation, or enclosure. See the EPA rules and guidelines on the requirements. If you fail to comply with these, you may be subject to fines of \$25,000 per day per violation and criminal penalties or a Class D Felony and a minimum fine of \$5,000 per day per violation.

If interim control procedures are used instead of abatement procedures in eliminating lead-based paint hazards, a Certified Renovator that has successfully completed an EPA approved 8-hour course on Renovation, Repair and Painting should be employed to complete the lead hazard task(s). If you fail to comply with these rules, you may be subject to civil penalties of up to \$37,500 per day per violation.

3.0 SITE DESCRIPTION

3.1 Narrative

The residence is a single-family, two-story house constructed 1883. It has a non-painted brick foundation. The exterior of the residence has wood siding with wood soffit and trim. The doors are wood. The windows are wood. The owner/tenant of this property is Vacant.

3.2 Building Condition Form

The following is a general representation of the property at the time of the inspection. While efforts were made to provide accurate data, this information should not be considered absolute, and it should be understood that errors may exist. It is supplied only to give an idea of the condition of the home.

Condition	Yes	No	Unknown
Improper use of extension cords		✓	
Gutters and downspouts present and in good shape	✓		
Smoke detector present		✓	
Cockroaches or evidence of cockroaches present		✓	
Rodents or evidence of rodents present		✓	
Someone smoking in the unit during inspection		✓	
Handrails present on all areas with more than three steps	✓		
Mold present	✓		
Screens present in at least one window in each room	✓		
Outlet covers present	✓		
Furnace covers present	✓		
Breaker box cover present	✓		
Bathroom has a window that opens or a ventilation fan	✓		
	Good	Average	Poor
Cleanliness of house		✓	

4.0 BACKGROUND INFORMATION AND EDUCATIONAL INFORMATION

4.1 Health Effects of Lead Exposure

Lead is a soft metal, naturally occurring in the Earth's crust. It has been determined, however, that lead has no useful purpose in the human body and acts as a toxin. It takes the place of essential minerals such as calcium, potassium, and iron, which are vital to the construction and repair of bones, organs and blood. Lead exposures have become a major health concern, especially in young children under the age of six.

Children, due to their smaller body mass and higher metabolism, are affected by lead exposures much more severely than adults. They ingest lead through daily hand-to-mouth activities and may develop severe attention deficit disorders, irreversible brain injury, learning disabilities and aggressive behaviors. The symptoms of lead poisoning often mimic other afflictions such as flu, colic or general malaise. It is important to have young children's blood tested for lead burden.

4.2 Sources of Lead Poisoning

Since lead is ingested by routine daily activities such as eating, playing and working, it is important to understand the sources of lead exposures. The most common places to find lead in household settings are interior and exterior paint, and contaminated dust or soil. Lead-based paint is most hazardous when it is chipping, peeling, cracking, or chalking; or applied to friction surfaces of components such as doors, windows, and floors. The abrasive action of painted surfaces rubbing together causes lead-containing paints to be ground into a fine dust. Lead dust can also be created from decaying vinyl mini blinds. Lead dust then settles on furniture, play area floors, and children's toys, where children are exposed during regular activities.

Several other sources of lead in the home include lead dust brought into the home from occupational exposures, water pipes, fixtures, and joints; decorative china, "leaded" crystal, fishing lures and sinkers, firearms ammunition, wine bottles and cosmetics. Some hobbies may also contribute to lead contamination within the home. Exposures to all sources of lead should be minimized or eliminated.

4.3 Methods to Reduce Exposure to Lead Hazards

The simplest and often most effective way to reduce lead exposures is through regular washing of hands, toys, and horizontal surfaces in the home with a liquid hand soap or dish soap and water. It is highly recommended that disposable cleaning materials be used to wash surfaces, so as not to re-contaminate them with a used mop or cloth.

Other ways of reducing lead hazards within the home include taking shoes off before entering living areas, letting water run prior to drinking or cooking, covering exposed soil with plant materials, and vacuuming with a High Efficiency Particulate Air (HEPA) filtered vacuum.

For more information regarding lead poisoning and prevention, contact your local health department or the National Lead Information Center (800-424-LEAD (5323)). Contact the Indiana State Department of Health (866-433-0746) for information regarding lead hazard remediation or selection of qualified lead professionals.

5.0 RE-EVALUATION AND MONITORING SCHEDULE

All painted components require periodic re-evaluation and monitoring. Re-evaluation typically is scheduled on an annual basis, but more frequent re-evaluations may be required depending on site conditions. All painted surfaces must remain in good/intact condition. Painted surfaces that are peeling, cracking, blistering or causing dust from friction or impact must be corrected immediately to prevent hazardous exposure to possible lead-based paint sources. All repairs must follow HUD Guidelines for the interim control and abatement of lead-based paint hazards. The normal re-evaluation schedule for the interim control measures used in this property is twelve months. **The dwelling should be re-evaluated between six to twelve months from the date of this Assessment.**

6.0 ADDITIONAL RESOURCES

For further information regarding lead-based paint hazards and poisoning prevention, consult the following resources:

CONTACTS

Greentree Environmental Services, Inc.888-584-LEAD (5323)
National Lead Information Center:800-424-LEAD (5323)
U.S. Department of Housing and Urban Development:888-532-3547 (LEADLIST)
State of Indiana - Lead and Healthy Homes:866-433-0746
State of Illinois - Department of Public Health:217-782-4977

PUBLICATIONS

“Lead in Your Home: A Parent’s Reference Guide” U.S. Environmental Protection Agency
“Renovate Right” U.S. Environmental Protection Agency
“Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work”
U.S. Department of Housing and Urban Development

WEB SITES:

- Greentree Environmental Services, Inc.
- Indiana State Dept. of Health, Lead and Healthy Homes www.isdh.in.gov
- HUD – Office of Healthy Homes and Lead Hazard Control www.hud.gov/offices/lead
- EPA www.epa.gov/lead
- National Safety Council www.nsc.org/issues/lead

7.0 CERTIFICATION

All inspectors utilized by Greentree Environmental Services, Inc. have EPA/State licensure, and are licensed lead risk assessors who have completed and passed the HUD Lead-based Paint Visual Assessment Training Course. All technicians utilized by Greentree Environmental Services, Inc. have also been trained in the use, calibration, and maintenance of the Heuresis XRF equipment they currently use, along with necessary principles of radiation safety.

"The Federal Residential Lead-based Paint Hazard Reduction Act, 42 USC 4852d, requires sellers and landlords of most residential housing built before 1978 to disclose all available records and reports concerning lead-based paint and/or lead-based paint hazards, including the test results contained in this notice, to purchasers and tenants at the time of sale or lease upon lease renewal. This disclosure must occur even if hazard reduction or abatement has been completed. Failure to disclose these test results is a violation of the US Department of Housing and Urban Development and the US Environmental Protection Agency regulations at 24 CFR Part 35 and 40 CFR Part 745 and can result in a fine of up to \$11,000 per violation. To find out more information about your obligations under federal lead-based paint requirements, call 1-800-424-LEAD or go to the web to www.epa.gov/lead or www.hud.gov/offices/lead/index.com."


By acceptance of this report, the receiver agrees Greentree Environmental Services, Inc. (and by extent the risk assessor, agents and or contractor's liability) is limited to the field sampling date only identified on the front of this report.

The information contained in this report is a true and accurate representation of the lead-based paint conditions at the subject property at the time of the investigation, based on the professional judgment of the person(s) who conducted and reported this lead-based paint inspection and risk assessment:




William C. Center

Indiana Registered Lead Risk Assessor, IND000368

 **Indiana State Department of Health**
William C Center
 Lead Risk Assessor License # IND000368

Effective: 10/14/2009 Expiration: 10/14/2024
 Birth Date: 08/21/1984 Gender: M
 Height: 5' 7" Eye Color: Green
 Weight: 205 Hair Color: Brown

 **Indiana Department of Homeland Security**
 302 W. Washington, E-241
 Indianapolis, IN 46204

Radioactive Material Facility Registration

Registration Number	Expiration Date	Registration Status
XN000605	11/20/2022	Active

Greentree Environmental Services, Inc.
 5287 Central Ave/ PO Box 2297
 Portage IN 46368

Stephen Cox
 Stephen Cox
 Executive Director
 Indiana Department of Homeland Security

STATE FORM 60102 (02 / 10 / 18)

Certificate of Training

Has completed the Heuresis Corp. training materials presented on the topic of Instrument Operator Training, Pb200i, with regards to the materials licensed by the Commonwealth of Massachusetts and the Nuclear Regulatory Commission.



Instrument Operator Training
Heuresis Corporation, Pb200i

I confirm that the above named individual has received the training listed on this certificate.


 Adam Robinson
 Name
 Sales and Product Specialist
 Title

October 22nd, 2018
 Date



I certify that I have received the stated training and understand the content presented. I understand that I can follow up this training with questions from Heuresis Corporation.

William Center
 Name
 Date

October 22nd, 2018
 Date

CONGRATULATIONS

William Center

has successfully completed the U.S. Department
of Housing and Urban Development,
Office of Healthy Homes and Lead Hazard Control's

VISUAL ASSESSMENT COURSE
pursuant to 24 Code of Federal Regulations Part 35

Jeanette R. Haulder
Director, Program Management and Assurance Division
Office of Healthy Homes and Lead Hazard Control

U.S. Department of Housing and Urban Development

- APPENDIX -

8.0 SAMPLING PROCEDURES

8.1 Laboratory

Dust and soil samples were analyzed by SanAir Technologies Laboratory, Inc. located at 1551 Oakbridge Drive, Suite B, Powhatan, VA 23139, phone number 804-897-1177. SanAir Technologies Laboratory, Inc. participates in the Environmental Lead Proficiency Analytical Testing (ELPAT) quality control rounds and is approved by the National Lead Laboratory Accreditation Program (NLLAP).

8.2 Site Sketch Orientation

Perimeter walls are identified as A, B, C, and D. Each room equivalent was oriented so that the "A Wall" corresponds directly with the main entrance wall and/or the main street. Each room equivalent's side identification follows the scheme in a clockwise direction for the whole housing unit. Site sketches designating rooms by expected use (kitchen, bathroom, etc.) and walls by orientation (A through D) are located in Section 9.0.

8.3 Soil Sampling

Soil samples, if deemed appropriate by the Risk Assessor, were collected following HUD guidelines from areas of exposed soil located within the boundaries of the property, such as sandbox, play areas, and foundation drip line. Composite samples from the upper 1/2 inch of soil were collected and analyzed by SanAir Technologies Laboratory, Inc. Results are reported in mg/Kg.

8.4 Dust Wipe Sampling

Dust wipe samples, where deemed appropriate by the Risk Assessor, were collected according to HUD Guidelines, as follows:

- An area located on the surface to be sampled was measured and marked.
- A single approved sampling wipe (disposable towelette) was opened with a gloved hand and wiped across the sampling area in a series of "S" patterns.
- The wipe was then placed into a container labeled with the site location identification, sample location and size of area sampled.
- Samples were analyzed by SanAir Technologies Laboratory, Inc. The results are reported in $\mu\text{g}/\text{ft}^2$.

8.5 XRF Analysis

The instrument used for this Risk Assessment was an X-ray fluorescence unit (XRF) manufactured by Heuresis. The unit was operated according to Performance Characteristic Sheet recommendations. XRF technology utilizes low level radiation to excite atoms within painted surfaces. The XRF unit interprets the gamma radiation rebound to determine whether or not lead is present and if so to what degree. If the unit detects lead at the HUD defined threshold limit of $1.0 \mu\text{g}/\text{cm}^2$ or more, then a positive reading is reported. For this risk assessment, Heuresis Pb200i #2034 was used.

Upstairs Unit

23

10.0 REPRESENTATIVE PICTURES



Side A



Side B



Side C



Side D



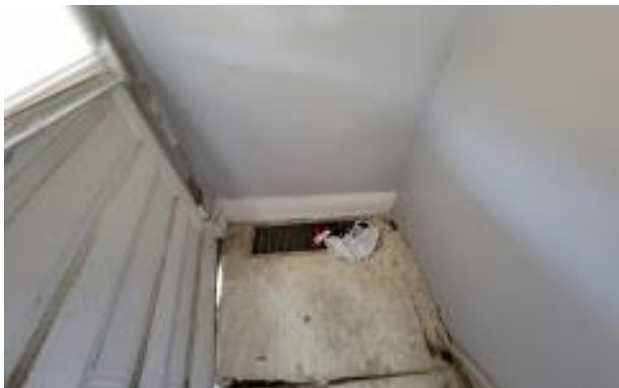
Address



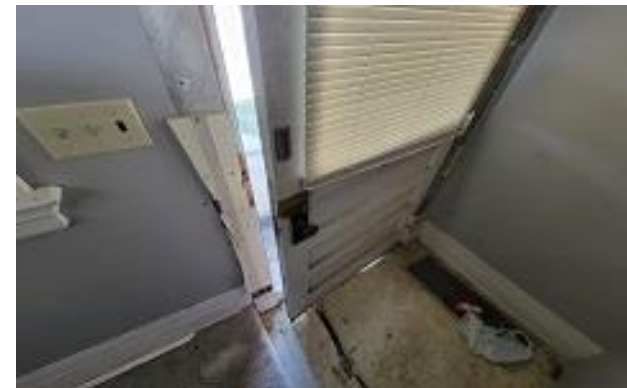
2nd floor exterior window sash ABCD



2nd floor exterior window well and track ABCD



Front entry baseboard



Front entry door and components A and Baseboard



Front entry exterior A door components



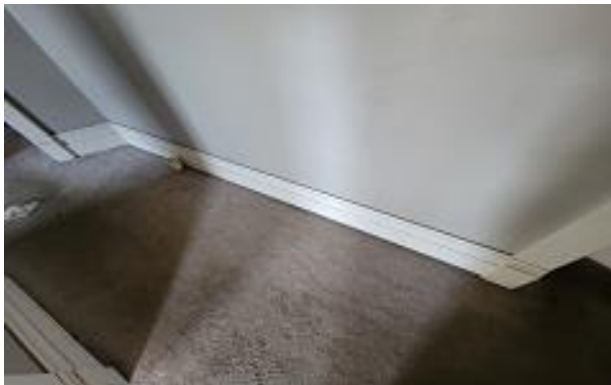
Front entry exterior A window sash



Front entry stair stringers



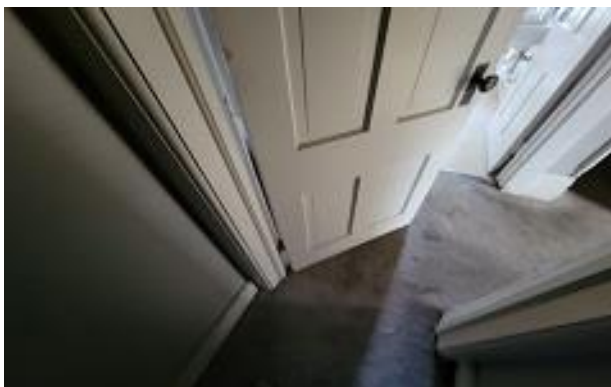
Front entry AD window and components



2nd floor stairway baseboard



2nd floor stairway closet components



2nd floor stairway closet door and Components



2nd floor stairway door and components including dormer



2nd floor stairway trim AC



2nd floor stairway window and components



Room 1 arch casing



Room 1 door and components C



Room 1 door and components and Baseboard



Room 1 window and components



Room 2 door and components



Room 2 window and components and Baseboard



Room 3 door and components, closet Door and components, closet components, Baseboards, and window and components



Room 3 door and components



Attic stairway door and jamb



Bathroom door and components



Bathroom B cabinet in and out including Shelves



Bathroom sinks (intact)



Kitchen closet brackets



Kitchen closet components



Kitchen closet door and components



Kitchen A door components



Kitchen AB door and components



Kitchen B trim (in closet)



Kitchen C window and components



Rear stairway baseboard



**Rear stairway stringer and door
Components C**



Rear stairway trim AC and stair stringer



Rear stairway window and components and baseboard

11.0 LABORATORY RESULTS

11.1 Soil Sample Analysis

****No Soil Sample Taken****

11.2 Dust Wipe Sample Analysis



Name: Greentree Environmental Services, Inc
Address: PO Box 2297
 Portage, IN 46368
Phone: 219-764-2828

Project Number:
P.O. Number:
Project Name: 118 N. Walnut St South Bend IN
Collected Date: 3/28/2022
Received Date: 3/31/2022 10:15:00 AM

SanAir ID Number
 22015671
 FINAL REPORT
 4/1/2022 9:50:59 AM

Analyst: Baird, Marti

Test Method: SW846/M3050B/7000B

Lead Wipe Analysis

Sample	Description	µg Pb			Calculated RL	Sample Results	Units
		In Sample	Area	Units			
22015671 - 1	1 / Kitchen F	340	1.000	Sq. Ft.	10	340.1	µg/ft2
22015671 - 2	2 / Bath F	225	1.000	Sq. Ft.	10	225.1	µg/ft2
22015671 - 3	3 / Rm 1 F	67	1.000	Sq. Ft.	10	67.4	µg/ft2
22015671 - 4	4 / Rm 2 F	140	1.000	Sq. Ft.	10	140.3	µg/ft2
22015671 - 5	5 / Rm 3 F	101	1.000	Sq. Ft.	10	100.8	µg/ft2
22015671 - 6	6 / Kitchen WS	18230	0.25	Sq. Ft.	40	72900.0	µg/ft2
22015671 - 7	7 / Bath WS	853	0.25	Sq. Ft.	40	3413.0	µg/ft2
22015671 - 8	8 / Rm 1 WS	15120	0.25	Sq. Ft.	40	60490.0	µg/ft2
22015671 - 9	9 / Rm 2 WS	29810	0.25	Sq. Ft.	40	119300.0	µg/ft2
22015671 - 10	10 / Rm 3 WS	11650	0.25	Sq. Ft.	40	46580.0	µg/ft2

Method Reporting Limit < 10 µg/wipe

Signature:

Date: 3/31/2022

Reviewed:

Date: 4/1/2022

11.3 Chain of Custody

Form 70, Revision 4, 5/2/2013



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

Metals & Lead Chain of Custody

SanAir ID Number,

22015671

Company:	Greentree Environmental Services, Inc	Project #:	Phone #: 219-764-2828
Address:	PO Box 2297	Project Name:	118 N. Walnut St South Bend, IN
City, St., Zip:	Portage, IN 46368	Date Collected:	3-28-22
Samples Collected By:	William Center	P.O. Number:	Phone #: 219-762-2828
			Fax #: 219-762-2828
			Email: greentree@gmtree.net

Matrix Types

Metals Analysis Types

<input type="checkbox"/> Air	<input type="checkbox"/> Aqueous	<input type="checkbox"/> Bulk	<input checked="" type="checkbox"/> Total Concentration of Lead	<input type="checkbox"/> ICP-total concentration of metals (please list metals):
<input type="checkbox"/> Paint	<input type="checkbox"/> Sludge	<input checked="" type="checkbox"/> Soil	<input type="checkbox"/> Total Concentration of RCRA 8 Metals	
<input type="checkbox"/> Dust	<input checked="" type="checkbox"/> Wipe	<input type="checkbox"/> Potable Water	<input type="checkbox"/> TCLP for Lead	<input type="checkbox"/> Other:
<input type="checkbox"/> Non-Potable Water	<input type="checkbox"/> Wastewater		<input type="checkbox"/> TCLP for RCRA 8 Metals	
<input type="checkbox"/> Other:			<input type="checkbox"/> TCLP Full (w/ Organics)	

*Turn Around Times	Same Day <input type="checkbox"/>	1 Day <input checked="" type="checkbox"/>	2 days <input type="checkbox"/>	3 Days <input type="checkbox"/>
	<input type="checkbox"/> Standard (5 day)	<input type="checkbox"/> Full TCLP (10d)		

*Courier charge for same day and 1 day TAT for offsite work.

Sample #	Sample Identification/Location	Flow Rate	Start Time	Stop Time	Volume (L) or Area (Sq ft)
1	Kitchen F				12x12
2	Bath F				12x12
3	Rm 1 F				12x12
4	Rm 2 F				12x12
5	Rm 3 F				12x12
6	Kitchen WS				2x18
7	Bath WS				2x18
8	Rm 1 WS				2x18
9	Rm 2 WS				2x18
10	Rm 3 WS				2x18

Special Instructions	
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Relinquished by	Date	Time	Received by	Date	Time
WCC	3-28-22		EDR	3/31/22	10:15 a.m.

Unless scheduled, the turn around time for all samples received after 3 pm will begin at 8 am the next business morning.
Weekend or Holiday work must be scheduled ahead of time and is charged for rush turn around time.

Work with standard turn around time sent Priority Overnight and Billed To Recipient will be charged a \$10 shipping fee.

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12.0 XRF DATA

**Vacant
118 N Walnut Street
South Bend, IN 46628**

#	Time	Type	Duration	Units	Component	Substrate	Side	Condition of Paint	Color	Room	Floor	Int/Ext	PbC	Result
1	10:58:43	Lead Paint	5	mg/cm2	CALIBRATE				Green				1	Positive
2	10:59:03	Lead Paint	5	mg/cm2	CALIBRATE				Green				1.1	Positive
3	11:02:05	Lead Paint	2	mg/cm2	Door	Wood	A	DETERIORATED	Brown	Entry Front	1st	Ext	0.2	Negative
4	11:02:19	Lead Paint	2	mg/cm2	Door Casing	Wood	A	DETERIORATED	Brown	Entry Front	1st	Ext	25.2	Positive
5	11:02:31	Lead Paint	2	mg/cm2	Door Jamb	Wood	A	DETERIORATED	Brown	Entry Front	1st	Ext	29.3	Positive
6	11:02:45	Lead Paint	2	mg/cm2	Door Threshold	Wood	A	DETERIORATED	Brown	Entry Front	1st	Ext	2.8	Positive
7	11:03:19	Lead Paint	2	mg/cm2	Win. Sash	Wood	A	DETERIORATED	Brown	Entry Front	1st	Ext	6.3	Positive
8	11:03:51	Lead Paint	2	mg/cm2	Win. Sash	Wood	A	DETERIORATED	White	Entry Front	1st	Int	15.5	Positive
9	11:04:24	Lead Paint	2	mg/cm2	Win. Sill-Stool	Wood	A	DETERIORATED	White	Entry Front	1st	Int	14.9	Positive
10	11:04:41	Lead Paint	2	mg/cm2	Win. Casing	Wood	A	DETERIORATED	White	Entry Front	1st	Int	15	Positive
11	11:04:55	Lead Paint	2	mg/cm2	Win. Casing	Wood	A	DETERIORATED	White	Entry Front	1st	Int	15	Positive
12	11:05:25	Lead Paint	2	mg/cm2	Door Jamb	Wood	A	DETERIORATED	White	Entry Front	1st	Int	14.5	Positive
13	11:05:40	Lead Paint	2	mg/cm2	Door Casing	Wood	A	DETERIORATED	White	Entry Front	1st	Int	14.5	Positive
14	11:05:58	Lead Paint	2	mg/cm2	Door	Wood	A	DETERIORATED	White	Entry Front	1st	Int	12.5	Positive
15	11:06:15	Lead Paint	2	mg/cm2	Baseboard	Wood	B	DETERIORATED	White	Entry Front	1st	Int	14	Positive
16	11:06:33	Lead Paint	2	mg/cm2	Newel Post	Wood	C	DETERIORATED	White	Entry Front	1st	Int	0.1	Negative
17	11:06:56	Lead Paint	2	mg/cm2	Stair Stringer	Wood	D	DETERIORATED	White	Entry Front	1st	Int	10.3	Positive
18	11:08:00	Lead Paint	2	mg/cm2	Wall	Plaster	D	DETERIORATED	Grey	Entry Front	1st	Int	0.2	Negative
19	11:08:19	Lead Paint	2	mg/cm2	Ceiling	Plaster		DETERIORATED	Grey	Entry Front	1st	Int	0.1	Negative
20	11:08:39	Lead Paint	2	mg/cm2	Stair Wall	Plaster	B	DETERIORATED	Grey	Entry Front	1st	Int	0.1	Negative
21	11:09:28	Lead Paint	2	mg/cm2	Stair Wall	Plaster	C	DETERIORATED	Grey	2nd Fl. Stair	2nd	Int	0	Negative
22	11:09:45	Lead Paint	2	mg/cm2	Ceiling	Plaster		DETERIORATED	Grey	2nd Fl. Stair	2nd	Int	0	Negative
23	11:10:09	Lead Paint	2	mg/cm2	Win. Casing	Wood	D	DETERIORATED	White	2nd Fl. Stair	2nd	Int	11.6	Positive
24	11:10:23	Lead Paint	2	mg/cm2	Win. Sash	Wood	D	DETERIORATED	White	2nd Fl. Stair	2nd	Int	9.8	Positive
25	11:10:38	Lead Paint	2	mg/cm2	Win. Sill-Stool	Wood	D	DETERIORATED	White	2nd Fl. Stair	2nd	Int	10.9	Positive
26	11:11:02	Lead Paint	2	mg/cm2	Win. Sash	Wood	D	DETERIORATED	Brown	2nd Fl. Stair	2nd	Ext	9.5	Positive
27	11:11:25	Lead Paint	2	mg/cm2	Win. Well-Trough	Wood	D	DETERIORATED	Brown	2nd Fl. Stair	2nd	Ext	11.4	Positive
28	11:11:39	Lead Paint	2	mg/cm2	Win. Track	Wood	D	DETERIORATED	Brown	2nd Fl. Stair	2nd	Ext	10.3	Positive
29	11:12:29	Lead Paint	2	mg/cm2	Stair Stringer	Wood	C	DETERIORATED	White	2nd Fl. Stair	2nd	Int	8.3	Positive
30	11:12:48	Lead Paint	2	mg/cm2	Baseboard	Wood	B	DETERIORATED	White	2nd Fl. Stair	2nd	Int	13.6	Positive
31	11:13:03	Lead Paint	2	mg/cm2	Door	Wood	B	DETERIORATED	White	2nd Fl. Stair	2nd	Int	12.8	Positive
32	11:13:16	Lead Paint	2	mg/cm2	Door Jamb	Wood	B	DETERIORATED	White	2nd Fl. Stair	2nd	Int	21.4	Positive
33	11:13:29	Lead Paint	2	mg/cm2	Door Casing	Wood	B	DETERIORATED	White	2nd Fl. Stair	2nd	Int	15.5	Positive
34	11:13:47	Lead Paint	2	mg/cm2	Door Dormer Wn.	Wood	B	DETERIORATED	White	2nd Fl. Stair	2nd	Int	16.3	Positive
35	11:14:33	Lead Paint	2	mg/cm2	Clos. Door	Wood	D	DETERIORATED	White	2nd Fl. Stair	2nd	Int	12.6	Positive
36	11:14:45	Lead Paint	2	mg/cm2	Clos. Dr. Jamb	Wood	D	DETERIORATED	White	2nd Fl. Stair	2nd	Int	9.9	Positive
37	11:14:59	Lead Paint	2	mg/cm2	Clos. Baseboard	Wood	D	DETERIORATED	White	2nd Fl. Stair	2nd	Int	5.1	Positive
38	11:15:16	Lead Paint	2	mg/cm2	Clos. Bracket	Wood	D	DETERIORATED	Grey	2nd Fl. Stair	2nd	Int	6.3	Positive

#	Time	Type	Duration	Units	Component	Substrate	Side	Condition of Paint	Color	Room	Floor	Int/Ext	PbC	Result
39	11:15:36	Lead Paint	2	mg/cm2	Clos. Shelf	Wood	D	DETERIORATED	Grey	2nd Fl. Stair	2nd	Int	5.8	Positive
40	11:16:15	Lead Paint	2	mg/cm2	Clos. Wall	Plaster	D	DETERIORATED	Grey	2nd Fl. Stair	2nd	Int	0.1	Negative
41	11:16:48	Lead Paint	2	mg/cm2	Wall	Plaster	B	DETERIORATED	Grey	2nd Fl. Stair	2nd	Int	0.1	Negative
42	11:24:52	Lead Paint	2	mg/cm2	Wall	Plaster	C	DETERIORATED	White	Bathroom	2nd	Int	0.1	Negative
43	11:25:16	Lead Paint	2	mg/cm2	Ceiling	Plaster	C	DETERIORATED	White	Bathroom	2nd	Int	0.1	Negative
44	11:25:44	Lead Paint	2	mg/cm2	Bathtub	Glazed Metal	A	INTACT	White	Bathroom	2nd	Int	0.5	Negative
45	11:26:04	Lead Paint	2	mg/cm2	Sink out	Glazed Ceramic	C	INTACT	White	Bathroom	2nd	Int	2.9	Positive
46	11:26:50	Lead Paint	2	mg/cm2	Cabinet Out	Wood	B	DETERIORATED	White	Bathroom	2nd	Int	10.1	Positive
47	11:27:08	Lead Paint	2	mg/cm2	Cabinet Shelf	Wood	B	DETERIORATED	White	Bathroom	2nd	Int	8.8	Positive
48	11:27:23	Lead Paint	2	mg/cm2	Cabinet In	Wood	B	DETERIORATED	White	Bathroom	2nd	Int	8.3	Positive
49	11:27:39	Lead Paint	2	mg/cm2	Cabinet Door	Wood	B	DETERIORATED	White	Bathroom	2nd	Int	0.3	Negative
50	11:27:58	Lead Paint	2	mg/cm2	Cabinet Door	Wood	B	DETERIORATED	White	Bathroom	2nd	Int	0.5	Negative
51	11:28:11	Lead Paint	2	mg/cm2	Cabinet Door	Wood	D	DETERIORATED	White	Bathroom	2nd	Int	0.5	Negative
52	11:28:27	Lead Paint	2	mg/cm2	Cabinet Out	Wood	D	DETERIORATED	White	Bathroom	2nd	Int	0.2	Negative
53	11:28:42	Lead Paint	2	mg/cm2	Cabinet Shelf	Wood	D	DETERIORATED	White	Bathroom	2nd	Int	0.1	Negative
54	11:30:18	Lead Paint	2	mg/cm2	Win. Casing	Wood	B	DETERIORATED	White	Bathroom	2nd	Int	0	Negative
55	11:30:31	Lead Paint	2	mg/cm2	Win. Sill-Stool	Wood	B	DETERIORATED	White	Bathroom	2nd	Int	0.1	Negative
56	11:30:44	Lead Paint	2	mg/cm2	Win. Sash	Wood	B	DETERIORATED	White	Bathroom	2nd	Int	0	Negative
57	11:31:05	Lead Paint	2	mg/cm2	Win. Well-Trough	Wood	B	DETERIORATED	Brown	Bathroom	2nd	Ext	5.7	Positive
58	11:31:20	Lead Paint	2	mg/cm2	Win. Track	Wood	B	DETERIORATED	Brown	Bathroom	2nd	Ext	31	Positive
59	11:31:36	Lead Paint	2	mg/cm2	Win. Sash	Wood	B	DETERIORATED	Brown	Bathroom	2nd	Ext	14	Positive
60	11:32:05	Lead Paint	2	mg/cm2	Door	Wood	D	DETERIORATED	White	Bathroom	2nd	Int	9.8	Positive
61	11:32:18	Lead Paint	2	mg/cm2	Door Casing	Wood	D	DETERIORATED	White	Bathroom	2nd	Int	0.2	Negative
62	11:32:31	Lead Paint	2	mg/cm2	Door Jamb	Wood	D	DETERIORATED	White	Bathroom	2nd	Int	11.4	Positive
63	11:32:53	Lead Paint	2	mg/cm2	Door Dormer Wn.	Wood	D	DETERIORATED	White	Bathroom	2nd	Int	11.3	Positive
64	11:36:55	Lead Paint	2	mg/cm2	Win. Sill-Stool	Wood	B	DETERIORATED	White	Stair Rear	2nd	Int	17.2	Positive
65	11:37:08	Lead Paint	2	mg/cm2	Win. Sash	Wood	B	DETERIORATED	White	Stair Rear	2nd	Int	17.3	Positive
66	11:37:22	Lead Paint	2	mg/cm2	Win. Casing	Wood	B	DETERIORATED	White	Stair Rear	2nd	Int	15	Positive
67	11:37:42	Lead Paint	2	mg/cm2	Win. Sash	Wood	B	DETERIORATED	Brown	Stair Rear	2nd	Ext	15.3	Positive
68	11:37:55	Lead Paint	2	mg/cm2	Win. Well-Trough	Wood	B	DETERIORATED	Brown	Stair Rear	2nd	Ext	15.9	Positive
69	11:38:08	Lead Paint	2	mg/cm2	Win. Track	Wood	B	DETERIORATED	Brown	Stair Rear	2nd	Ext	14.8	Positive
70	11:38:35	Lead Paint	2	mg/cm2	Trim	Wood	C	DETERIORATED	White	Stair Rear	2nd	Int	11.7	Positive
71	11:38:56	Lead Paint	2	mg/cm2	Stair Stringer	Wood	C	DETERIORATED	White	Stair Rear	2nd	Int	20	Positive
72	11:39:16	Lead Paint	2	mg/cm2	Baseboard	Wood	A	DETERIORATED	White	Stair Rear	2nd	Int	17	Positive
73	11:39:58	Lead Paint	2	mg/cm2	Pipe	Metal	A	DETERIORATED	Grey	Stair Rear	2nd	Int	0.5	Negative
74	11:42:07	Lead Paint	2	mg/cm2	Door Casing	Wood	C	DETERIORATED	White	Stair Rear	1st	Int	19.3	Positive
75	11:42:23	Lead Paint	2	mg/cm2	Stair Stringer	Wood	D	DETERIORATED	White	Stair Rear	1st	Int	18.4	Positive
76	11:42:43	Lead Paint	2	mg/cm2	Stair Wall	Plaster	D	DETERIORATED	Grey	Stair Rear	1st	Int	0.1	Negative
77	11:43:03	Lead Paint	2	mg/cm2	Stair Wall	Plaster	A	DETERIORATED	Grey	Stair Rear	2nd	Int	0	Negative
78	11:43:20	Lead Paint	2	mg/cm2	Ceiling	Plaster		DETERIORATED	Grey	Stair Rear	2nd	Int	0	Negative
79	11:43:54	Lead Paint	2	mg/cm2	Trim	Wood	C	DETERIORATED	White	2nd Fl. Stair	2nd	Int	16.7	Positive
80	11:46:49	Lead Paint	2	mg/cm2	Wall	Plaster	C	DETERIORATED	White	Kitchen	2nd	Int	0	Negative
81	11:47:06	Lead Paint	2	mg/cm2	Ceiling	Plaster		DETERIORATED	White	Kitchen	2nd	Int	0.5	Negative
82	11:47:26	Lead Paint	2	mg/cm2	Door	Wood	A	DETERIORATED	White	Kitchen	2nd	Int	6.5	Positive
83	11:47:38	Lead Paint	2	mg/cm2	Door Casing	Wood	A	DETERIORATED	White	Kitchen	2nd	Int	6.6	Positive
84	11:47:52	Lead Paint	2	mg/cm2	Door Jamb	Wood	A	DETERIORATED	White	Kitchen	2nd	Int	7	Positive
85	11:48:06	Lead Paint	2	mg/cm2	Door Jamb	Wood	B	DETERIORATED	White	Kitchen	2nd	Int	6.9	Positive

#	Time	Type	Duration	Units	Component	Substrate	Side	Condition of Paint	Color	Room	Floor	Int/Ext	PbC	Result
86	11:48:24	Lead Paint	2	mg/cm2	Win. Casing	Wood	C	DETERIORATED	White	Kitchen	2nd	Int	6.5	Positive
87	11:48:36	Lead Paint	2	mg/cm2	Win. Sill-Stool	Wood	C	DETERIORATED	White	Kitchen	2nd	Int	5.5	Positive
88	11:48:49	Lead Paint	2	mg/cm2	Win. Sash	Wood	C	DETERIORATED	White	Kitchen	2nd	Int	5.4	Positive
89	11:49:51	Lead Paint	2	mg/cm2	Trim	Wood	A	DETERIORATED	White	Kitchen	2nd	Int	10.4	Positive
90	11:50:07	Lead Paint	2	mg/cm2	Baseboard	Wood	B	DETERIORATED	White	Kitchen	2nd	Int	8.9	Positive
91	11:50:51	Lead Paint	2	mg/cm2	Win. Well-Trough	Wood	C	DETERIORATED	Brown	Kitchen	2nd	Ext	2	Positive
92	11:51:17	Lead Paint	2	mg/cm2	Win. Track	Wood	C	DETERIORATED	Brown	Kitchen	2nd	Ext	21.6	Positive
93	11:51:37	Lead Paint	2	mg/cm2	Win. Sash	Wood	C	DETERIORATED	Brown	Kitchen	2nd	Ext	15.8	Positive
94	11:52:05	Lead Paint	2	mg/cm2	Clos. Door	Wood	B	DETERIORATED	White	Kitchen	2nd	Int	9.4	Positive
95	11:52:18	Lead Paint	2	mg/cm2	Clos. Dr. Casing	Wood	B	DETERIORATED	White	Kitchen	2nd	Int	7.6	Positive
96	11:52:30	Lead Paint	2	mg/cm2	Clos. Bracket	Wood	B	DETERIORATED	White	Kitchen	2nd	Int	8.7	Positive
97	11:52:45	Lead Paint	2	mg/cm2	Clos. Baseboard	Wood	B	DETERIORATED	White	Kitchen	2nd	Int	9.1	Positive
98	11:53:08	Lead Paint	2	mg/cm2	Clos. Shelf	Wood	B	DETERIORATED	White	Kitchen	2nd	Int	8	Positive
99	11:56:17	Lead Paint	2	mg/cm2	Stair Tread	Wood		DETERIORATED	Grey	Attic Stair	2nd	Int	0	Negative
100	11:56:32	Lead Paint	2	mg/cm2	Stair Riser	Wood		DETERIORATED	Grey	Attic Stair	2nd	Int	0	Negative
101	11:56:46	Lead Paint	2	mg/cm2	Stair Stringer	Wood		DETERIORATED	Grey	Attic Stair	2nd	Int	0	Negative
102	11:57:03	Lead Paint	2	mg/cm2	Door Jamb	Wood	C	DETERIORATED	Grey	Attic Stair	2nd	Int	4.5	Positive
103	11:57:18	Lead Paint	2	mg/cm2	Door	Wood	C	DETERIORATED	Grey	Attic Stair	2nd	Int	4.2	Positive
104	11:57:49	Lead Paint	2	mg/cm2	Ceiling	Plaster		DETERIORATED	Grey	Attic Stair	2nd	Int	0	Negative
105	11:58:09	Lead Paint	2	mg/cm2	Stair Wall	Plaster	D	DETERIORATED	Grey	Attic Stair	2nd	Int	0	Negative
106	11:59:41	Lead Paint	2	mg/cm2	Win. Sash	Wood	D	DETERIORATED	Brown	Attic		Int	0.7	Negative
107	12:01:45	Lead Paint	2	mg/cm2	Win. Sash	Wood	A	DETERIORATED	White	Room 01	2nd	Int	13	Positive
108	12:02:00	Lead Paint	2	mg/cm2	Win. Sill-Stool	Wood	A	DETERIORATED	White	Room 01	2nd	Int	12.1	Positive
109	12:02:13	Lead Paint	2	mg/cm2	Win. Casing	Wood	A	DETERIORATED	White	Room 01	2nd	Int	13.5	Positive
110	12:02:39	Lead Paint	2	mg/cm2	Baseboard	Wood	A	DETERIORATED	White	Room 01	2nd	Int	11.3	Positive
111	12:04:26	Lead Paint	2	mg/cm2	Door	Wood	C	DETERIORATED	White	Room 01	2nd	Int	15	Positive
112	12:04:39	Lead Paint	2	mg/cm2	Door Casing	Wood	C	DETERIORATED	White	Room 01	2nd	Int	16.2	Positive
113	12:04:52	Lead Paint	2	mg/cm2	Door Jamb	Wood	C	DETERIORATED	White	Room 01	2nd	Int	17.7	Positive
114	12:05:17	Lead Paint	2	mg/cm2	Door Dormer Wn.	Wood	C	DETERIORATED	White	Room 01	2nd	Int	15.2	Positive
115	12:05:35	Lead Paint	2	mg/cm2	Clos. Door	Wood	D	DETERIORATED	White	Room 01	2nd	Int	10.2	Positive
116	12:05:49	Lead Paint	3	mg/cm2	Clos. Dr. Jamb	Wood	D	DETERIORATED	White	Room 01	2nd	Int	12.4	Positive
117	12:06:13	Lead Paint	2	mg/cm2	Clos. Baseboard	Wood	D	DETERIORATED	White	Room 01	2nd	Int	9.2	Positive
118	12:06:30	Lead Paint	2	mg/cm2	Clos. Bracket	Wood	D	DETERIORATED	Grey	Room 01	2nd	Int	11.1	Positive
119	12:06:45	Lead Paint	2	mg/cm2	Clos. Shelf	Wood	D	DETERIORATED	Grey	Room 01	2nd	Int	6.5	Positive
120	12:07:07	Lead Paint	2	mg/cm2	Clos. Wall	Plaster	D	DETERIORATED	Grey	Room 01	2nd	Int	0.3	Negative
121	12:08:08	Lead Paint	2	mg/cm2	Arch Casing	Wood	D	DETERIORATED	White	Room 01	2nd	Int	12.4	Positive
122	12:12:05	Lead Paint	2	mg/cm2	Win. Well-Trough	Wood	A	DETERIORATED	Brown	Room 01	2nd	Ext	2.5	Positive
123	12:12:19	Lead Paint	2	mg/cm2	Win. Track	Wood	A	DETERIORATED	Brown	Room 01	2nd	Ext	25.3	Positive
124	12:12:33	Lead Paint	2	mg/cm2	Win. Sash	Wood	A	DETERIORATED	Brown	Room 01	2nd	Ext	19	Positive
125	12:12:48	Lead Paint	2	mg/cm2	Win. Sash	Wood	A	DETERIORATED	Brown	Room 02	2nd	Ext	17.2	Positive
126	12:13:12	Lead Paint	2	mg/cm2	Win. Track	Wood	A	DETERIORATED	Brown	Room 02	2nd	Ext	26.1	Positive
127	12:13:27	Lead Paint	5	mg/cm2	Win. Well-Trough	Wood	A	DETERIORATED	Brown	Room 02	2nd	Ext	1.3	Positive
128	12:14:12	Lead Paint	2	mg/cm2	Wall	Plaster	B	DETERIORATED	Grey	Room 01	2nd	Int	0.2	Negative
129	12:14:29	Lead Paint	2	mg/cm2	Ceiling	Plaster		DETERIORATED	Grey	Room 01	2nd	Int	0	Negative
130	12:15:49	Lead Paint	2	mg/cm2	Ceiling	Plaster		DETERIORATED	Grey	Room 02	2nd	Int	0.3	Negative
131	12:16:03	Lead Paint	2	mg/cm2	Wall	Plaster	D	DETERIORATED	Grey	Room 02	2nd	Int	0.1	Negative
132	12:16:29	Lead Paint	2	mg/cm2	Baseboard	Wood	B	DETERIORATED	White	Room 02	2nd	Int	16	Positive

#	Time	Type	Duration	Units	Component	Substrate	Side	Condition of Paint	Color	Room	Floor	Int/Ext	PbC	Result
133	12:16:45	Lead Paint	2	mg/cm2	Win. Casing	Wood	B	DETERIORATED	White	Room 02	2nd	Int	13.3	Positive
134	12:16:58	Lead Paint	2	mg/cm2	Win. Sill-Stool	Wood	B	DETERIORATED	White	Room 02	2nd	Int	15.3	Positive
135	12:17:10	Lead Paint	2	mg/cm2	Win. Sash	Wood	B	DETERIORATED	White	Room 02	2nd	Int	15.1	Positive
136	12:17:39	Lead Paint	2	mg/cm2	Door	Wood	D	DETERIORATED	White	Room 02	2nd	Int	15.5	Positive
137	12:17:50	Lead Paint	2	mg/cm2	Door Casing	Wood	D	DETERIORATED	White	Room 02	2nd	Int	16.5	Positive
138	12:18:03	Lead Paint	2	mg/cm2	Door Jamb	Wood	D	DETERIORATED	White	Room 02	2nd	Int	14.8	Positive
139	12:18:22	Lead Paint	2	mg/cm2	Door Dormer Wn.	Wood	D	DETERIORATED	White	Room 02	2nd	Int	16.3	Positive
140	12:20:39	Lead Paint	2	mg/cm2	Door Dormer Wn.	Wood	B	DETERIORATED	White	Room 03	2nd	Int	16.6	Positive
141	12:20:56	Lead Paint	2	mg/cm2	Door Casing	Wood	B	DETERIORATED	White	Room 03	2nd	Int	17.5	Positive
142	12:21:18	Lead Paint	2	mg/cm2	Door Jamb	Wood	B	DETERIORATED	White	Room 03	2nd	Int	16.1	Positive
143	12:21:34	Lead Paint	2	mg/cm2	Door	Wood	B	DETERIORATED	White	Room 03	2nd	Int	13.7	Positive
144	12:21:49	Lead Paint	2	mg/cm2	Door	Wood	C	DETERIORATED	White	Room 03	2nd	Int	15.1	Positive
145	12:22:04	Lead Paint	2	mg/cm2	Clos. Door	Wood	C	DETERIORATED	White	Room 03	2nd	Int	12.8	Positive
146	12:22:18	Lead Paint	2	mg/cm2	Clos. Dr. Casing	Wood	C	DETERIORATED	White	Room 03	2nd	Int	6.9	Positive
147	12:22:31	Lead Paint	2	mg/cm2	Clos. Baseboard	Wood	C	DETERIORATED	White	Room 03	2nd	Int	7	Positive
148	12:22:46	Lead Paint	2	mg/cm2	Clos. Bracket	Wood	C	DETERIORATED	Grey	Room 03	2nd	Int	7	Positive
149	12:23:01	Lead Paint	2	mg/cm2	Clos. Shelf	Wood	C	DETERIORATED	Grey	Room 03	2nd	Int	6.9	Positive
150	12:23:23	Lead Paint	2	mg/cm2	Baseboard	Wood	D	DETERIORATED	White	Room 03	2nd	Int	18.6	Positive
151	12:23:41	Lead Paint	2	mg/cm2	Win. Sash	Wood	D	DETERIORATED	White	Room 03	2nd	Int	0.6	Negative
152	12:23:51	Lead Paint	2	mg/cm2	Win. Sash	Wood	D	DETERIORATED	White	Room 03	2nd	Int	0.7	Negative
153	12:24:09	Lead Paint	3	mg/cm2	Win. Sash	Wood	D	DETERIORATED	White	Room 03	2nd	Int	0.7	Negative
154	12:24:29	Lead Paint	2	mg/cm2	Win. Sash	Wood	D	DETERIORATED	White	Room 03	2nd	Int	0.6	Negative
155	12:24:47	Lead Paint	2	mg/cm2	Win. Sill-Stool	Wood	D	DETERIORATED	White	Room 03	2nd	Int	15.7	Positive
156	12:25:06	Lead Paint	2	mg/cm2	Win. Sash	Wood	D	DETERIORATED	Brown	Room 03	2nd	Ext	22.1	Positive
157	12:25:20	Lead Paint	2	mg/cm2	Win. Well-Trough	Wood	D	DETERIORATED	Brown	Room 03	2nd	Ext	16.7	Positive
158	12:25:34	Lead Paint	2	mg/cm2	Win. Track	Wood	D	DETERIORATED	Brown	Room 03	2nd	Ext	17.8	Positive
159	12:26:01	Lead Paint	2	mg/cm2	Clos. Wall	Plaster	C	DETERIORATED	Grey	Room 03	2nd	Int	0.2	Negative
160	12:26:26	Lead Paint	2	mg/cm2	Wall	Plaster	D	DETERIORATED	Grey	Room 03	2nd	Int	0.3	Negative
161	12:26:41	Lead Paint	2	mg/cm2	Ceiling	Plaster		DETERIORATED	Grey	Room 03	2nd	Int	0	Negative
162	12:30:53	Lead Paint	5	mg/cm2	CALIBRATE				Green				1	Positive
163	12:31:11	Lead Paint	5	mg/cm2	CALIBRATE				Green				1	Positive
164	12:31:29	Lead Paint	5	mg/cm2	CALIBRATE				Green				1	Positive

13.0 GLOSSARY

COMMON LEAD-BASED PAINT TERMS

Abatement: A measure or set of measures designed to permanently eliminate lead-based paint hazards or lead-based paint. Abatement strategies include the removal of lead-based paint, enclosure, encapsulation, replacement of building components coated with lead-based paint, removal of lead-contaminated dust, and removal of lead-contaminated soil or overlaying of soil with a durable covering such as asphalt (grass and sod are considered interim control measures). All of these strategies require preparation; cleanup; waste disposal; post-abatement clearance testing; recordkeeping; and, if applicable, monitoring. See also **complete abatement** and **interim controls**.

Bare soil: Soil not covered with grass, sod, some other similar vegetation, or paving, including the sand in sandboxes.

Building component: Any element of a building that may be painted or have dust on its surface. Building components include, for example, walls, stair treads, floors, railings, doors, jambs, casings, window sills, casings, etc. Building component replacement: See **replacement**.

Chewable surface: Any interior or exterior surface painted with lead-based paint that a young child can mouth or chew. A chewable surface is any painted surface that shows evidence of having been chewed or mouthed by a young child. A chewed surface is the same as an "accessible surface" as defined in 42 USC 4851b(2). It is usually a protruding, horizontal part of a building, such as an interior window sill. Hard metal substrates and other materials that cannot be dented by the bite of a young child are not considered chewable.

Cleaning: The process of using a HEPA vacuum and wet cleaning agents to remove leaded dust; the process includes removal of bulk debris from the work area. OSHA prohibits the use of compressed air to clean lead-contaminated dust from a surface.

Clearance examination: Visual examination and collection of environmental samples by an inspector or risk assessor and analysis by an accredited laboratory upon completion of an abatement project, interim control intervention, or maintenance job that disturbs lead-based paint (or paint suspected of being lead-based). The clearance examination is performed to ensure that lead exposure levels do not exceed standards established by the EPA Administrator pursuant to Title IV of the Toxic Substances Control Act, and that any cleaning following such work adequately meets those standards.

Complete abatement: Abatement of all lead-based paint inside and outside a dwelling or building and reduction of any lead-contaminated dust or soil hazards. All of these strategies require preparation; cleanup; waste disposal; post-abatement clearance testing; recordkeeping; and, if applicable, reevaluation and on-going monitoring. See also **abatement**.

Deteriorated paint: Any paint coating on a damaged or deteriorated surface or fixture, or any interior or exterior lead-based paint that is peeling, chipping, blistering, flaking, worn, chalking, alligatoring, cracking, or otherwise becoming separated from the substrate.

Dripline/foundation area: The area within three feet out from the building wall and surrounding the perimeter of a building.

Dust-lead hazard: Surface dust in residences that contains an area or mass concentration of lead equal to or in excess of the standard established by the EPA under Title IV of the Toxic Substances Control Act. EPA standards for dust-lead hazards, which are based on wipe samples, are published at 40 CFR 745.65(b); as of the publication of this edition of these *Guidelines*, these are 10 µg/ft² on floors and 100 µg/ft² on interior window sills. Also called lead-contaminated dust.

Encapsulation: Any covering or coating that acts as a barrier between lead-based paint and the

environment, the durability of which relies on adhesion and the integrity of the existing bonds between multiple layers of paint and between the paint and the substrate. See also **enclosure**.

Enclosure: The use of rigid, durable construction materials that are mechanically fastened to the substrate to act as a barrier between the lead-based paint and the environment.

Friction surface: Any interior or exterior surface, such as a window or stair tread, subject to abrasion or friction.

Garden area: An area where plants are cultivated for human consumption or for decorative purposes.

Impact surface: An interior or exterior surface (such as surfaces on doors) subject to damage by repeated impact or contact.

Inspection (of paint): A surface-by-surface investigation to determine the presence of lead-based paint (in some cases including dust and soil sampling) and a report of the results.

Interim controls: A set of measures designed to temporarily reduce human exposure or possible exposure to lead-based paint hazards. Such measures include specialized cleaning, repairs, maintenance, painting, temporary containment, and management and resident education programs. Monitoring, conducted by owners, and reevaluations, conducted by professionals, are integral elements of interim control. Interim controls include dust removal; paint film stabilization; treatment of friction and impact surfaces; installation of soil coverings, such as grass or sod; and land-use controls. See also **monitoring**, **reevaluation**, and **abatement**.

Lead-based paint hazard control: Activities to control and eliminate lead-based paint hazards, including interim controls, abatement, and complete abatement.

Lead-based paint hazard: A condition in which exposure to lead from lead contaminated dust, lead contaminated soil, or deteriorated lead-based paint would have an adverse effect on human health (as established by the EPA at 40 CFR 745.65, under Title IV of the Toxic Substances Control Act). Lead-based paint hazards include, for example, **paint-lead** hazards, **dust-lead** hazards, and **soil-lead hazards**.

Lead-based paint: Any paint, varnish, shellac, or other coating that contains lead equal to or greater than 1.0 mg/cm² as measured by XRF or laboratory analysis, or 0.5 percent by dry weight (5,000 mg/g, 5,000 ppm, or 5,000 mg/kg) as measured by laboratory analysis. (Local definitions may vary.)

Maintenance: Work intended to maintain adequate living conditions in a dwelling, which has the potential to disturb lead-based paint or paint that is suspected of being lead-based.

Monitoring: Surveillance to determine (1) that known or suspected lead-based paint is not deteriorating, (2) that lead-based paint hazard controls, such as paint stabilization, enclosure, or encapsulation have not failed, (3) that structural problems do not threaten the integrity of hazard controls or of known or suspected lead-based paint, and (4) that dust lead levels have not risen above applicable standards. There are two types of monitoring activities; visual surveys by property owners and reevaluations by certified risk assessors. Visual surveys are generally conducted annually for the purpose of making the first three determinations listed above. Reevaluations are conducted in accordance with the Standard Reevaluation Schedule (or more frequently, if needed) for the purpose of making all four determinations. Monitoring is not required in properties known to be free of lead-based paint. See also **reevaluation**.

Paint film stabilization: The process of wet scraping, priming, and repainting surfaces coated with deteriorated lead-based paint; paint film stabilization includes cleanup and clearance.

Paint removal: An abatement strategy that entails the removal of lead-based paint from surfaces. For lead hazard control work, this can mean using chemicals, heat guns below 1,100°F, and certain *contained*

abrasive methods. Open flame burning, open abrasive blasting, sandblasting, water blasting, and extensive dry scraping are prohibited paint removal methods. (Methylene chloride paint removers and dry scraping are also not recommended).

Paint-lead hazard: Lead-based paint on a friction surface that is subject to abrasion and where a dust-lead hazard is present on the nearest horizontal surface underneath the friction surface (e.g., the window sill or floor); damaged or otherwise deteriorated lead-based paint on an impact surface that is caused by impact from a related building component; a chewable lead-based painted surface on which there is evidence of teeth marks; or any other deteriorated lead-based paint in any residential building or child-occupied facility or on the exterior of any residential building or child-occupied facility.

Play area: An area of frequent soil contact by children age six or under as indicated by, but not limited to, such factors including the following: the presence of outdoor play equipment (e.g., sandboxes, swing sets and sliding boards), toys, or other children's possessions, observations of play patterns, or information provided by parents, residents, caregivers, or property owners.

Reevaluation: In lead hazard control work, the combination of a visual assessment and collection of environmental samples performed by a certified risk assessor to determine if a previously implemented lead-based paint hazard control measure is still effective and if the dwelling remains lead-safe.

Replacement: A strategy of abatement that entails the removal of building components coated with lead-based paint (such as windows, doors, and trim) and the installation of new components free of lead-based paint.

Risk assessment: An onsite investigation of a residential dwelling to discover any lead-based paint hazards. Risk assessments include an investigation of the age, history, management, and maintenance of the dwelling, and the number of children under age 6 and women of child-bearing age who are residents; a visual assessment; limited environmental sampling (i.e. collection of dust wipe samples, soil samples, and deteriorated paint samples); and preparation of a report identifying acceptable abatement and interim control strategies based on specific conditions.

Soil-lead hazard: Bare soil on residential property that contains lead in excess of the standard established by the EPA under Title IV of the Toxic Substances Control Act. EPA standards for soil-lead hazards, published at 40 CFR 745.65©, as of the publication of this edition of these *Guidelines*, is 400 µg/g in play areas and 1,200 µg/g in the rest of the yard. Also called lead-contaminated soil.

Treatment: In residential lead-based paint hazard control work, any method designed to control lead-based paint hazards. Treatment includes interim controls, abatement, and removal. Hazardous waste “treatment” is a method, technique, or process (such as neutralization) that is designed to change the physical, chemical, or biological character or composition of hazardous waste to neutralize it; render it non-hazardous or less hazardous; recover it; make it safer to transport, store, or dispose; or allow for easier recovery, storage, or volume reduction.

KEY UNITS OF MEASUREMENT

Gram (g or gm): A unit of mass in the metric system. A nickel weighs about 1 gram, as does 1 cube of water 1 centimeter on each side. A gram is equal to about 35/1000 (thirty-five thousandths) of an ounce. Another way to think of this is that about 28.4 grams equal 1 ounce.

µg (microgram): A microgram is 1/1000th of a milligram (or one millionth of a gram). To put this into perspective, a penny weighs 2 grams. To get a microgram, you would need to divide the penny into 2 million pieces. A microgram is one of those two million pieces.

µg/dL (microgram per deciliter): used to measure the level of lead in children’s and worker’s blood to establish whether the intervention is needed. A deciliter (1/10th of liter) is a little less than half a cup.

µg/ft² (micrograms per square feet): the unit used to express levels of lead in dust samples. All reports should report levels of lead in dust in µg/ft².

mg/cm² (milligrams per square centimeter): used to report levels of lead in paint through XRF testing.

ppm (parts per million): Typically used to express the concentrations of lead in soil. Can also be used to express the amount of lead in a surface coating on a mass concentration basis. This measurement can also be shown as: µg/g (micrograms per gram), mg/kg (milligrams per kilogram) or mg/l (milligrams per liter).

ppb (parts per billion): Typically used to express the amount of lead found in drinking water. This measurement is also sometimes expressed as µg/L (micrograms per liter).

LEAD-BASED PAINT AND LEAD-BASED PAINT HAZARD STANDARDS

Lead-based Paint (may be determined in either of two ways)

- Surface concentration (mass of lead per area) 1.0 µg/cm²
- Bulk concentration (mass of lead per volume) 0.5%, 5000 µg/g, or 5000 ppm

Dust-thresholds for Lead Contamination

- Floors 10 µg/ft²
- Interior windowsills 100 µg/ft²
- Window troughs (clearance examination only) 400 µg/ft²

Soil-thresholds for Lead Contamination

- Play areas used by children age 6 or under 400 µg/g or 400 ppm
- Other areas 1200 µg/g or 1200 ppm

14.0 PERFORMANCE CHARACTERISTIC SHEET

HEURESIS PCS December 2015

Performance Characteristic Sheet

EFFECTIVE DATE: December 1, 2015

MANUFACTURER AND MODEL:

Make: *Heuresis*
Models: *Model Pb200i*
Source: *⁵⁷Co, 5 mCi (nominal – new source)*

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Action Level mode

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm ² (inclusive)

SUBSTRATE CORRECTION:

Not applicable

INCONCLUSIVE RANGE OR THRESHOLD:

ACTION LEVEL MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm ²)
Results not corrected for substrate bias on any substrate	Brick	1.0
	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 using test results on building components in the HUD archive. Testing was conducted on 146 test samples in November 2015, with two separate instruments running software version 2.1-2 in Action Level test mode. The actual source strength of each instrument on the day of testing was approximately 2.0 mCi; source ages were approximately one year.

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.

XRF CALIBRATION CHECK:

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm² in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm² film).

If the average (rounded to 1 decimal place) of three readings is outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instrument into control before XRF testing proceeds.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Chapter 7 of the HUD Guidelines provides guidance on correcting XRF results for substrate bias. Supplemental guidance for using the paint film nearest 1.0 mg/cm² for substrate correction is provided:

XRF results are corrected for substrate bias by subtracting from each XRF result a correction value determined separately in each house for single-family housing or in each development for multifamily housing, for each substrate. The correction value is an average of XRF readings taken over the NIST SRM paint film nearest to 1.0 mg/cm² at test locations that have been scraped bare of their paint covering. Compute the correction values as follows:

Using the same XRF instrument, take three readings on a bare substrate area covered with the NIST SRM paint film nearest 1 mg/cm². Repeat this procedure by taking three more readings on a second bare substrate area of the same substrate covered with the NIST SRM.

Compute the correction value for each substrate type where XRF readings indicate substrate correction is needed by computing the average of all six readings as shown below.

For each substrate type (the 1.02 mg/cm² NIST SRM is shown in this example; use the actual lead loading of the NIST SRM used for substrate correction):

$$\text{Correction value} = (1\text{st} + 2\text{nd} + 3\text{rd} + 4\text{th} + 5\text{th} + 6\text{th Reading})/6 - 1.02 \text{ mg/cm}^2$$

Repeat this procedure for each substrate requiring substrate correction in the house or housing development.

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.

Conduct XRF re-testing 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 multi-family 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 the 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 readings.

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

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:

In the Action Level paint test mode, the instrument takes the longest time to complete readings close to the Federal standard of 1.0 mg/cm². The table below shows the mean and standard deviation of actual reading times by reading level for paint samples during the November 2015 archive testing. The tested instruments reported readings to one decimal place. No significant differences in reading times by substrate were observed. These times apply only to instruments with the same source strength as those tested (2.0 mCi). Instruments with stronger sources will have shorter reading times and those with weaker sources, longer reading times, than those in the table.

Mean and Standard Deviation of Reading Times in Action Level Mode by Reading Level		
Reading (mg/cm ²)	Mean Reading Time (seconds)	Standard Deviation (seconds)
< 0.7	3.48	0.47
0.7	7.29	1.92
0.8	13.95	1.78
0.9 – 1.2	15.25	0.66
1.3 – 1.4	6.08	2.50
≥ 1.5	3.32	0.05

CLASSIFICATION OF RESULTS:

XRF results are classified as **positive** if they are **greater than or equal** to the stated threshold for the instrument (1.0 mg/cm²), and *negative* if they are *less than* the threshold.

DOCUMENTATION:

A report titled *Methodology for XRF Performance Characteristic Sheets* (EPA 747-R-95-008) 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. The report may be downloaded at <http://www2.epa.gov/lead/methodology-xrf-performance-characteristic-sheets-epa-747-r-95-008-september-1997>.

This XRF Performance Characteristic Sheet (PCS) was developed by QuanTech, Inc., under a contract with the XRF manufacturer.

15.0 SUMMARY NOTICE OF LEAD-BASED PAINT RISK ASSESSMENT

Address of unit where risk assessment was conducted:

118 N Walnut Street
South Bend, IN 46628

Lead-based paint risk assessment description:

Date of risk assessment: March 28, 2022

Summary of risk assessment results (check all that apply):

- ☒ No lead-based paint hazards were identified.
- ☐ Lead-based paint hazards were identified.
- ☒ A brief summary of the findings of the assessment.

Summary of types and locations of lead-based paint hazards identified:

Dust-lead Locations

- *Lead dust is assumed to be present around all positive components noted in the following charts.*
- *There are lead dust levels around all windows and all floors (including all stairwell stair treads) that exceed HUD guidelines.*

Bare Soil Locations

- *No Soil Sample Taken (Upstairs unit only)*

Building Components

EXTERIOR				
<i>General note: If any exterior inaccessible components are ever removed, all painted surfaces must be assumed positive.</i>				
Room/Location	Component(s)	Square Feet	Quantity	Assumed Positive (check if yes)
Front entry A	Door components	10	1	
Front entry AD	Windows and components	3	2	
2 nd floor stairway D	Window and components	5	1	
Room 1 A	Windows and components	5	3	
Room 2 AB	Windows and components	5	2	
Bathroom B	Window and components	5	1	
Rear stairway B	Window and components	5	1	
Kitchen C	Windows and components	5	2	
Room 3 D	Windows and components	5	2	

INTERIOR				
<i>General note: If any interior inaccessible components (paneling, drop ceiling, wall boards, etc.) are ever removed, all painted surfaces must be assumed positive.</i>				
Room/Location	Component(s)	Square Feet	Quantity	Assumed Positive (check if yes)

INTERIOR

General note: If any interior inaccessible components (paneling, drop ceiling, wall boards, etc.) are ever removed, all painted surfaces must be assumed positive.

Room/Location	Component(s)	Square Feet	Quantity	Assumed Positive (check if yes)
Front entry A	Door and components	25	1	
Front entry	Baseboard	6		
Front entry D	Stringer	18		
Front entry AD	Windows and components	5	2	
2 nd floor stairway	Window and components	8	1	
2 nd floor stairway	Stair stringer	4		
2 nd floor stairway	Baseboard	25		
2 nd floor stairway B	Doors and components including dormers	22	4	
2 nd floor stairway D	Door and components	18	1	
2 nd floor stairway D	Closet door and components	18	1	
2 nd floor stairway D	Closet components	8		
2 nd floor stairway C	Door components	10	1	
Bathroom B	Cabinet out and in including shelves	20		
Bathroom D	Door and jamb including dormer	20	1	
2 nd floor stairway AC	Trim (corner)	2	3	
Rear stairway AC	Trim (corner)	2	2	
Rear stairway B	Window and components	6	1	
Rear stairway C	Door casing	6	1	
Rear stairway ABCD	Stair stringers	40		
Rear stairway	Baseboard	6		
Kitchen AB	Trim (corner) (in closet)	2	2	
Kitchen ABCD	Baseboard	15		
Kitchen C	Windows and components	8	2	
Kitchen AB	Doors and components	15	2	
Kitchen A	Door components	10	1	
Kitchen B	Closet components	15	1	
Kitchen B	Closet door and components	20		
Attic stairway C	Door and jamb	15		
Room 1 A	Windows and components	8	3	
Room 1 ABCD	Baseboard	30		
Room 1 D	Arch casing	14		
Room 1 C	Door and components including dormer	22		
Room 1 D	Door and components	15		
Room 1 D	Closet door and components	15		
Room 1 D	Closet components	8		
Room 2 AB	Windows and components	8	2	
Room 2 ABCD	Baseboard	25		
Room 2 D	Door and components including dormer	22	1	
Room 3 B	Door and components including	22	1	

INTERIOR

General note: *If any interior inaccessible components (paneling, drop ceiling, wall boards, etc.) are ever removed, all painted surfaces must be assumed positive.*

Room/Location	Component(s)	Square Feet	Quantity	Assumed Positive (check if yes)
	dormer			
Room 3 C	Door and components	15	1	
Room 3 C	Closet door and components	15	1	
Room 3 C	Closet components	10		
Room 3 D	Windows and components	5	2	
Room 3 ABCD	Baseboard	20		

Staff person to contact for more information regarding risk assessment:

Pat Lynch
South Bend Heritage
803 Lincolnway West
South Bend, IN 46616
Phone: 574-289-1066
patlynch@sbheritage.org

Person who prepared this Summary Notice:

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March 28, 2022