

**CITY OF NORWICH
OFFICE OF DEVELOPMENT
23 UNION STREET
NORWICH, CONNECTICUT 06360**

**CITY OF NORWICH
PROPERTY REHABILITATION &
LEAD PAINT HAZARD CONTROL
PROGRAMS
Project LP1641-RP1416**

**5 Burton Avenue
Norwich, CT. 06360**

PROJECT SPECIFICATION

**Bid 1-Lead Paint Hazard Control
Bid 2- Heating**

**CITY OF NORWICH
INVITATION TO BID PROPERTY REHABILITATION & LEAD PAINT
HAZARD CONTROL PROGRAMS**

**Bid for: LP1641-RP1416
5 Burton Avenue
Norwich CT 06360**

**Bid 1-Lead Paint Hazard Control
Bid 2-Heating**

Bids are being sought for the project for the property located at:
The residence at

5 Burton Avenue

This project is being funded through the Property Rehabilitation Program and/or HUD Lead Based Paint Hazard Control in Priority Housing Program. Contractors must be aware that the City of Norwich is an Equal Opportunity Employer. Contract documents including the lead abatement plan and property rehabilitation specifications may be obtained from the Office of Community Development, 23 Union Street, Norwich, CT. Office hours are from 8:30 AM to 4:30 PM, Monday through Friday. **A pre-bid conference will be held on Friday June 14, 2019 at 10:00 AM at the project location. Attendance at that meeting is recommended to bid on this project.**

Sealed bids will be received at the Office of Community Development, 23 Union Street, Norwich, CT until 4:00 PM, on Friday, June 21, 2019, at which time they will be opened and read aloud. The City of Norwich reserves the right to reject any and all bids, or any part of any bid where such action is deemed to be in the best interest of the City.

**EQUAL EMPLOYMENT/OPPORTUNITY
AFFIRMATIVE ACTION
FAIR HOUSING AGENCY**

CITY OF NORWICH
OFFICE OF DEVELOPMENT
23 UNION STREET
NORWICH, CONNECTICUT
860-823-3770

SPECIFICATIONS FOR THE PROJECT KNOWN AS:

5 Burton Avenue
Norwich, CT 06360

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GENERAL BIDDING INSTRUCTIONS:

1. The contractor is to obtain and review the Project Specifications and prepare a quotation for all work specified on the Company Letterhead and the enclosed bid form.
2. Contractors are urged to attend the Pre-Bid conference on **06-14-19 At 10:00 a.m.** Failure to attend the Pre-Bid conference may result in incomplete bid information.
3. Bid proposals are to be submitted in a sealed envelope addressed as follows:

Community Development, Property Rehabilitation Program
Bid Project: #LP1641-RP1416 5 Burton Avenue
-On the outside front of the envelope-

4. **The sealed bid proposals will be received until 4:00 PM on 06-21-19,** at the Office of Community development which time they will be opened and read aloud.
5. It is the contractor's responsibility to ensure they have all the project addendums and changes made to the scope of work prior to the bid due date. Copies of the addendum will be available at the city offices. Copies of addendum are to be attached with each bid. Failure to attach the addendum sheets will disqualify the bidder.

The information contained in this bid package is for the purpose of providing general project specifications of the items included in the scope of work. Code compliance work required by the local building officials and fire marshal will be limited to those items directly relating to lead abatement activities. All other code compliance issues will be the responsibility of the property owner, and will not be funded under this program.

Funding provided under this program will be in the form of a two party check made out to the Property Owner and the Contractor. The Property Owner will authorize the release of the check by personally signing it at the City of Norwich Office of Development. The contractor may then pick up the check or notify the City to mail it to the contractors address listed herein. Contractors should allow a minimum of 15 days for payment of approved invoices. The contract documents further describe the payment process.

Items not included in this specification, that are required for a complete installation or operation are considered part of this specification. All issues pertaining to code compliance should be directed to the Building Official. It is the responsibility of the contractor to secure and pay for all required permits, and terminate all required permits with inspections required by the permitting authority. Copies of all permits to be provided to the City at the time of issue and release.

Prior to the start of any construction activities, the contractor must request a pre-abatement inspection which will review the containment preparations, licensure, and proper set up of construction activities and safety equipment, if the work Specification requires it.

**NOTICE OF INVITATION TO BID
GENERAL INFORMATION**

PROJECT NAME: LP1641-RP1416
ADDRESS: 5 Burton Avenue
Norwich, Connecticut, 06360

OWNERS NAME: Dioneris Marte & Jarman Marte
OWNERS ADDRESS: 5 Burton Avenue
Norwich CT. 06360

OWNERS PHONE NO: 860- 639- 4677
For the City of Norwich, Contact:

City of Norwich
Office of Development
23 Union Street
Norwich, CT 06360
(860) 823-3770
Wayne R. Sharkey, Property Rehabilitation, Program Manager
Office hours: Monday – Friday 8:30 am – 4:30 pm

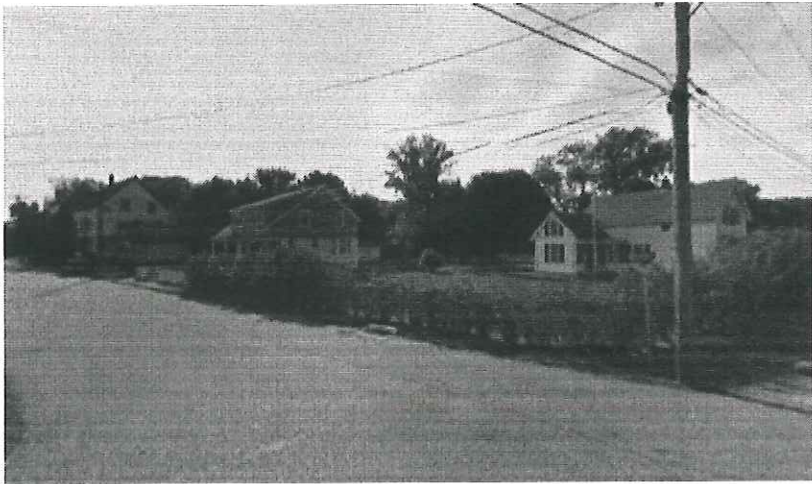
Contractor:

Additional project specifications may be obtained at:

Community Development Office
23 Union Street
Norwich, Connecticut 06360
(860) - 822 - 3770

Project specifications may be obtained during normal business hours 8:30 AM - 4:30 PM,
Monday thru Friday.

5 Burton Ave



5 Burton Ave
Norwich, CT 06360

BIDDING AND GENERAL PROGRAM POLICIES

1. The omission of any items listed in the Basic Bid Package will result in the disqualification of the bid.
2. All addendums and scope changes discussed at the bid walk through will be written up and available at the city office prior to the bid opening date. All addendum and changes to be attached to the bid forms and signed by the contractor. Failure to attach addendum and changes may result in bid disqualification.
3. Bid readings are open to the public. No bid documents will be made available to contractors or the public without supervision at the bid opening. Results of the bidding will be available at the Office of Development the following business day.
4. The City of Norwich reserves the right to reject any bid when it is deemed to be in the best interest of the City and/or the property owner. The City of Norwich further reserves the right to accept or reject portions of any bid when it is deemed to be in the best interest of the City and or the property owner.
5. Disputes and protests:
 - a. If a contractor feels that a bidder has submitted an incomplete bid, or has evidence of other improprieties that negatively impact their own qualified bid, they may file a protest with the City of Norwich, Office of Development within 7 calendar days of the Bid opening.
 - b. Such notice shall be in writing and include copies of evidence required to prove or disprove the questionable bids.
 - c. Bid protests will not be accepted by unqualified bidders, or bidders who have been disqualified for incomplete bids.
 - d. All bid protests will be reviewed by program staff and the Director of Development. The decision rendered by the director of development will be final.
 - e. Contractors submitting frivolous bid protests are hereby warned that unjustified and groundless protests may result in the loss of future bidding privileges
6. Bidder Limitation Policies:
 - a. Bidders may hold no more than three active contracts between either the Lead or Rehab program. (However Contractors may request exception to this rule if they can provide assurances sufficient to the timely start and completion of project contracts.) Acceptance/denial of such a request is solely at the discretion of the Rehabilitation Specialist.
 - b. Bidders holding three open contracts, will be prohibited from future bidding until the closeout of one or more open contracts. (see- exception clause)
 - c. Contract holders that are in delinquent standing of any project completion date, may be prohibited from bidding until all delinquent projects are closed out.
 - d. New Contractors will be subject to a probationary period in which they may hold only one contract. Once a new contractor has entered into their first contract for a Property Rehabilitation or Lead Hazard Reduction project, they will not be allowed to bid further projects until the successful completion of the probationary

period. During the probationary period the Contractor will be evaluated based on their performance according to both the project contract, and overall program requirements. At the completion of the project the Program Manger will give the Contractor written notice outlining their acceptance or denial as a Contractor “in good standing”, for future Projects.

7. Lead Abatement Clearance Policies:
 - e. Both the first and second rounds of dust wipes tests are included in program costs.
 - f. Further failures will be assessed to the project contractor in the form of an \$80.00 per hour inspector fee.
 - g. All additional testing fees must be paid in full prior to the release of final payment to the contractor.

BASIC PRODUCT SELECTION ALLOWANCES:

As the most common work items for Lead Paint Hazard Control projects, the following door selection pricings will be implemented as they are applicable to each project scope.

Exterior grade door (standard sizes), hardware & trim: Max Owner selection \$500.00 per

Exterior grade door with Side lights, hardware & trim: Max Owner selection \$1,000.00 per

Interior Door slab only: Max Owner selection \$85.00 per

Interior Door, casing, trim, and hardware: Max Owner Selection \$175.00 per

Storm Doors: \$225.00

General Selections such as roof or siding colors are to documented between the Contractor and Home Owner then submitted to the Program Manager prior to start of work.

OTHER PRODUCT BIDDING REQUIRMENTS

Where Lead Paint Hazard Control, and Rehabilitation Projects include various other building products, the contractor is responsible include "Builders Grade Materials and Products, with basic selections for colors and style where applicable."

For program purposes (Builders Grade Products) shall be defined as middle grade market available building products by costs. Prior to contract signing, the Contractor, Program Manager and Property owner will meet to review and approve all product selections. NOTE: Property owners may elect to select higher grade or specialty products only at their own cost, and if such a selection does not delay the normal agreed upon schedule of work. No product alterations shall be made after contract signing unless under special circumstance, approved by Program Management.

HISTORICAL REQUIREMENTS (Windows)

Some projects that are located in National or Local historic districts must comply with the following:

- 1. All wood construction window.**
- 2. In like form and fashion of the pre-existing.**
- 3. May be simulated divide, but manufactured Mullions must be part of the factory construction of the window unit not after-market pieces.**
- 4. All windows must be primed and painted to match original.**

BASIC BID PACKAGE: Bid 1-Lead Paint Hazard Control

The City of Norwich, Office of Community Development basic bid package is enclosed and shall be submitted as follows:

1. This Instruction Sheet with signed bidders certification
2. Payment Request from filled out and totaled.
3. Non-Collusion Affidavit.
4. Proof of insurance
5. Proof of licensure as a home improvement contractor in the State of Connecticut.
6. Proof of Licensure as a Lead Abatement contractor in the State of Connecticut (if applicable)
7. Copies of all addendum sheets properly signed and filled out as directed.

*** Please note, items 3,4,5, and 6 may be submitted once annually. It is also the contractor's responsibility to insure that these items are updated as they expire. Please be aware that the submittal of items 1,2,and 7 will only constitute a complete bid package if all other items are on file and up to date with the City of Norwich.

BIDDERS CERTIFICATION

I, _____, acting on behalf of _____
A contractor registered in the State of Connecticut, have reviewed the bid requirements, bid documents and site conditions and hereby propose to complete the work specified for the amount of _____ dollars (\$ _____)

I will guarantee this price for a maximum of 15 days from the date of this proposal. I will be able to start this project on or about _____, 2019. This project is allotted **20, calendar days** to complete the specified scope, baring weather and or other excusable delays. (Note: Work items that cannot be undertaken during winter months such as exterior encapsulation or soils, shall have a completion date of no later than May 30th) I am aware that if I fail to complete the work in the time required, I may be penalized based upon the terms of the contract.

Signed by: _____ (Print Name) Date: _____

Signature: _____ Phone: _____

Contractor Name: _____

Address: _____

BASIC BID PACKAGE: Bid 2-Heating

The City of Norwich, Office of Community Development basic bid package is enclosed and shall be submitted as follows:

1. This Instruction Sheet with signed bidders certification
2. Payment Request from filled out and totaled.
3. Non-Collusion Affidavit.
4. Proof of insurance
5. Proof of licensure as a home improvement contractor in the State of Connecticut.
6. Proof of Licensure as a Lead Abatement contractor in the State of Connecticut (if applicable)
7. Copies of all addendum sheets properly signed and filled out as directed.

*** Please note, items 3,4,5, and 6 may be submitted once annually. It is also the contractor's responsibility to insure that these items are updated as they expire. Please be aware that the submittal of items 1,2,and 7 will only constitute a complete bid package if all other items are on file and up to date with the City of Norwich.

BIDDERS CERTIFICATION

I, _____, acting on behalf of _____
A contractor registered in the State of Connecticut, have reviewed the bid requirements, bid documents and site conditions and hereby propose to complete the work specified for the amount of _____ dollars (\$ _____)

I will guarantee this price for a maximum of 15 days from the date of this proposal. I will be able to start this project on or about _____, 2019. This project is allotted **20, calendar days** to complete the specified scope, baring weather and or other excusable delays. (Note: Work items that cannot be undertaken during winter months such as exterior encapsulation or soils, shall have a completion date of no later than May 30th) I am aware that if I fail to complete the work in the time required, I may be penalized based upon the terms of the contract.

Signed by: _____ (Print Name) Date: _____

Signature: _____ Phone: _____

Contractor Name: _____

Address: _____

City of Norwich, Property Rehabilitation Program

Payment Request Form				
Contractor Name:				
Authorized signature:				
PROPERTY ADDRESS:			DATE:	
5 Burton Avenue			Req. No.:	
Norwich CT. 06360				
Heating				
DESCRIPTION	BID AMOUNT	1st. REQ DATE	2nd. REQ DATE	Final REQ DATE
Permits and Fees				
Waste Disposal				
Drain and Remove tank GC				
Install stove gas line GC				
Move electrical (as needed)				
Install new Heating System				
TOTALS				
Received to Date:				
This Request:				10% Retain
Total Paid to Date			Total Retainage	
Approved by Owner			Date	
Approved by City			Date	
Approved by Contractor			Date	
PROJECT SCHEDULE:				
Proposed Start Date				

201. NON-COLLUSION AFFIDAVIT OF CONTRACTOR

State of _____)
) ss.
County of _____)

_____, being first duly sworn, deposes and says
that :

(1) He is (owner, partner, officer, representative, or agent) of

_____, (hereafter refer to as the "Contractor"), who has executed the Agreement, of which this affidavit is a part;

(2) He is fully informed respecting the preparation and contents of said Agreement and the Contract Price and all pertinent circumstances respecting such Agreement and Contract Price;

(3) Such Contract Price is genuine and not a collusive or sham price;

(4) Neither the Contractor nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affidavit, has in any way colluded, conspired, connived, or agreed, directly or indirectly, with any other contractor, bidder, firm or person to submit a collusive or sham price or bid in connection with such work, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other contractor, bidder, firm or person to fix the price or prices offered by the Contractor and accepted by the owner, or to fix the offered price of any other bidder, or to secure through collusion, conspiracy, connivance or unlawful agreement any advantage against the Owner and/or the City or any person interested in this agreement; and

(5) The price or prices offered by the contractor and accepted by the Owner as the Contract price is fair and proper and is not obtained by any collusion, conspiracy, connivance or unlawful agreement on the part of the Contractor or any of its agents, representatives, owners, employees or parties in interest, including this affiant.

(Seal, if corporation) _____

By: _____

Title: _____

Subscribed and sworn to before me this _____ day of

_____, 20_____.

***** General Acknowledgement: This Affidavit is to apply to all projects, bid through the City of Norwich, Community Development Center. (2019)**

BY

REHABILITATION PROGRAM:

5 Burton Avenue

HEATING (General Instructions and requirements)

Existing heating system: Contractor to include removal of existing Heating systems and Cast Iron Radiators.

Notes: Owner will keep the existing oil fired boiler and cast Iron Radiators. Contractor is responsible to disconnect all hardware and move to a basement location determined by the Home Owner.

- Drain and remove Oil tank.
- Install a new gas line from the new main line to the kitchen stove area for future use.
- Contractor to identify and include in the Base bid, any relocation of electrical outlets as may be required for new baseboard installation.

Install (#1) new combination, on demand, natural gas fired, hot water heating unit “Stainless steel heat exchanger”, (2 Zone configuration 1st and 2nd Floor, include new electronic thermostats, locations in coordination with Home Owner)

Domestic Capacity (GPM)-Highest available for the sized unit.

Contractor to install all new hot water baseboards (white/off white)

Note: Floor penetrations left from removal of cast iron radiators will be patched by a future contract.

Basic Product Requirements

(Noritz, Navien, Rinnai, or approved equal.)

Direct vent with BTU/capacity based on a heat loss analysis or equivalent assessment approved by the local Building Department. Existing vent openings to chimneys are to be capped as required. Use of existing chimneys for the purpose of venting may be possible based on a Building Department inspection/approval. However base bids are to be submitted with direct venting to the exterior without use of the existing chimney or chimney's.

(94% AFUE Minimum- Energy Star rating required.)

***Additional Contractor Inclusions-**

Complete installation to include all hardware and labor required for the installation, direct venting, and connection of domestic hot water through the new unit. All costs associated with connection to utilities where they enter the home, such as electrical, or gas, are to be included in the base bid. Contractors are expected to include any modifications to access these utilities based on the location to the new installation. Include venting, draining of any existing hot water tanks where required. Include removal and securing of any chimney vented appliance if applicable.

General Notes: Contractors are responsible for coordinating with N.P.U. and the local Building Department for all required inspections/testing as may be required. It is the contractor's responsibility to account for the general conditions and requirements per project based on a thorough inspection at each on site meeting.

Connecticut Lead Paint Solutions, LLC

1245 Hebron Avenue
Glastonbury, CT 06033
860-633-3330
CT License #2124
andrew@ctleadpaint.com

Lead Paint Inspections & Testing
Consulting & Cost Analysis
Abatement/Management Plans
Abatement & Clean-up

Lead Paint Inspection Report and Lead Hazard Assessment

Connecticut Lead Consultant and Contractor License #002124
Lead Inspector/Risk Assessor, CT #002179

This report is prepared for;
City of Norwich
Lead Paint Hazard Control Program
23 Union St
Norwich, CT 06360

The property inspected;
5 Burton Ave
Norwich, CT 06360

Owners; Dioneris Marte

The testing instrument used is a Niton XLp 300A Lead Paint, Spectrum Analyzer, serial #16387. A reading of 1.0 milligrams lead per square centimeter of surface ($1.0\text{mg}/\text{cm}^2$) or greater is defined as a toxic level of lead, by the State of Connecticut, Dept. of Public Health, Regulations for Lead Poisoning Prevention and Control, 19a-111-1a. The inspection protocol as detailed in Chapter 7 of the HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (2012 Revision) was used for this inspection. The testing mode is K+L Spectrum.

At the beginning and end of the inspection and after four hours of testing, calibration tests are done on known control standards and the readings recorded to ensure the accuracy of the testing device. The calibration lines on the data sheets provides the measured lead concentration of the control standards (in the Condition Column) and whether the lead is at the surface or buried under non-lead paint.

The testing protocol is to test representative samples of various building components or sub-components per room or area. The test result for the representative sample is then applied to the other similar component(s) in that room or area. Refer to the floor plan attach toward the end of this report for the location of the rooms and walls sides (A, B, C, D).

Any lead reading $1.0\text{mg}/\text{cm}^2$ or greater is positive for toxic levels of lead and the line for that reading is in **red print** on the data sheets.

This inspection is for lead in paint primarily. The paint was tested on site. Dust and soil samples were also collected for analysis of lead concentrations by accredited laboratories.

The inspection was done on April 01, 2019.

The property inspected is a single-family house built in 1923. All interior rooms or areas were fully inspected including the Basement Stairs and all areas in the basement.

1A

Some of the interior surfaces tested in the house were positive for lead-based paint (LBP). Most of the positive surfaces were intact.

Most window sashes (the part of the window which contains the glass and is movable) in the house have been replaced with either vinyl replacement units. There are only a few remaining wood windows.

The exterior of the house is completely covered with vinyl siding and aluminum window casings and upper trim (exterior soffits and fascia trim). Some painted surfaces tested on the exterior of the front porch and other exterior surfaces were positive for LBP. There are painted and positive exterior wood trim (Window Blind Stops) adjacent to the vinyl windows.

The detached garage was tested on the exterior only. All painted surfaces tested were negative for LBP.

Lead in Dust and Soil Assessment

Six dust wipe samples were collected for analysis of lead concentrations by an accredited laboratory. Three dust wipe samples (DW-2, 5 and 6) were over the limits set by HUD for risk assessment testing, therefore failing. The limits must not exceed $10\mu\text{g}/\text{ft}^2$ (micrograms lead per square foot of surface area) for floors and $100\mu\text{g}/\text{ft}^2$ for window sills and wells. These samples were collected in accordance with the collection protocol as stated in the HUD Guidelines.

One soil sample was collected for analysis of lead concentrations by an accredited laboratory. It was a composite sample collected from bare soil with-in one foot of the perimeter of the foundation or the concrete pad from two sides of the house. The test result was 760ppm lead.

The Federal EPA's section 403 Guidelines for soil concentrations are determined by the land use by children. If the area is expected to be used by children, various interim controls to prevent contact between children and contaminated soil are recommended for soil lead levels above 400ppm but less than 5000ppm. Some action will be required at this site.

All the test results are detailed on the data sheets for the inspection.

If you have any questions on this report, please do not hesitate to contact me.



Andrew Miller
Lead Inspector/Risk Assessor, CT #002179
April 17, 2019

How to read the data sheets

Starting from the left side column.

Index	The instrument assigns a number to every reading.
Fl.	Floor level
Room	Indicated which room or area was tested. The room or area is also detailed on the floor plan.
Side	The side of the room that faces the street is the A Side, the B side is clockwise to the A wall, the C wall is opposite the A wall and so on. For the exterior the A side is the front facing the street, the B side is clockwise, the C side is the rear ect. See attached floor plan for more details.
Component	Indicates which building component was tested, window, door, wall ect. Many components have sub-components such as a window <i>casing</i> or window <i>sash</i> . If there is more than 1 similar building component on a wall in a room or area, than the component may be further described as being the Lft for left, Ctr for center or Rht for right. This would be as you face the wall.
Substrate	Indicates what building material the component was constructed of. Not always accurate for drywall or plaster walls.
Color	Indicates the color of the test surface. The color selected is influenced by many factors including lighting, contrasting colors, smoke films and others.
Condition	Indicates the condition of the paint film or the substrate. The ratings are as follows; Intact, a paint film with no cracked or peeling paint; Fair, the paint film is cracked or chipped but paint chips can not be picked off; Poor, the paint film is cracked or chipped and paint chips can be picked off; Peeling; the paint film is very loose and can fall off with little or no external effort; Defective-Sub, defective substrate. The worse visible condition is noted. Substrate conditions are only listed if it affects the condition of the paint film.
Result	Indicates the results of that test. Either Positive, equal to or greater than 1.0 milligrams lead per square centimeter of surface ($1.0\text{mg}/\text{cm}^2$) Negative meaning below the action level of $1.0\text{mg}/\text{cm}^2$ or Null if the reading was interrupted and not completed. The incomplete reading is almost always followed by a complete reading from the same surface. All positive reading lines are in color print.
PbC	This is the range of the lead concentration in the dry paint. The testing instrument narrows the reading down to plus or minus from the main (1^{st}) number.

On the data sheets any lead reading $1.0\text{mg}/\text{cm}^2$ or greater is positive for lead-based paint and the line for that reading is in color print. The calibration readings are from the known control standards and not from any painted surface on the property tested. Even a property that has been certified as being “free of lead-based paint” will still have positive calibration readings listed on the report.

Index	FL	ROOM	SIDE	COMPONENT	SUBSTRATE	COLOR	CONDITION	Results	PbC
1				Calibration- Surface			1.53mg/cm ²	Positive	1.60 ± 0.40
2				Calibration- Surface			1.04mg/cm ²	Positive	1.00 ± 0.10
3				Calibration- Surface			1.04mg/cm ²	Positive	1.10 ± 0.10
4				Calibration- Surface			1.04mg/cm ²	Positive	1.10 ± 0.10
5				Calibration- Surface			0.01mg/cm ²	Negative	0.00 ± 0.02
6	1st	Room 1	A	Window Sill	Wood	White	Intact	Positive	9.80 ± 7.20
7	1st	Room 1	A	Window Casing	Wood	White	Intact	Positive	12.40 ± 9.50
8	1st	Room 1	A	Window Sash Int.	Wood	White	Intact	Positive	13.70 ± 9.70
9	1st	Room 1	A	Window Sash Upc	Wood	White	Intact	Positive	6.80 ± 3.80
10	1st	Room 1	D	Window Sill Rht	Wood	White	Intact	Positive	12.40 ± 4.80
11	1st	Room 1	D	Window Casing	Wood	White	Intact	Positive	11.40 ± 8.00
12	1st	Room 1	D	Window Sill Lft	Wood	White	Intact	Positive	2.00 ± 0.70
13	1st	Room 1	D	Window Casing	Wood	White	Intact	Positive	11.00 ± 4.00
14	1st	Room 1	A	Door	Wood	Beige	Defective	Positive	12.00 ± 9.30
15	1st	Room 1	A	Door Casing	Wood	White	Defective	Positive	9.50 ± 5.10
16	1st	Room 1	A	Door Jamb	Wood	White	Defective	Positive	3.60 ± 2.20
17	1st	Room 1	C	Door Rht	Wood	White	Intact	Positive	10.00 ± 7.30
18	1st	Room 1	C	Door Jamb	Wood	White	Intact	Positive	13.10 ± 9.90
19	1st	Room 1	C	Closet Door	Wood	White	Intact	Negative	0.00 ± 0.02
20	1st	Room 1	C	Closet Casing	Wood	White	Intact	Negative	0.00 ± 0.02
21	1st	Room 1	C	Closet Jamb	Wood	White	Intact	Negative	0.00 ± 0.03
22	1st	Room 1	C	Closet Cleat	Wood	White	Intact	Negative	0.00 ± 0.02
23	1st	Room 1	C	Closet Shelf	Plywood	Unpainted	Intact	Negative	0.00 ± 0.02
24	1st	Room 1	C	Closet Wall	Drywall	Wallpaper	Intact	Negative	0.01 ± 0.02
25	1st	Room 1	C	Stair Stringer	Wood	White	Intact	Positive	8.10 ± 6.60
26	1st	Room 1	C	Stair Newel Post	Wood	White	Intact	Positive	11.70 ± 8.10
27	1st	Room 1	B	Column	Wood	White	Intact	Positive	10.90 ± 7.80
28	1st	Room 1	B	Opening Casing	Wood	White	Intact	Positive	9.90 ± 7.30
29	1st	Room 1	B	Wall - Lower	Wood	White	Intact	Positive	9.20 ± 3.70
30	1st	Room 1	C	Baseboard	Wood	White	Intact	Positive	10.00 ± 7.60
31	1st	Room 1	A	Radiator	Metal	White	Intact	Negative	0.03 ± 0.06
32	1st	Room 1	A	Radiator	Metal	White	Intact	Negative	0.04 ± 0.07
33	1st	Room 1	D	Fireplace Mantel	Wood	Brown	Intact	Negative	0.23 ± 0.12
34	1st	Room 1	D	Fireplace Trim	Wood	Brown	Fair	Negative	0.17 ± 0.14
35	1st	Room 1	C-D	Pipe	Metal	White	Intact	Negative	0.00 ± 0.02
36	1st	Room 1	A	Wall	Plaster	Bone	Intact	Negative	0.60 ± 0.10
37	1st	Room 1	B	Wall	Plaster	Bone	Intact	Negative	0.60 ± 0.40
38	1st	Room 1	C	Wall	Plaster	Bone	Intact	Negative	0.60 ± 0.10
39	1st	Room 1	D	Wall	Plaster	Bone	Intact	Null	1.20 ± 0.40
41	1st	Room 1	D	Wall	Plaster	Bone	Intact	Negative	0.50 ± 0.10
43	1st	Room 1	C	Ceiling	Drywall	White	Intact	Negative	0.00 ± 0.02
44	1st	Room 2	A	Window Sill	Wood	White	Intact	Positive	5.80 ± 3.10
45	1st	Room 2	A	Window Casing	Wood	White	Intact	Positive	5.50 ± 3.40
46	1st	Room 2	A	Window Sash Int.	Wood	White	Intact	Positive	7.30 ± 4.30
47	1st	Room 2	B	Window Sill	Wood	White	Intact	Positive	6.90 ± 3.80
48	1st	Room 2	B	Window Casing	Wood	White	Intact	Positive	5.90 ± 3.50
49	1st	Room 2	C	Opening Casing	Wood	White	Intact	Negative	0.00 ± 0.02
50	1st	Room 2	C	Opening Casing	Wood	White	Intact	Negative	0.00 ± 0.02
51	1st	Room 2	D	Opening Casing	Wood	White	Intact	Positive	5.20 ± 3.30
52	1st	Room 2	D	Bookcase Shelf Lft	Wood	White	Intact	Negative	0.04 ± 0.07
53	1st	Room 2	D	Bookcase Shelf Lft	Wood	White	Intact	Negative	0.06 ± 0.15
54	1st	Room 2	D	Bookcase Frame	Wood	White	Intact	Positive	6.50 ± 3.70

Index	FL	ROOM	SIDE	COMPONENT	SUBSTRATE	COLOR	CONDITION	Results	PbC
55	1st	Room 2	B	Baseboard	Wood	White	Intact	Positive	6.30 ± 3.80
56	1st	Room 2	C	Baseboard	Wood	White	Intact	Positive	5.10 ± 2.20
57	1st	Room 2	B	Radiator	Metal	White	Intact	Negative	0.02 ± 0.04
58	1st	Room 2	B	Pipe	Metal	White	Intact	Negative	0.08 ± 0.12
59	1st	Room 2	A	Wall	Plaster	Bone	Intact	Positive	2.00 ± 0.90
60	1st	Room 2	B	Wall	Plaster	Bone	Intact	Positive	1.80 ± 0.70
61	1st	Room 2	C	Wall	Drywall	Bone	Intact	Negative	0.00 ± 0.02
62	1st	Room 2	C	Wall	Drywall	Bone	Intact	Negative	0.01 ± 0.04
63	1st	Room 2	D	Wall	Plaster	Bone	Intact	Positive	2.00 ± 0.90
64	1st	Room 2	A	Ceiling	Drywall	White	Intact	Negative	0.00 ± 0.02
65	1st	Room 3	C	Window Sill	Wood	White	Intact	Positive	10.20 ± 7.50
66	1st	Room 3	C	Window Sill	Wood	White	Intact	Positive	12.40 ± 4.90
67	1st	Room 3	D	Window Sill Lft	Wood	White	Intact	Positive	11.00 ± 1.60
68	1st	Room 3	D	Window Casing	Wood	White	Intact	Positive	12.30 ± 5.60
69	1st	Room 3	D	Window Sill Ctr	Wood	White	Intact	Positive	12.10 ± 8.40
70	1st	Room 3	D	Window Casing	Wood	White	Intact	Positive	10.10 ± 7.60
71	1st	Room 3	A	Door Rht	Wood	White	Intact	Positive	11.50 ± 8.00
72	1st	Room 3	A	Door Casing	Wood	White	Intact	Positive	12.50 ± 8.70
73	1st	Room 3	A	Door Jamb	Wood	White	Intact	Positive	12.10 ± 8.50
74	1st	Room 3	B	Door	Wood	Brown	Intact	Negative	0.01 ± 0.04
75	1st	Room 3	B	Door Casing	Wood	White	Intact	Positive	10.00 ± 7.60
76	1st	Room 3	B	Door Jamb	Wood	White	Intact	Negative	0.00 ± 0.02
77	1st	Room 3	B	Pipe	Metal	White	Intact	Negative	0.03 ± 0.07
78	1st	Room 3	D	Radiator	Metal	White	Intact	Negative	0.02 ± 0.04
79	1st	Room 3	C	Baseboard	Wood	White	Intact	Positive	11.20 ± 8.90
80	1st	Room 3	D	Baseboard	Wood	White	Intact	Positive	13.10 ± 9.50
81	1st	Room 3	A	Wall	Drywall	Off-White	Intact	Negative	0.00 ± 0.02
82	1st	Room 3	B	Wall	Drywall	Off-White	Intact	Negative	0.00 ± 0.02
83	1st	Room 3	C	Wall	Plaster	Wallpaper	Intact	Negative	0.50 ± 0.10
84	1st	Room 3	D	Wall	Drywall	Off-White	Intact	Negative	0.00 ± 0.02
86	1st	Room 3	D	Ceiling	Drywall	White	Intact	Negative	0.00 ± 0.02
87	1st	Kitchen	B	Window Sill	Wood	Varnish	Fair	Negative	0.00 ± 0.02
88	1st	Kitchen	B	Window Casing	Wood	Varnish	Intact	Negative	0.00 ± 0.02
89	1st	Kitchen	C	Window Sill	Wood	White	Intact	Positive	3.40 ± 1.00
90	1st	Kitchen	C	Window Casing	Wood	White	Intact	Positive	4.80 ± 2.00
91	1st	Kitchen	A	Opening Jamb	Wood	Varnish	Intact	Negative	0.00 ± 0.02
92	1st	Kitchen	A	Door Threshold	Wood	Varnish	Intact	Negative	0.00 ± 0.02
93	1st	Kitchen	C	Door Threshold	Wood	Varnish	Intact	Negative	0.17 ± 0.44
94	1st	Kitchen	C	Door Threshold	Wood	Varnish	Intact	Negative	0.05 ± 0.11
95	1st	Kitchen	C	Opening Casing	Wood	White	Intact	Positive	6.10 ± 4.70
96	1st	Kitchen	C	Opening Jamb	Wood	White	Intact	Positive	6.70 ± 3.10
97	1st	Kitchen	D	Door	Wood	Brown	Intact	Negative	0.00 ± 0.02
98	1st	Kitchen	D	Door Jamb	Wood	White	Intact	Positive	5.20 ± 2.20
99	1st	Kitchen	D	Door Casing	Wood	Varnish	Intact	Negative	0.00 ± 0.02
100	1st	Kitchen	C	Baseboard	Wood	Varnish	Intact	Negative	0.01 ± 0.04
101	1st	Kitchen	C	Baseboard	Wood	Varnish	Intact	Negative	0.00 ± 0.02
102	1st	Kitchen	B	Cabinet Door Lwr	Wood	Varnish	Intact	Negative	0.03 ± 0.12
103	1st	Kitchen	B	Cabinet Body	Wood	Varnish	Intact	Negative	0.00 ± 0.02
104	1st	Kitchen	A	Wall	Drywall	Beige	Intact	Negative	0.00 ± 0.02
105	1st	Kitchen	A	Wall	Drywall	Beige	Intact	Negative	0.00 ± 0.02
106	1st	Kitchen	C	Wall - Upper	Plaster	Beige	Intact	Positive	7.60 ± 3.00
107	1st	Kitchen	C	Wall - Lower	Plaster	Beige	Intact	Positive	2.80 ± 1.50

Index	FL	ROOM	SIDE	COMPONENT	SUBSTRATE	COLOR	CONDITION	Results	PbC
108	1st	Kitchen	D	Wall	Drywall	Beige	Intact	Negative	0.00 ± 0.02
109	1st	Kitchen	C	Ceiling	Drywall	White	Intact	Negative	0.00 ± 0.02
110	1st	Bath 1	C	Window Stop	Wood	White	Intact	Negative	0.00 ± 0.02
111	1st	Bath 1	C	Window Casing	Wood	White	Intact	Positive	4.90 ± 3.10
113	1st	Bath 1	B	Door	Wood	Brown	Intact	Negative	0.00 ± 0.02
114	1st	Bath 1	B	Door Jamb	Wood	White	Defective	Positive	3.50 ± 1.70
115	1st	Bath 1	B	Door Casing	Wood	White	Defective	Positive	4.60 ± 2.90
116	1st	Bath 1	D	Door	Wood	Brown	Intact	Negative	0.00 ± 0.02
117	1st	Bath 1	D	Door Jamb	Wood	White	Intact	Negative	0.00 ± 0.02
118	1st	Bath 1	D	Door Casing	Wood	White	Defective	Positive	8.80 ± 6.00
119	1st	Bath 1	A	Door	Wood	White	Defective	Positive	8.70 ± 6.70
120	1st	Bath 1	A	Door Jamb	Wood	White	Defective	Negative	0.23 ± 0.42
121	1st	Bath 1	A	Door Casing	Wood	White	Defective	Positive	4.50 ± 2.80
122	1st	Bath 1	A	Door Jamb	Wood	Brown	Fair	Positive	11.10 ± 8.60
123	1st	Bath 1	C	Baseboard	Wood	White	Fair	Positive	4.50 ± 3.20
124	1st	Bath 1	A	Wall - Upper	Drywall	White	Intact	Negative	0.00 ± 0.02
125	1st	Bath 1	B	Wall - Upper	Drywall	Wallpaper	Intact	Negative	0.00 ± 0.02
126	1st	Bath 1	C	Wall - Upper	Drywall	Wallpaper	Defective	Positive	2.50 ± 1.00
127	1st	Bath 1	D	Wall - Upper	Plaster	Wallpaper	Intact	Positive	3.30 ± 2.00
128	1st	Bath 1	B	Wall - Lower	Paneling	White	Intact	Negative	0.00 ± 0.02
130	1st	Bath 1	C	Wall - Lower	Paneling	White	Intact	Negative	0.00 ± 0.02
131	1st	Bath 1	D	Wall - Lower	Paneling	White	Intact	Negative	0.00 ± 0.02
134	1st	Bath 1	D	Ceiling	Drywall	White	Intact	Negative	0.00 ± 0.02
135	1st	Bath 1	B	Pipe	Metal	White	Defective	Positive	7.60 ± 5.00
136	1st	Bath 1	C	Cabinet Door Lwr	Wood	White	Intact	Negative	0.00 ± 0.02
137	1st	Bath 1	C	Cabinet Body	Wood	White	Intact	Negative	0.00 ± 0.02
138	1st	Bath 1	BC	Cabinet Door Upr	Wood	White	Intact	Negative	0.02 ± 0.06
139	1st	Bath 1	BC	Cabinet Body	Wood	White	Intact	Negative	0.10 ± 0.30
141	1st	Bath 1	BC	Cabinet Shelf	Wood	White	Intact	Negative	0.12 ± 0.26
142	1st	Rear Entry	B	Door	Metal	White	Intact	Negative	0.00 ± 0.02
143	1st	Rear Entry	B	Door Jamb	Wood	White	Intact	Negative	0.00 ± 0.02
144	1st	Rear Entry	A	Opening Jamb	Wood	White	Intact	Positive	16.50 ± 11.30
145	1st	Rear Entry	D	Wall Cleat	Wood	White	Intact	Negative	0.01 ± 0.03
146	1st	Rear Entry	D	Counter Top	Plywood	Unpainted	Intact	Negative	0.00 ± 0.02
148	1st	Rear Entry	A	Wall	Drywall	White	Intact	Negative	0.00 ± 0.02
149	1st	Rear Entry	B	Wall	Drywall	White	Intact	Negative	0.00 ± 0.02
150	1st	Rear Entry	C	Wall	Drywall	White	Intact	Negative	0.00 ± 0.02
151	1st	Rear Entry	D	Wall	Drywall	White	Intact	Negative	0.00 ± 0.02
152	1st	Rear Entry	A	Ceiling	Drywall	White	Intact	Negative	0.00 ± 0.02
153	1st	Stairwell	D	Stair Stringer	Wood	White	Intact	Positive	12.00 ± 9.30
154	1st	Stairwell	C	Stair Riser	Wood	White	Intact	Positive	10.00 ± 7.50
155	1st	Stairwell	D	Stair Tread	Wood	Brown	Intact	Negative	0.60 ± 0.20
156	1st	Stairwell	D	Stair Tread	Wood	Brown	Intact	Negative	0.22 ± 0.16
157	1st	Stairwell	B	Stair Tread	Wood	Brown	Intact	Negative	0.28 ± 0.17
158	1st	Stairwell	B	Stair Railing	Wood	Brown	Intact	Negative	0.06 ± 0.06
159	1st	Stairwell	B	Stair Baluster	Wood	White	Intact	Positive	11.20 ± 8.10
160	1st	Stairwell	B	Wall	Plaster	White	Intact	Null	0.90 ± 0.30
161	1st	Stairwell	A	Stair Wallcasing	Wood	White	Intact	Null	0.00 ± 0.02
162	1st	Stairwell	B	Stair Wallcasing	Wood	White	Intact	Positive	9.70 ± 7.30
163	2nd	Stairwell	B	Stair Baluster	Wood	White	Poor	Positive	8.20 ± 4.70
164	2nd	Stairwell	C	Stair Newel Post	Wood	White	Intact	Positive	9.20 ± 6.80
165	2nd	Stairwell	B	Stair Railing	Wood	Brown	Fair	Negative	0.05 ± 0.07

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166	1st	Stairwell	D	Stair Railing	Wood	Brown	Intact	Negative	0.00 ± 0.02
167	1st	Stairwell	D	Wall	Drywall	White	Intact	Negative	0.00 ± 0.02
168	2nd	Stairwell	D	Wall	Drywall	White	Intact	Negative	0.00 ± 0.02
169	2nd	Stairwell	C	Wall	Drywall	White	Intact	Negative	0.00 ± 0.02
170	2nd	Stairwell	C	Window Sill	Wood	White	Intact	Positive	11.60 ± 8.20
171	2nd	Stairwell	C	Window Casing	Wood	White	Intact	Positive	10.20 ± 7.90
172	2nd	Stairwell	C	Window Sash Int.	Wood	White	Intact	Positive	8.70 ± 7.60
173	2nd	Stairwell	C	Window Screen	Wood	White	Intact	Negative	0.02 ± 0.02
174	2nd	Stairwell	C	Bench Top	Wood	White	Intact	Positive	10.30 ± 7.80
175	2nd	Stairwell	C	Bench Face	Wood	White	Intact	Positive	11.00 ± 7.90
176	2nd	Stairwell	B	Baseboard	Wood	White	Intact	Positive	10.30 ± 7.60
177	2nd	Stairwell	B	Radiator	Metal	White	Intact	Negative	0.02 ± 0.04
178	2nd	Stairwell	C	Floor	Wood	Brown	Intact	Negative	0.02 ± 0.04
179	2nd	Hall	A	Door Lft	Wood	Brown	Intact	Negative	0.11 ± 0.12
180	2nd	Hall	A	Door Threshold	Wood	Brown	Poor	Negative	0.21 ± 0.10
181	2nd	Hall	A	Door Casing	Wood	Brown	Intact	Positive	10.90 ± 8.60
182	2nd	Hall	A	Door Jamb	Wood	White	Intact	Positive	8.60 ± 4.70
183	2nd	Hall	A	Door Rht	Wood	Brown	Intact	Negative	0.21 ± 0.22
184	2nd	Hall	A	Door Threshold	Wood	Brown	Poor	Negative	0.17 ± 0.12
185	2nd	Hall	A	Door Casing	Wood	Brown	Intact	Positive	9.00 ± 7.10
186	2nd	Hall	A	Door Jamb	Wood	White	Intact	Positive	8.90 ± 6.90
187	2nd	Hall	B	Door	Wood	Brown	Intact	Negative	0.06 ± 0.07
188	2nd	Hall	B	Door Threshold	Wood	Brown	Fair	Negative	0.50 ± 0.20
189	2nd	Hall	B	Door Casing	Wood	Brown	Intact	Positive	9.40 ± 5.00
190	2nd	Hall	B	Door Jamb	Wood	White	Intact	Positive	12.90 ± 11.20
191	2nd	Hall	D	Door	Wood	Brown	Intact	Negative	0.10 ± 0.10
192	2nd	Hall	D	Door Threshold	Wood	Brown	Poor	Negative	0.14 ± 0.11
193	2nd	Hall	D	Door Jamb	Wood	White	Intact	Positive	8.20 ± 4.60
194	2nd	Hall	B	Baseboard	Wood	White	Intact	Positive	8.00 ± 4.40
195	2nd	Hall	A	Wall	Plaster	White	Intact	Positive	1.50 ± 0.50
196	2nd	Hall	B	Wall	Drywall	White	Intact	Negative	0.00 ± 0.02
198	2nd	Hall	D	Wall	Drywall	White	Intact	Negative	0.00 ± 0.02
199	2nd	Hall	B	Ceiling	Drywall	White	Intact	Negative	0.00 ± 0.02
200	2nd	Hall	A	Attic Cover Trim	Wood	White	Poor	Positive	8.90 ± 7.10
201	2nd	Hall	A	Floor	Wood	Varnish	Fair	Negative	0.03 ± 0.04
202	2nd	Bath 2	B	Window Sill	Wood	White	Intact	Positive	1.50 ± 0.50
203	2nd	Bath 2	B	Window Casing	Wood	Varnish	Intact	Negative	0.00 ± 0.02
204	2nd	Bath 2	C	Door	Wood	Varnish	Intact	Negative	0.06 ± 0.07
205	2nd	Bath 2	C	Door Casing	Wood	Varnish	Intact	Negative	0.00 ± 0.02
206	2nd	Bath 2	C	Door Jamb	Wood	Off-White	Intact	Positive	7.90 ± 4.50
207	2nd	Bath 2	D	Door	Wood	White	Intact	Positive	6.60 ± 4.10
208	2nd	Bath 2	D	Door Jamb	Wood	Brown	Intact	Positive	7.60 ± 6.20
209	2nd	Bath 2	D	Door Casing	Wood	Varnish	Intact	Negative	0.00 ± 0.02
210	2nd	Bath 2	C	Baseboard	Wood	Varnish	Intact	Negative	0.00 ± 0.02
211	2nd	Bath 2	B	Radiator	Metal	Brown	Intact	Negative	0.11 ± 0.16
212	2nd	Bath 2	A	Cabinet Door Lwr	Wood	Varnish	Fair	Negative	0.00 ± 0.02
213	2nd	Bath 2	A	Wall - Lower	Drywall	Bone	Intact	Negative	0.00 ± 0.02
214	2nd	Bath 2	B	Wall - Lower	Drywall	Bone	Intact	Negative	0.00 ± 0.02
215	2nd	Bath 2	C	Wall - Lower	Drywall	Bone	Intact	Negative	0.00 ± 0.02
216	2nd	Bath 2	D	Wall - Lower	Drywall	Bone	Intact	Negative	0.00 ± 0.02
217	2nd	Bath 2	A	Wall - Upper	Drywall	Wallpaper	Intact	Negative	0.00 ± 0.02
218	2nd	Bath 2	B	Wall - Upper	Drywall	Wallpaper	Intact	Negative	0.00 ± 0.02

Index	FL	ROOM	SIDE	COMPONENT	SUBSTRATE	COLOR	CONDITION	Results	PbC
219	2nd	Bath 2	C	Wall - Upper	Drywall	Wallpaper	Intact	Negative	0.00 ± 0.02
220	2nd	Bath 2	D	Wall - Upper	Drywall	Wallpaper	Intact	Negative	0.00 ± 0.02
221	2nd	Bath 2	C	Ceiling	Drywall	White	Intact	Negative	0.00 ± 0.02
222	2nd	Room 4	C	Window Casing	Wood	Beige	Defective	Positive	8.00 ± 4.50
223	2nd	Room 4	C	Window Sash Int.	Wood	Beige	Defective	Positive	9.40 ± 7.40
224	2nd	Room 4	A	Door	Wood	Varnish	Intact	Negative	0.03 ± 0.06
225	2nd	Room 4	A	Door Jamb	Wood	Bone	Intact	Positive	7.60 ± 4.30
226	2nd	Room 4	B	Closet Door	Wood	Bone	Intact	Negative	0.04 ± 0.09
228	2nd	Room 4	B	Closet Casing	Wood	Bone	Intact	Negative	0.13 ± 0.29
229	2nd	Room 4	B	Door Threshold	Wood	Bone	Poor	Negative	0.13 ± 0.23
230	2nd	Room 4	B	Closet Baseboard	Wood	Bone	Intact	Positive	6.70 ± 4.10
231	2nd	Room 4	B	Closet Cleat	Wood	Bone	Intact	Negative	0.01 ± 0.03
232	2nd	Room 4	B	Closet Cleat	Wood	Bone	Intact	Negative	0.02 ± 0.06
233	2nd	Room 4	B	Closet Wall	Plaster	Bone	Poor	Negative	0.10 ± 0.10
234	2nd	Room 4	B	Closet Floor	Wood	Varnish	Intact	Negative	0.02 ± 0.07
235	2nd	Room 4	D	Closet Wall D	Wood	Bone	Intact	Negative	0.06 ± 0.12
236	2nd	Room 4	A	Baseboard	Wood	Bone	Intact	Positive	7.10 ± 3.80
237	2nd	Room 4	D	Cabinet Door Lwr	Wood	Bone	Intact	Negative	0.15 ± 0.27
238	2nd	Room 4	C	Cabinet Door Lwr	Wood	Bone	Intact	Negative	0.09 ± 0.13
239	2nd	Room 4	C	Cabinet Body	Wood	Bone	Fair	Negative	0.16 ± 0.22
240	2nd	Room 4	A	Wall	Plaster	White	Intact	Negative	0.20 ± 0.15
241	2nd	Room 4	C	Wall	Plaster	White	Intact	Negative	0.30 ± 0.21
243	2nd	Room 4	D	Wall	Drywall	White	Intact	Negative	0.00 ± 0.02
244	2nd	Room 4	C	Ceiling	Drywall	White	Intact	Negative	0.00 ± 0.02
245	2nd	Room 5	A	Window Sill	Wood	White	Poor	Positive	11.50 ± 8.40
246	2nd	Room 5	A	Window Casing	Wood	White	Intact	Positive	7.00 ± 4.00
247	2nd	Room 5	D	Window Sill	Wood	White	Intact	Positive	9.40 ± 3.90
248	2nd	Room 5	D	Window Casing	Wood	White	Intact	Positive	6.10 ± 3.70
249	2nd	Room 5	C	Door	Wood	Brown	Intact	Positive	8.10 ± 6.60
250	2nd	Room 5	C	Door Casing	Wood	White	Intact	Positive	6.50 ± 3.80
251	2nd	Room 5	A	Closet Door	Wood	White	Intact	Positive	6.40 ± 3.60
252	2nd	Room 5	A	Closet Casing	Wood	White	Intact	Positive	7.20 ± 4.20
253	2nd	Room 5	A	Closet Cleat	Wood	White	Intact	Positive	6.20 ± 3.70
254	2nd	Room 5	A	Closet Floor	Wood	Varnish	Intact	Negative	0.22 ± 0.16
255	2nd	Room 5	A	Closet Wall	Plaster	Varnish	Intact	Negative	0.01 ± 0.02
256	2nd	Room 5	B	Baseboard	Wood	White	Intact	Positive	8.10 ± 4.40
257	2nd	Room 5	D	Radiator	Metal	Silver	Intact	Negative	0.01 ± 0.03
258	2nd	Room 5	A	Wall	Plaster	Bone	Intact	Positive	2.10 ± 1.00
259	2nd	Room 5	B	Wall	Plaster	Bone	Intact	Null	0.06 ± 0.02
260	2nd	Room 5	C	Wall	Plaster	Bone	Intact	Positive	2.10 ± 1.00
261	2nd	Room 5	D	Wall Lft	Drywall	Bone	Intact	Negative	0.01 ± 0.03
262	2nd	Room 5	D	Wall Rht	Plaster	Bone	Intact	Null	0.10 ± 0.03
263	2nd	Room 5	D	Wall Rht	Plaster	Bone	Intact	Positive	1.80 ± 0.70
264	2nd	Room 5	C	Ceiling	Plaster	White	Intact	Null	0.90 ± 0.30
265	2nd	Room 6	A	Window Sill	Wood	White	Intact	Positive	2.60 ± 1.10
266	2nd	Room 6	A	Window Casing	Wood	White	Intact	Positive	7.20 ± 2.80
267	2nd	Room 6	B	Window Sill	Wood	White	Intact	Positive	3.20 ± 2.10
268	2nd	Room 6	B	Window Casing	Wood	White	Intact	Positive	8.90 ± 7.00
269	2nd	Room 6	C-D	Door	Wood	White	Intact	Positive	5.70 ± 3.50
270	2nd	Room 6	C-D	Door Edge	Wood	Brown	Intact	Positive	5.60 ± 3.40
271	2nd	Room 6	C-D	Door Jamb	Wood	White	Intact	Positive	7.00 ± 4.20
272	2nd	Room 6	A	Closet Door	Wood	White	Intact	Positive	7.40 ± 4.40

Ind	Fl	ROOM	SIDE	COMPONENT	SUBSTRATE	COLOR	CONDITION	Results	PbC
273	2nd	Room 6	A	Closet Jamb	Wood	White	Intact	Positive	9.50 ± 7.10
274	2nd	Room 6	A	Closet Baseboard	Wood	White	Intact	Positive	9.80 ± 7.30
275	2nd	Room 6	A	Closet Wall	Plaster	White	Intact	Negative	0.01 ± 0.02
276	2nd	Room 6	B	Baseboard	Wood	White	Intact	Positive	7.30 ± 4.20
277	2nd	Room 6	A	Baseboard	Wood	White	Intact	Positive	6.80 ± 4.00
278	2nd	Room 6	B	Radiator	Metal	Silver	Fair	Negative	0.06 ± 0.09
279	2nd	Room 6	A	Wall	Plaster	Pink	Intact	Negative	0.40 ± 0.50
280	2nd	Room 6	B	Wall Rht	Plaster	Pink	Intact	Negative	0.30 ± 0.57
281	2nd	Room 6	C	Wall	Plaster	Pink	Intact	Negative	0.40 ± 0.60
282	2nd	Room 6	D	Wall	Plaster	Pink	Intact	Negative	0.30 ± 0.57
283	2nd	Room 6	B	Ceiling	Plaster	White	Intact	Null	0.00 ± 0.02
284	2nd	Room 6	B	Ceiling	Plaster	White	Intact	Negative	0.01 ± 0.02
285	2nd	Room 7	D	Window Sill	Wood	White	Intact	Positive	7.50 ± 4.40
286	2nd	Room 7	D	Window Casing	Wood	White	Intact	Positive	7.20 ± 4.30
287	2nd	Room 7	C	Closet Casing	Wood	White	Intact	Positive	9.70 ± 7.40
288	2nd	Room 7	B	Door	Wood	White	Intact	Positive	7.70 ± 4.40
289	2nd	Room 7	B	Door Edge Hinge	Wood	Brown	Intact	Negative	0.13 ± 0.13
292	2nd	Room 7	B	Door Jamb	Wood	White	Intact	Positive	6.10 ± 3.50
293	2nd	Room 7	A	Baseboard	Wood	White	Intact	Positive	8.90 ± 6.90
294	2nd	Room 7	D	Baseboard	Wood	White	Intact	Positive	11.10 ± 9.00
295	2nd	Room 7	B	Radiator	Metal	White	Intact	Negative	0.02 ± 0.04
296	2nd	Room 7	A	Wall	Drywall	Bone	Intact	Negative	0.00 ± 0.02
297	2nd	Room 7	B	Wall	Drywall	Bone	Intact	Negative	0.00 ± 0.02
299	2nd	Room 7	C	Wall	Drywall	Bone	Intact	Negative	0.00 ± 0.02
300	2nd	Room 7	D	Wall	Drywall	Bone	Intact	Negative	0.00 ± 0.02
301	2nd	Room 7	C	Ceiling	Drywall	White	Intact	Negative	0.00 ± 0.02
302	2nd	Room 7 Closet	C	Window Casing	Wood	White	Intact	Positive	8.70 ± 6.70
303	2nd	Room 7 Closet	A	Door Casing	Wood	White	Intact	Positive	10.10 ± 7.50
304	2nd	Room 7 Closet	A	Baseboard	Wood	White	Intact	Positive	9.10 ± 6.90
305	2nd	Room 7 Closet	B	Closet Shelf	Plywood	White	Intact	Negative	0.01 ± 0.03
306	2nd	Room 7 Closet	D	Closet Shelf	Wood	White	Intact	Negative	0.00 ± 0.02
307	2nd	Room 7 Closet	A	Closet Wall	Plaster	White	Intact	Negative	0.17 ± 0.22
308	2nd	Room 7 Closet	C	Closet Wall	Plaster	Bone	Intact	Negative	0.01 ± 0.02
309	2nd	Room 7 Closet	C	Closet Ceiling	Drywall	White	Intact	Negative	0.00 ± 0.02
310	2nd	Room 7 Closet	C	Closet Floor	Wood	Varnish	Intact	Negative	0.03 ± 0.06
311	1st	Base Stairs	C	Door	Wood	White	Poor	Positive	10.90 ± 7.80
312	1st	Base Stairs	C	Door Jamb	Wood	Brown	Poor	Positive	10.40 ± 8.40
313	1st	Base Stairs	B	Stair Stringer Up	Wood	Blue	Fair	Negative	0.24 ± 0.17
314	1st	Base Stairs	A	Stair Riser Up	Wood	Unpainted	Fair	Null	0.27 ± 0.61
315	1st	Base Stairs	A	Stair Riser Up	Wood	Unpainted	Fair	Negative	0.00 ± 0.02
316	1st	Base Stairs	C	Shelf	Wood	Green	Fair	Negative	0.13 ± 0.11
317	1st	Base Stairs	B	Wall	Plaster	Blue	Damaged	Negative	0.18 ± 0.05
318	1st	Base Stairs	D	Wall	Plaster	Blue	Damaged	Negative	0.14 ± 0.04
319	Base	Base Stairs	D	Stair Wallcasing	Wood	Gray	Intact	Negative	0.50 ± 0.20
320	Base	Base Stairs	B	Stair Wallcasing	Wood	Gray	Intact	Negative	0.40 ± 0.20
321	Base	Base Stairs	C	Stair Tread	Wood	Gray	Poor	Negative	0.40 ± 0.30
322	Base	Base Stairs	C	Stair Tread	Wood	Gray	Poor	Negative	0.50 ± 0.40
323	Base	Base Stairs	A	Stair Tread	Wood	Gray	Fair	Negative	0.70 ± 0.30
324	Base	Base Stairs	C	Stair Riser	Wood	White	Poor	Negative	0.30 ± 0.26
325	Base	Base Stairs	A	Chimney	Brick	Gray	Intact	Negative	0.25 ± 0.07
326	Base	Room 8	A	Wall	Drywall	White	Intact	Negative	0.01 ± 0.03
327	Base	Room 8	B	Wall	Drywall	White	Intact	Negative	0.00 ± 0.02

Index	FL	ROOM	SIDE	COMPONENT	SUBSTRATE	COLOR	CONDITION	Results	PbC
328	Base	Room 8	C	Wall	Drywall	White	Intact	Negative	0.00 ± 0.02
329	Base	Room 8	D	Wall	Drywall	White	Intact	Negative	0.00 ± 0.02
330	Base	Room 8	C	Column	Brick	White	Fair	Positive	3.50 ± 2.00
331	Base	Room 8	C	Column	Brick	White	Fair	Positive	3.00 ± 1.80
332	Base	Room 8	C-D	Door	Wood	Unpainted	Fair	Negative	0.00 ± 0.02
333	Base	Room 8	C-D	Door Jamb	Wood	Unpainted	Intact	Negative	0.00 ± 0.02
334	Base	Room 9	C	Window Casing	Wood	White	Intact	Negative	0.00 ± 0.02
335	Base	Room 9	D	Window Sill	Drywall	White	Intact	Negative	0.00 ± 0.03
336	Base	Room 9	D	Window Sash Int.	Wood	White	Intact	Negative	0.09 ± 0.23
337	Base	Room 9	D	Window Sash Ext.	Wood	Green	Peeling	Positive	10.90 ± 7.80
338	Base	Room 9	B	Door	Wood	Unpainted	Intact	Negative	0.00 ± 0.02
339	Base	Room 9	B	Column	Brick	Blue	Fair	Positive	4.40 ± 2.80
340	Base	Room 9	A	Wall Lft	Drywall	White	Intact	Negative	0.00 ± 0.02
341	Base	Room 9	B	Wall Lft	Drywall	White	Intact	Negative	0.00 ± 0.02
342	Base	Room 9	C	Wall	Drywall	White	Intact	Negative	0.00 ± 0.02
343	Base	Room 9	D	Wall	Drywall	White	Intact	Negative	0.00 ± 0.02
344	Base	Room 9	C	Ceiling	Drywall	White	Intact	Negative	0.00 ± 0.02
345	Base	Hall 2	C	Door	Wood	Unpainted	Intact	Negative	0.00 ± 0.02
346	Base	Hall 2	C	Door Jamb	Wood	White	Intact	Negative	0.01 ± 0.05
347	Base	Hall 2	A	Wall	Drywall	White	Intact	Negative	0.00 ± 0.02
348	Base	Hall 2	C	Wall	Drywall	White	Intact	Negative	0.00 ± 0.02
349	Base	Laundry Area	B	Window Sash Int.	Wood	Brown	Intact	Negative	0.07 ± 0.14
350	Base	Laundry Area	C	Window Sash Int.	Wood	Brown	Fair	Negative	0.30 ± 0.19
351	Base	Laundry Area	C	Door	Metal	White	Intact	Negative	0.00 ± 0.03
352	Base	Laundry Area	C	Door Jamb	Wood	White	Intact	Negative	0.00 ± 0.02
353	Base	Laundry Area	A	Wall	Drywall	Unpainted	Intact	Negative	0.01 ± 0.04
354	Base	Laundry Area	B	Wall	Drywall	Unpainted	Intact	Negative	0.00 ± 0.02
355	Base	Laundry Area	C	Wall	Drywall	Unpainted	Intact	Negative	0.00 ± 0.02
356	Base	Laundry Area	D	Wall	Drywall	Unpainted	Intact	Negative	0.00 ± 0.02
357	Base	Laundry Area	A	Ceiling	Drywall	Brown	Intact	Negative	0.00 ± 0.02
358	Base	Basement	B	Window Sash Int.	Wood	Brown	Intact	Negative	0.04 ± 0.10
359		Exterior	A	Door	Wood	Brown	Intact	Negative	0.04 ± 0.08
360		Exterior	A	Door	Wood	Brown	Intact	Negative	0.03 ± 0.07
361		Exterior	A	Door Jamb	Wood	White	Intact	Positive	12.00 ± 8.50
362		Exterior	A	Door Threshold	Wood	White	Intact	Positive	6.40 ± 3.90
363		Exterior	A	Porch Column Lft	Wood	Blue	Intact	Positive	9.90 ± 7.50
364		Exterior	A	Porch Column Ctr	Wood	Blue	Intact	Positive	10.70 ± 7.80
365		Exterior	A	Porch Floor	Wood	Blue	Intact	Negative	0.06 ± 0.16
366		Exterior	A	Porch Floor	Wood	Blue	Intact	Negative	0.09 ± 0.19
367		Exterior	A	Porch Rail Cap	Wood	Blue	Intact	Negative	0.30 ± 0.20
368		Exterior	B	Porch Rail Cap	Wood	Blue	Intact	Negative	0.40 ± 0.30
369		Exterior	B	Porch Rail Cap	Wood	Blue	Intact	Positive	2.00 ± 0.80
370		Exterior	A	Porch Upper Trim.	Wood	White	Intact	Positive	14.00 ± 10.20
371		Exterior	A	Porch Lattice	Wood	Blue	Intact	Negative	0.08 ± 0.12
372		Exterior	A	Porch Lattice	Wood	Blue	Intact	Negative	0.03 ± 0.07
373		Exterior	A	Porch Lattice	Wood	Blue	Intact	Positive	1.70 ± 0.60
374		Exterior	A	Porch Post	Brick	Blue	Poor	Positive	3.50 ± 2.00
375		Exterior	B	Porch Post	Brick	Blue	Poor	Null	0.30 ± 0.29
376		Exterior	B	Porch Post	Brick	Blue	Poor	Positive	3.70 ± 1.70
377		Exterior	A	Stair Wall	Brick	Blue	Fair	Negative	0.00 ± 0.02
378		Exterior	B	Ext. Foundation	Brick	Blue	Intact	Positive	3.40 ± 2.30
379		Exterior	B	Cell. Wind. Frame	Wood	White	Intact	Positive	17.40 ± 13.60

Index	FL	ROOM	SIDE	COMPONENT	SUBSTRATE	COLOR	CONDITION	Results	PbC
380		Exterior	B	Cell. Wind. Sash Rht	Wood	White	Intact	Positive	12.90 ± 10.90
381		Exterior	B	Cell. Wind. Sash Lft	Wood	White	Intact	Negative	0.29 ± 0.25
382		Exterior	B	Door	Metal	White	Intact	Negative	0.00 ± 0.02
383		Exterior	B	Door Jamb	Wood	White	Intact	Negative	0.00 ± 0.02
384		Exterior	B	Landing Railing	Metal	Black	Fair	Negative	0.11 ± 0.21
385		Exterior	B	Landing Railing	Metal	Black	Fair	Negative	0.06 ± 0.09
386		Exterior	C	Door	Metal	White	Intact	Negative	0.00 ± 0.02
387		Exterior	C	Ext. Foundation	Brick	Blue	Intact	Positive	6.00 ± 4.00
388		Exterior	C	Ext. Foundation	Brick	Blue	Intact	Positive	3.40 ± 1.70
389		Exterior	D	Ext. Foundation	Brick	Blue	Intact	Positive	4.50 ± 2.30
390		Exterior	D	Cell. Window Sill Lft	Wood	White	Intact	Negative	0.40 ± 0.30
391		Exterior	D	Cell. Window Sill Lft	Wood	White	Intact	Positive	2.50 ± 0.90
392		Exterior	D	Cell. Window Sill Rht	Wood	White	Poor	Positive	23.80 ± 14.20
393		Exterior	D	Cell. Window Sash Rht	Wood	Green	Peeling	Positive	11.80 ± 10.40
394		Exterior	C	Cell. Window Sill Lft	Wood	Blue	Intact	Negative	0.70 ± 0.30
395		Exterior	C	Cell. Wind. Frame	Wood	Blue	Intact	Positive	16.50 ± 4.70
396		Exterior	C	Cell. Wind. Frame	Wood	Purple	Poor	Positive	21.50 ± 18.30
397		Exterior	C	Cell. Wind. Sash	Wood	Purple	Poor	Positive	11.00 ± 8.30
398		Exterior	C	Post	Brick	Blue	Intact	Positive	1.40 ± 0.40
399		Garage Ext	B	Ext. Siding	Paneling	White	Intact	Negative	0.00 ± 0.02
400		Garage Ext	D	Door	Wood	White	Intact	Negative	0.01 ± 0.04
401		Garage Ext	D	Door Jamb	Wood	White	Intact	Negative	0.00 ± 0.02
402		Yard	A	Fence	Wood	White	Fair	Negative	0.00 ± 0.02
403		Yard	A	Fence	Wood	White	Fair	Negative	0.00 ± 0.02
404		Exterior	B	Window Blind Stop	Wood	White	Intact	Positive	3.90 ± 2.60
405		Exterior	C	Window Blind Stop	Wood	White	Peeling	Positive	10.60 ± 7.40
406		Exterior	D	Window Blind Stop	Wood	White	Peeling	Positive	10.00 ± 7.20
407				Calibration- Surface			1.53mg/cm ²	Positive	1.70 ± 0.10
408				Calibration- Buried			1.04mg/cm ²	Positive	1.10 ± 0.10
409				Calibration- Buried			1.04mg/cm ²	Positive	1.10 ± 0.10
410				Calibration- Buried			1.04mg/cm ²	Positive	1.20 ± 0.10
411				Calibration- Buried			0.01mg/cm ²	Negative	0.00 ± 0.03



Environmental Hazards Services, L.L.C.
 7469 Whitepine Rd
 Richmond, VA 23237
 Telephone: 800.347.4010

Lead Dust Wipe Analysis Report

Report Number: 19-04-00948

Client: CT Lead Paint Solutions Inc.
 1245 Hebron Avenue
 Glastonbury, CT 06033

Received Date: 04/05/2019
Analyzed Date: 04/10/2019
Reported Date: 04/10/2019

Project/Test Address: 19-0153; Norwich Pb Marte Assessment Tests; 5 Burton Ave; Norwich, CT 06360
Collection Date: 04/01/2019

Client Number:
 07-1566

Laboratory Results

Fax Number:
 860-633-3330

Lab Sample Number	Client Sample Number	Collection Location	Surface	Total Pb (ug)	Wipe Area (ft ²)	Concentration (ug/ft ²)	Narrative ID
19-04-00948-001	DW-1	A SIDE ROOM 2	FL	5.44	1.00	5.44	
19-04-00948-002	DW-2	A SIDE ROOM 2	SL	184	0.906	203	
19-04-00948-003	DW-3	A SIDE NEAR CLOSET ROOM 6	FL	8.18	1.00	8.18	
19-04-00948-004	DW-4	B SIDE ROOM 6	SL	45.6	0.667	68.4	
19-04-00948-005	DW-5	B SIDE ROOM 6	WW	84.6	0.608	139	
19-04-00948-006	DW-6	D SIDE ROOM 9 LOWER LEVEL	FL	35.6	1.00	35.6	

Environmental Hazards Services, L.L.C

Client Number: 07-1566
Project/Test Address: 19-0153; Norwich Pb Marte Assessment Tests; 5
 Burton Ave; Norwich, CT 06360

Report Number: 19-04-00948

Lab Sample Number	Client Sample Number	Collection Location	Surface	Total Pb (ug)	Wipe Area (ft ²)	Concentration (ug/ft ²)	Narrative ID
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Method: ASTM E-1979-17/EPA SW846 7000B
Accreditation #: CT PH-0234

Reviewed By Authorized Signatory: Melissa Kanode

Missy Kanode
 QA/QC Clerk

The Federal lead guidelines for dust clearance levels by wipe sampling: Floors (FL) - 40 ug/ft², Interior Window Sills (SL) - 250 ug/ft², Window Wells (WW) - 400 ug/ft².

Effective April 1, 2017 all existing Office of Lead Hazard Control and Healthy Homes (OLHCHH), Lead Based Paint Hazard Control (LBPHC), and Lead Hazard Reduction (LHRD) grantees will use the following dust-lead action levels and clearance action levels (or lower levels if required by local, state or tribal authorities having jurisdictions):

Dust-Lead Action Levels: Floors (FL) - ≥ 10 ug/ft², Window Sills (SL)- ≥ 100 ug/ft²
 Lead Clearance Action Levels: Interior Floors (FL) - < 10 ug/ft², Porch Floors (PFL) - < 40 ug/ft²
 Window Sills (SL)- < 100 ug/ft², Window Troughs (WW) - < 100 ug/ft²

The Reporting Limit (RL) is 5.00 ug Total Pb. Reported results are not corrected for field blanks. Dust wipe area and results are calculated based on area measurements determined by the client. All internal quality control requirements associated with this batch were met, unless otherwise noted.

The condition of the samples analyzed was acceptable upon receipt per laboratory protocol unless otherwise noted on this report. Results represent the analysis of samples submitted by the client. Sample location, description, area, etc., was provided by the client. Results reported above in ug/ft² are calculated based on area supplied by the client. If the report does not contain the result for a field blank, it is due to the fact that the client did not include a field blank with their samples. EHS sample results do not reflect blank correction. This report shall not be reproduced except in full, without the written consent of the Environmental Hazards Services, L.L.C.

ELLAP Accreditation through AIHA-LAP, LLC (100420), NY ELAP #11714.

Legend	ug = microgram	ug/ft ² = micrograms per square foot
	mL = milliliter	ft ² = square foot

19-04-00948



Environmental Hazards Services, LLC
 7469 Whitepine Road
 North Chesterfield, Virginia 23237
 804-275-4788

Due Date:
 04/10/2019
 (Wednesday)
 AE

CHAIN OF CUSTODY FORM

Date: April 03, 2019
 Company Name: CT Lead Paint Solutions, LLC
 Address: 1245 Hebron Ave.
 City, State, Zip: Glastonbury, CT 06033
 Phone: 860-633-3330
 Project Name: Norwich Pb – Marte
 Assessment Tests
 Project Address: 5 Burton Ave, Norwich, CT 06360
 Project Number: 19-0153

E-mail to:
 andrew@ctleadpaint.com
 Dates of Collections;
 April 01, 2019

Matrix	Method	Instrument	Method Detect Limits	TAT
Lead in Dust	EPA SW 846 7420	Flame Atomic Absorption	3.0 µg/wipe	three days

Lead Wipes Used ASTM E 1792 **Lead in Dust**

Sample #	Area size/ Sq. inch	Location Sample and substrate	Room or area
DW-1	144.00	Floor, A side, vinyl	Room 2
DW-2	130.50	Window sill, A side, wood	Room 2
DW-3	144.00	Floor, A side, vinyl, near closet	Room 6
DW-4	96.00	Window sill, B side, wood	Room 6
DW-5	87.50	Window well, B side, vinyl	Room 6
DW-6	144.00	Floor, D side, ceramic	Room 9, lower level
Collected	Andrew Miller	Signature <i>Andrew Miller</i>	Date: Apr. 01, 2019
Mailed by	Andrew Miller	Signature <i>Andrew Miller</i>	Date: Apr. 03, 2019
Received	<i>Greg</i>	<i>[Signature]</i>	Date: 4/5/19 1:25pm



Environmental Hazards Services, L.L.C.
 7469 Whitepine Rd
 Richmond, VA 23237
 Telephone: 800.347.4010

Lead in Soil Analysis Report

Report Number: 19-04-00946

Client: CT Lead Paint Solutions Inc.
 1245 Hebron Avenue
 Glastonbury, CT 06033

Received Date: 04/05/2019
 Analyzed Date: 04/09/2019
 Reported Date: 04/10/2019

Project/Test Address: 19-0153; 5 Burton Ave; Norwich, CT 06360
 Collection Date: 04/01/2019

Client Number:
 07-1566

Laboratory Results

Fax Number:
 860-633-3330

Lab Sample Number	Client Sample Number	Collection Location	Concentration ppm (ug/g)	Narrative ID
19-04-00946-001	SOIL-4	A AND C SIDES	760	

Method: ASTM E-1979-17/EPA SW846 7000B
 Accreditation #: CT PH-0234

Reviewed By Authorized Signatory: Deborah Britt
 Deborah Britt
 QA/QC Clerk

The Federal lead guidelines for lead in soil is 400 ug/g (ppm) in play areas, and 1200 ug/g (ppm) in bare soil in the remainder of the yard. The Reporting Limit (RL) is 10.0 ug Total Pb. All internal quality control requirements associated with this batch were met, unless otherwise noted.

The condition of the samples analyzed was acceptable upon receipt per laboratory protocol unless otherwise noted on this report. Results represent the analysis of samples submitted by the client. Unless otherwise noted, samples are reported without a dry weight correction. Sample location, description, area, volume, etc., was provided by the client. If the report does not contain the result for a field blank, it is due to the fact that the client did not include a field blank with their samples. EHS sample results do not reflect blank correction. This report shall not be reproduced except in full, without the written consent of the Environmental Hazards Service, L.L.C.

ELLAP Accreditation through AIHA-LAP, LLC (100420), NY ELAP #11714.

LEGEND ug = microgram ppm = parts per million
 ug/g = micrograms per gram

19-04-00946



Environmental Hazards Services, LLC
 7469 White Pine Road
 North Chesterfield, Virginia 23237
 804-275-4788

Due Date:
 04/10/2019
 (Wednesday)
 AE

CHAIN OF CUSTODY FORM

Date: April 03, 2019
 Company Name: CT Lead Paint Solutions, LLC
 Address: 1245 Hebron Ave.
 City, State, Zip: Glastonbury, CT 06033
 Phone: 860-633-3330
 Project Name: Norwich Pb – Marte
 Project Address: 5 Burton Ave, Norwich, CT 06360
 Project Number: 19-0153

E-mail to: andrew@ctleadpaint.com
 Dates of Collections: April 01, 2019
 Assessment Tests

Matrix	Method	Instrument	mdls	TAT
Lead in Soil	EPA846-7420	Flame Atomic Absorption	20mg/kg 20 ppm	three day

Lead in Soil

Sample #	Exterior Area	Location Sample	Comments	Lab notes
Soil - 4	Collected from bare soil along the perimeter of concrete pad or foundation	A and C sides	8 composite samples	
		Lab, please mix sample		
Collected	Andrew Miller	Sign. <i>Andrew Miller</i>	Date: Apr. 01, 2019	
Mailed by	Andrew Miller	Sign. <i>Andrew Miller</i>	Date: Apr. 03, 2019	
Received by	<i>Green</i>	Sign. <i>[Signature]</i>	Date: 4/5/19 115	

Lead Abatement Plan

Scope of work Rehabilitation Inclusion: 5 Burton Avenue

Contractor to include the following work Items-The Lead hazard Control Contractor is to include the patching and repairing of floor penetrations left from the removal of the Cast Iron radiators, which resulted of the new heating installation. Match surfaces with like materials as closely as possible. Contractor to also include in their base bid the boxing in of at least two chases from the 1st to the 2nd Floor. Chase are to be as minimally intrusive in size as possible, finished and painted to match the surrounding surfaces.

**Lead Abatement Plan
for
5 Burton Ave
Norwich, CT 06360**

A. Background Information

This abatement plan was submitted on April 22, 2019. Revised on May 16, 2019

Address of property to be abated;
5 Burton Ave
Norwich, CT 06360

This abatement plan was prepared by
Planner/Project Designer; Andrew Miller
Certificate #002129
1245 Hebron Ave
Glastonbury, CT 06033
860-633-3330

The property was inspected by;
Connecticut Lead Paint Solutions, LLC
1245 Hebron Ave
Glastonbury, CT 06033
860-633-3330
Lead Consultant Contractor License; #2124
Lead Inspector/Risk Assessor; Andrew Miller
Lead Inspector/Risk Assessor #002179
Date of inspection was April 01, 2019.

B. Owner/Owner Agent Information

The owners and agent of the house is;
Dioneris Marte
5 Burton Ave
Norwich, CT 06360
860-639-4611

C. **Resident Information**

At the time of the inspection one children under the age of Six years resided in the dwelling. The occupants will be notified at least 5 days prior to starting any work.

D. **Abatement Contractor Information**

The lead abatement contractor has not been selected yet. The Uncas Health Department will be notified when the selection has been made and before any work is started.

E. **Repairs Prior to Abatement**

No repair appear to be required prior to starting the abatement work.

F. **Abatement Techniques to be Used**

1. **Component Replacement.** Replace positive wood windows with vinyl replacement units, as needed. Replace front door unit with new fiberglass unit.
2. **Liquid Encapsulation.** Remove all defective paint, feather out all edges, wet sand and wash surface, on both the interior and exterior. Prime as required and paint with an approved encapsulating paint. The encapsulating paint must contain Bitrex.
3. **Rigid Encapsulation.** Cover positive exterior window and cellar window trim with aluminum.

The abatement contractor and/or owner must have read and follow Encapsulating Guide book when using encapsulating paints. Follow procedures for testing existing surface to ensure proper adhesion. Document all testing results. Consult with Lead Planner Project Designer if any surfaces fails test and therefore is not acceptable for encapsulation. Follow all procedure on proper preparation of surfaces that are to be encapsulated. The Lead Planner Project Designer will require the abatement contractor, if any, to provide a written and signed statement that they have read and followed the Liquid Encapsulating Guide. The guide is available online at; http://www.ct.gov/dph/lib/dph/environmental_health/lead/pdf/ec_guide.pdf.

The complete list of all areas and components to be abated, along with the methods to be used, is detailed on the attached abatement sheets.

G. **The Dates of the Abatement Project**

The estimated starting date of the abatement work is currently unknown. The Uncas Health Department will be notified 5 days prior to starting any abatement work.

H. **Notification To The Connecticut Historical Commission**

This house was built in 1923. The City of Norwich will notify the Connecticut Historical Commission, if required to do so

I. Occupant Notification Procedure

The owner or contractor will provide all tenants with the EPA guide titled; Renovate Right: Important Lead Hazard Information for Families, Child Care Providers, and Schools.

Warning signs will be posted on all entrance doors of the building while abatement work is performed. These signs will be in English only.

J. Containment of the Work Area

Interior

Six mil plastic will cover the complete floor in the work areas and be taped completely to the baseboard prior to starting any work. After abatement work is complete, roll plastic inward so all paint chips and debris are sealed in the plastic, tape closed and place in 6 mil plastic bag and tape shut. HEPA vacuum work area after plastic is removed. Cover all heating duct vents, as needed.

Exterior

Containment is required to collect all paint chips and dust that disturbed during the exterior abatement. All windows and entrance doors must be covered with plastic, until all surfaces on that side are prepared for painting and primed.

After the surface preparations and abatement are complete, un-tape the plastic from the adjacent surfaces and roll inward or collapse so all paint chips and debris are sealed in the plastic. Tape the rolled plastic closed with duct tape and dispose of in six mil plastic bag. Heпа vacuum any paint chips on the ground that were not captured by the plastic.

No person will enter or remain in a work area at any time during this project except the owner, or his agent, certified workers, enforcement officials, their designees, or the lead project/planner. People other than those listed above may enter the work area only after the area has been clean-up and vacuumed with a HEPA vacuum.

K. Cleaning After Lead-Based Paint Abatement

Clean-up of the interior areas after the abatement work is completed will be as follows; remove the polyethylene plastic by un-taping from baseboards and rolling plastic inward, overlapping itself, wrap with tape after rolling up. Spray plastic surfaces with water bottle if plastic contains paint chips or loose debris. This will reduce dust movement. Put plastic into 6 mil plastic bags and tape shut.

HEPA vacuum all uncovered floor, window sills, window wells and all horizontal surfaces in work area. Wash all vacuumed surfaces with TSP or equivalent cleaner and rinsed with clean water. Avoid contaminating the washing solution by only using a clean paper towel or rag to wash surfaces. Discard all towels or rags after using just once. Hold towel/rag in a way that hands are never in contact with TSP solution. Carpeted floor will not be washed but HEPA vacuumed twice. HEPA vacuum wood or hard surface floors again after floors are dry.

Then after waiting 4 hours after active abatement has ceased the final clean-up can begin. For final clean-up, the abatement area is HEPA vacuumed, TSP washed and HEPA vacuumed again.

After 4 hours have passed after the clean-up of the abatement work, the areas will be ready for clearance testing.

L. Waste Disposal

All the waste plastic, overhead door and paint chips that have been removed will be wrapped in clean plastic and taped-up prior to being removed from the containment area. Disposal of all lead abatement waste will be in compliance with current all local and state regulations. If the owner elects to dispose of the debris herself, and the total amount of debris is 10 cubic yard or less, she will have an exemption from the waste disposal regulations. If it is anticipated that the amount of debris will be more than 10 cubic yards, consult with the Lead Planner Project Designer prior to any waste disposal.

M. Worker Protection

The owner, and any authorized visitor, without exception, will wear required protective clothing before entering any work area where active abatement is being performed but not yet completed and cleaned.

The worker protection will be as follows:

1. Workers will wear a full Tyvek suit (or equivalent).
2. Workers will wear booties when working in the containment area or on the containment plastic.
3. A half face respirator, NIOSH approved respirators, as required by Connecticut laws with an appropriate filter, (for lead dust) will be used when removing any window or door component.

No smoking, eating or drinking is to be done in the containment areas, and; the workers will wash hands at the end of working and before eating or drinking. Hand to Mouth activities are the easiest way for workers to be exposed to lead.

N. Clearance Testing

After the abatement work is complete and the areas have been cleaned up, a visual inspection will be performed and dust wipes samples will be collected in all rooms or areas where abatement work was performed. The visual inspection and the dust wipe samples will be done by the Uncas Health Department , Connecticut Lead Paint Solutions, LLC 1245 Hebron Ave, Glastonbury, CT 06033 860-633-3330 or another licensed lead consultant. Three dust wipe samples will be collected in each interior room or area where abatement was performed, one on a floor, one on a window interior sill and one on a window well in each room or area.

The clearance levels must be less than, as follows:

Floors	10ug/ft ² (micrograms per square foot of surface)
Porch Floors	40ug/ft ² (micrograms per square foot of surface)
Window Sills	100ug/ft ² (micrograms per square foot of surface)
Windows Wells	100ug/ft ² (micrograms per square foot of surface)

A final inspection will verify that all abatement work, as detailed in the abatement plan, has been completed, and that all of the clearance dust wipe tests results are under state action levels. Verify that all debris and construction materials removed from work areas. The letter of compliance shall then be issued by the Uncas Health Department.

Lead Management Plan

A lead management plan will need to be written, explaining which areas still have lead-based paint, when and how they will be periodically monitored. The lead management plan must be sent to the Uncas Health Department for their approval. The lead management plan will also include all surfaces that have been prepared and painted with an approved encapsulating paint. This will ensure that all current and future owners of this building are aware that even though the existing lead paint is covered and abated according to regulations, there is still lead-based paint under the new encapsulating paint.

The management plan will be written after the abatement is completed, since some changes from this abatement plan may occur, due to field conditions. Any changes, however, must be approved by the Uncas Health Department.

Abatement Sheet for
5 Burton Ave
Norwich, CT 06360

Room or Area	Component, number of components, Substrate	Location	Abatement Method	Comments
1st Floor				
Room #1	Window sills and casings, 3	A and D sides	Prepare and encapsulate with an approved encapsulant	
	Window sash, 1, wood	A side	Reframe window opening, so the stain glass upper sash remains, and a new double hung vinyl sash is installed below. Prepare and encapsulate the remaining upper sash.	
	Door, door jamb and casing	A side	Replace door with a new pre-hung fiberglass unit. Reframe door opening to match the exterior opening.	
	Doors, door jamb and casing, 2, wood	C side	Door treatment, see note at end of plan, below.	
	Stair stringer and newel post, all, wood	C side	Prepare and encapsulate	
	Columns, opening casing and jamb, lower wall, all, wood	B side	Prepare and encapsulate	
	Baseboards, all, wood	All sides	Prepare and encapsulate	
Room #2	Window sills and casings, 2	A and B sides	Prepare and encapsulate	
	Window sash, 1, wood	A side	Reframe window opening, so the stain glass upper sash remains, and a new double hung sash is installed below. Prepare and encapsulate the remaining upper sash.	
	Columns, opening casing and jamb, wall, bookcase frames, all, wood	D side	Prepare and encapsulate	
	Baseboards, all, wood	All sides	Prepare and encapsulate	
Room #3	Window sills and casings, 4,	C and D	Prepare and encapsulate	Windows are VRW
	Doors, door jamb and casing, 2, wood	A side	Door treatment, see note at end of plan, below.	
	Door casing, 1, wood	B side	Prepare and encapsulate	
	Baseboards, all, wood	All sides	Prepare and encapsulate	
Kitchen	Window sill and casing, 1	C side	Prepare and encapsulate	Window are VRW
	Opening casing and jamb, 1,	C side	Prepare and encapsulate	

Abatement Plan 5 Burton Ave, Norwich, CT 06360

Room or Area	Component, number of components, Substrate	Location	Abatement Method	Comments
Kitchen (continued)	Door jamb, 1, wood	D side	Replace door jamb with new	Door and casing are neg for LBP.
Bath #1	Window casing, 1, wood	C side	Prepare and encapsulate	
	Door jamb and casing, 1, wood	B side	Replace door jamb and casing with new	
	Door casing, 1, wood	D side	Prepare and encapsulate	
	Door, door jamb and casing,	A side	Door treatment	Alternative method, Replace with new pre-hung door unit #1
	Upper wall, all, drywall	C side	Prepare and encapsulate	Alternative method, cover with 1/2 drywall, paint 2 coats #2
	Pipe, 1, metal	B side	Prepare and encapsulate	
	Baseboards, all, wood	All sides	Prepare and encapsulate	
Rear Entry	Opening casing and jamb, 1,	A side	Prepare and encapsulate	
Stairwell	Stair stringers, newel posts, balusters, wall casings, all	All sides	Prepare and encapsulate	
	Stair risers, all, wood	All side	Remove cap under treads and install luan plywood, prime 1 coat and paint 2 coats of latex. Re-install cap	Risers must be mechanically fastened.
	Window sashes, 2, wood	C side	Remove and replace with vinyl replacement units	
	Window sills and casings, 2	C side	Prepare and encapsulate	
	Bench top and face, all	C side	Prepare and encapsulate	
	Baseboards, all, wood	All sides	Prepare and encapsulate	
Hall, 2 nd fl.	Door jambs and casings, 4, wood	A, B and D sides	Prepare and encapsulate	Doors are neg for LBP, jambs are not an impact surface.
	Baseboards, all, wood	All sides	Prepare and encapsulate	
	Attic cover trim, 1, wood	A side	Prepare and encapsulate	
Bath #2	Window sill, 1, wood	B side	Prepare and encapsulate	
	Door jamb, 1, wood	C side	Remove all paint from door jamb, test with XRF to ensure readings are below regulatory limits. Prime and paint.	
	Door and door jamb, 1, wood	D side	Door treatment,	Include both edges

Lead Abatement Plan for 5 Burton Ave, Norwich, CT 06360

Room or Area	Component, number of components, Substrate	Location	Abatement Method	Comments
Room #4	Window sash, 1, wood	C side	Remove and replace with vinyl replacement units	
	Window sill and casing, 1	C side	Prepare and encapsulate	
	Door jamb, 1, wood	A side	Prepare and encapsulate	Jamb is not an impact surface
	Baseboards, all, wood	All sides	Prepare and encapsulate	Including in closet
Room #5	Window sills and casings, 2	A and D side	Prepare and encapsulate	
	Door, door jamb and casing, 1, wood	C side	Door treatment	Include both edges
	Closet door, door jamb and casing, 1, wood	A side	Door treatment	
	Baseboard, all, wood	All sides	Prepare and encapsulate	
Room #6	Window sill and casing, 2	A and B sides	Prepare and encapsulate	
	Door, door jamb and casing, 1, wood	C/D side	Door treatment	Include both edges
	Closet door, door jamb and casing, 1, wood	A side	Door treatment	
	Baseboard, all, wood	All sides	Prepare and encapsulate	Including in closet
Room #7	Window sill and casing, 1	D side	Prepare and encapsulate	
	Door, door jamb and casing, 1, wood	B side	Door treatment	Include both edges
	Closet jamb and casing, 1,	C side	Prepare and encapsulate	There is no door
	Baseboard, all, wood	All sides	Prepare and encapsulate	
Room #7 Closet	Window sill and casing, 1	C side	Prepare and encapsulate	
	Closet jamb and casing, 1,	A side	Prepare and encapsulate	There is no door
	Baseboard, all, wood	All sides	Prepare and encapsulate	
Basement stairs	Door, door jamb and casing,	C side	Door treatment	Alternative method, # 2 Replace with new pre-hung door unit
Basement				
Room #8	Column, 1, brick	C side	Prepare and encapsulate	
Room #9	Column, 1, brick	B side	Prepare and encapsulate	
	Cellar window sash	D side	Replace with vinyl unit	

Abatement Plan 5 Burton Ave, Norwich, CT 06360

Room or Area	Component, number of components, Substrate	Location	Abatement Method	Comments
Exterior				
Front Porch, 1st	Door jamb and casing, 1, wood	A side	Replace door with a new pre-hung fiberglass unit. (same as in Room 1)	
	Door threshold, 1, wood	A side	Either remove and replace with new door unit or strip off all paint and test with XRF ensure reading are below regulatory limits. If stripped, sand and varnish 2 coats of exterior poly; sand between coats	
	Porch columns, all, wood	A side	Prepare and encapsulate	
	Porch rail caps and upper trim, all, wood	All sides	Prepare and encapsulate	
	Porch posts, all, brick	All sides	Prepare and encapsulate	
	Porch lattice, all old material	All sides	Remove and replace with vinyl material	
	Stain glass sashes, 2, wood	A side	Prepare and encapsulate Then install energy panel that covers complete sash	Remove both storm window units, do not replace.
Exterior	Window blind stops, 16 approx. (adjacent to VRW)	All sides	Cover with aluminum	
	Cellar window sashes, all (approx. 4), wood	B, C and D sides	Replace with vinyl windows	Contractor responsible to include all
	Cellar window frames and sills, all (approx. 5)	B, C and D sides	Cover with aluminum	Contractor responsible to include all
Grounds	Bare soil, all	All sides	Hepa vacuum all visible paint chips and plant grass out 4 feet	Many paint chips observed under the rear stairs

Door Treatment; Remove all paint from all **friction and impact** surfaces on the door. Remove all paint from at least 2 inches from all edges on the face of the door which impacts with the door jamb (including the upper style of the door) and feather paint edges. Remove all paint from both side edges of the door (hinge and strike sides). Remove all paint from impact surfaces of door jamb. Test all stripped surfaces with XRF instrument to ensure the surfaces are below regulatory limits. Prepare other surfaces, door casings and unstripped door surfaces and encapsulate with 2 coats of an approved encapsulate. This process is called **Door Treatment**. (if jambs are impact surface they must be stripped, if not, they can be encapsulated)