

Calhoun County Land Bank Authority

Neighborhood Stabilization Program 2

Request for Proposal: Environmental Abatement Lead Based Paint – Asbestos

BID NUMBER: #04-CCLBA-2011

DATE ISSUED: February 11, 2011

DATE DUE: February 24, 2011; 3:00 PM (LOCAL TIME)

Bid will be opened publicly at this time in the Purchasing Department,
315 W. Green Street, Marshall, MI.

As part of the Michigan NSP2 Consortium, a partnership between:

Michigan State Housing Development Authority
The City of Battle Creek
Calhoun County Land Bank Authority (CCLBA)

Para una versión en Español, por favor llamar a Nina Smith – 269-781-0806



TABLE OF CONTENTS

TABLE OF CONTENTS.....	2
REQUEST FOR PROPOSALS – Risk Assessment Services INTRODUCTION	3
A. Overview.....	3
B. Time of Completion.....	3
C. Term of Contract.....	4
D. Background.....	4
E. Federal Regulations	4
PROFESSIONAL SERVICE REQUIREMENTS.....	4
A. Scope of Work	4
EVALUATION CRITERIA AND SCORING.....	6
A. Experience and Capacity.....	7
SUBMITTAL REQUIRMENTS	7
A. Letter of Interest.....	7
B. Threshold Requirements	7
C. Main Proposal	8
SELECTION PROCESS	9
QUESTIONS	9
SUBMITTAL DUE DATE.....	9
CERTIFICATION FORM NOTE	10
RFP SUBMITTAL REQUIREMENTS CHECKLIST.....	11
APPENDIX A: NSP2 MAP AND BOUNDRIES OF TARGET AREAS	12
APPENDIX B: EVALUATION SCORING MATRIX	13
APPENDIX C: SURVEYS FOR PRICING	14

REQUEST FOR PROPOSALS – RISK ASSESSMENT SERVICES

INTRODUCTION

A. Overview

This Request for Proposals (“RFP”) is being issued by the Calhoun County Land Bank Authority. THE CALHOUN COUNTY LAND BANK AUTHORITY invites the submission of proposals from Certified Abatement Companies (contractors) specializing in the abatement of asbestos prior to demolition of structures or abatement of lead based paint hazards and asbestos for rehabilitation of structures. Certified Abatement Companies with demonstrated experience in these areas and an interest in making their services available to THE CALHOUN COUNTY LAND BANK AUTHORITY are invited to respond to this RFP. “Respondents” means the companies or individuals that submit proposals in response to this RFP.

It is understood that the selected Respondent acting as an individual, partnership, corporation or other legal entity, is State licensed and certified in the abatement of hazardous materials and is capable of providing the specified services. The Respondent shall be financially solvent and each of its members if a joint venture, its employees, agents or sub-consultants of any tier shall be competent to perform the services required under this RFP document.

THE CALHOUN COUNTY LAND BANK AUTHORITY is seeking to encourage participation by respondents who are MBE/WBE or Section 3 business enterprises and has a goal for minimum MBE/WBE participation of at least 10% MBE and 10% WBE participation.

Nothing in this RFP shall be construed to create any legal obligation on the part of THE CALHOUN COUNTY LAND BANK AUTHORITY or any respondents. THE CALHOUN COUNTY LAND BANK AUTHORITY reserves the rights, in its sole discretion, to amend, suspend, terminate, or reissue this RFP in whole or in part, at any stage. In no event shall THE CALHOUN COUNTY LAND BANK AUTHORITY be liable to respondents for any cost or damages incurred in connection with the RFP process, including but not limited to, any and all costs of preparing a response to this RFP or any other costs incurred in reliance on this RFP. No respondent shall be entitled to repayment from THE CALHOUN COUNTY LAND BANK AUTHORITY for any costs, expenses or fees related to this RFP. All supporting documentation submitted in response to this RFP will become the property of the CALHOUN COUNTY LAND BANK AUTHORITY. Respondents may also withdraw their interest in the RFP, in writing, at any point in time as more information becomes known. Bids are to be firm and cannot be withdrawn for a period of thirty (30) calendar days after opening.

The CALHOUN COUNTY LAND BANK AUTHORITY has adopted purchasing policies and procedures for procurement process. For further information on this requirement, contact the Calhoun County Purchasing Department, 315 W. Green St., Marshall MI 49068 or phone 269-781-0981.

B. Time of Completion

Any contract awarded pursuant to this RFP solicitation shall agree to complete the work on or before the times outlined in the Scope of Services. Due to the time constraints necessary to fully comply with all requirements of the Neighborhood Stabilization Program, it is imperative that the successful respondent meet or exceed all deadlines. The CCLBA may select more than one service provider from the proposals submitted in order to obtain the most qualified firm(s) or individual(s) for abatement services in order to ensure timely completion of the requested services.

C. Term of Contract

Any contract awarded pursuant to this RFP solicitation shall be for a contract period up to 18 months, with the possibility of an extension. All contracts made by the successful bidder with subcontractors shall be covered by the terms and conditions of the contract. The successful bidder shall see to it that their subcontractors are fully informed in regard to these terms and conditions.

D. Background

Under the Recovery Act, Congress established the Neighborhood Stabilization Program 2 (NSP2) to stabilize neighborhoods whose viability is negatively affected by properties that have been foreclosed upon and abandoned. NSP2 provides grants to states, local governments, nonprofits and a consortium of public and or private nonprofit entities on a competitive basis.

The Michigan NSP2 Consortium received \$223,875,339. The Michigan State Housing Development Authority (MSHDA), as lead applicant, 12 city governments, and eight county land banks will work together to remove blight, address vacancy and foreclosures, and reposition neighborhoods in targeted NSP2-eligible census tracts. MSHDA allocated \$201,487,805 to place properties back in productive use and \$22,387,534 in administrative fund for MSHDA, Cities and Lands Banks to share.

The City of Battle Creek received \$4,501,000 and the Calhoun County Land Bank Authority received \$3,218,839 for a total award amount of \$7,719,839 to assist the targeted census tracts in the City of Battle Creek.

E. Federal Regulations

Award recipients implementing the Michigan NSP2 Consortium must follow the Community Development Block Grant (CDBG) Program rules and regulations, unless stated otherwise in the May 4, 2009 of the Federal Register Notice [Docket No. FR-5321-N-01] regarding [Title XII of Division A of the American Recovery and Reinvestment Act of 2009](#), which is posted on

http://www.hud.gov/offices/cpd/communitydevelopment/programs/neighborhoodspg/pdf/nsp2_nofa.pdf

Respondents are strongly encouraged to read these regulations prior to submitting their response to this RFP. All NSP2 funds must be spent on specific eligible activities no later than February 10, 2013 and 50% of NSP2 funds must be spent no later than February 10, 2012.

PROFESSIONAL SERVICE REQUIREMENTS

A. Scope of Work

THE CALHOUN COUNTY LAND BANK AUTHORITY seeks sealed proposals from Respondents to abate hazardous materials from properties located in targeted neighborhoods and census tracts in the City of Battle Creek. (*See Appendix A – NSP2 Boundaries and Map.*)

THE CALHOUN COUNTY LAND BANK AUTHORITY is interested in facilitating the acquisition of vacant/foreclosed properties from various mortgage loan servicers and through the State of Michigan tax foreclosure process for the purpose of rehabilitation, new construction, and demolition to foster neighborhood stabilization. During the program period, which ends February 10, 2013, THE CALHOUN COUNTY LAND BANK AUTHORITY anticipates up to 350 assignments across the respective NSP2 areas. Further, THE CALHOUN COUNTY LAND BANK AUTHORITY anticipates multiple requests within a short timeframe. Properties are foreclosed, and anticipated to be vacant. Arrangements will be made by THE CALHOUN COUNTY LAND BANK AUTHORITY to schedule entry to the respective properties.

Selected Respondents will be required to export completion reports and disposition receipts from an accredited landfill to THE CALHOUN COUNTY LAND BANK AUTHORITY via Excel, Word or CSV file.

LEAD BASED PAINT ABATEMENT: Abatement for lead-based paint, as stated in Federal Regulations 24 CFR Part 35.132(a), shall be abated in accordance with the methods and standards established by the State of Michigan and or the Environmental Protection Agency (EPA).

The Contractor is to perform lead abatement on all painted surfaces inside and outside of the structure; and, all accessory structures (garages, sheds, fences, etc) pursuant to the Lead Based Paint/Risk Assessment Survey which will be provided. The survey shall list the areas tested and whether lead was found. The abatement must be completed in a manner that will provide a successful “Final Clearance Examination” which shall be performed by a certified person meeting the clearance levels in accordance with the current U.S. Department of Housing and Urban Development (HUD) and/or the State of Michigan or those standards set forth by the EPA at 40 CFR 745.227(b), whichever is more stringent shall apply. Abatement of Lead Based Paint may not be required on all structures in that the rehabilitation contractor may be required to abate Lead Based Paint as part of their contract.

ASBESTOS CONTAINING MATERIALS ABATEMENT: The abatement shall be performed in accordance with the methods and standards established by the State of Michigan and or the Environmental Protection Agency (EPA).

The actual abatement shall be performed utilizing and complying with OSHA, MIOSHA, NIOSHA, MDPH, and EPA approved methods.

CAPACITY: The CCLBA, in order to meet certain deadlines, will require the successful respondent to perform 8-10 abatements per week. It is important that all respondents clearly express in their response their ability to meet these expectations.

WRITTEN REPORTS: The Contractor shall be responsible for preparing or causing to have prepared final compliance reports for payment and use by the Calhoun County Land Bank Authority or in certain cases, the City of Battle Creek.

Reports shall contain control options for either asbestos or lead based paint, depending on the type of report written.

Reports shall contain property address, abatement methods, materials abated, disposition receipts, any permits or correspondence from local or state agencies, and a letter stating that all hazardous materials pursuant to the environmental survey have been abated.

Reports are due within five (5) working days following completion of field activities. The original report shall bear the signature of a person certified in Lead Based Paint abatement or asbestos abatement which ever applies.

Contractors shall begin abatement within five days after notification and receipt of the environmental assessment survey from the Calhoun County Land Bank Authority unless directed otherwise.

ALL WORK SHALL CONFORM TO THE FOLLOWING FEDERAL REQUIREMENTS WHERE APPLICABLE

24 CFR 570.061 – Equal Opportunity and Fair Housing

24 CFR 570.602 – Affirmative Marketing

24 CFR 570.603 – Davis Bacon Wage Rates for Projects with 8 or more units
24 CFR 570.604 – Environmental Review
24 CFR 570.605 – National Flood Insurance Program
24 CFR 570.606 – Displacement, Relocation and Acquisition
24 CFR 570.607 – Lead Based Paint
24 CFR 570.609 – Debarred, Ineligible or Suspended Contractors
24 CFR 570.611 – Conflict of Interest
24 CFR 85.36 – Procurement
Executive Order 11246

Services shall be provided on an “as needed” basis. The CCLBA does not guarantee a minimum quantity. The CCLBA expects to require Lead Based Paint abatement for an unknown number of properties. The CCLBA expects asbestos abatement on approximately 200 properties. The CCLBA reserves the right to increase or decrease the quantity based on available funding or other needs during the term of the contract.

Proposals shall be guaranteed for a period of 18 months with an option to re-new for an additional 12 months or until the end of the grant period (FEB 10, 2013). Prices shall remain the same during the extended term. Any additional proposed cost must be provided as bid alternatives.

The Calhoun County Land Bank Authority reserves the right to select the contractor that best meets the CCLBA’s goals and objectives, quality levels, as well as its educational and service level expectations. The CCLBA reserves the right, in its sole discretion, to reject any/or all proposals, to waive any irregularities and technical defects contained therein, to award the contract in its entirety, in part, or not at all and/or determine which proposal is the lowest and/or best to enter into a Contract, as deemed to be in the best interest of the CCLBA. The CCLBA may select more than one service provider from the proposals submitted in order to obtain the most qualified firm(s) or individual(s) for abatement services in order to ensure timely completion of the requested services.

THE CALHOUN COUNTY LAND BANK AUTHORITY requires Lead-Based Paint and Asbestos Abatement by a qualified person certified under the Federal certification program or under a accredited State certification program.

EVALUATION CRITERIA AND SCORING

In evaluating responses to this Request for Proposal, THE CALHOUN COUNTY LAND BANK AUTHORITY will take into consideration the experience, capacity, and costs that are being proposed by the Respondent. Proposals should provide a straightforward, concise description of the proponent’s capabilities to satisfy the requirements of the RFP. The following Evaluation Criteria will be considered in reviewing submittals:

Experience in Lead Risk Assessment and Asbestos Assessment
Capability of Contractor and its Personnel

Price
Qualifications
Completeness of Response
Locality of Business
Section 3 Certification or MBE/WBE

A. Experience and Capacity

A point system is to evaluate the experience and capacity of the Respondent including locality and HUD Section 3/MBE/WBE (*See Appendix B*)

SUBMITTAL REQUIREMENTS

RFP responses must be submitted via hard copy and sent to Calhoun County Purchasing Department, 315 W. Green St, Marshall MI 49068 and clearly labeled RFP #04-CCLBA-2011. Each respondent shall submit one (1) original and two (2) copies of the required documentation in a clear, legible, and 8.5 by 11 inch format. Respondents are advised to adhere to the Submittal Requirements. Failure to comply with the instructions of this RFP will be cause for rejection of submittals.

Written questions must be submitted via email to lobrig@calhouncountymi.gov by 5:00 pm Wednesday January 26, 2011. Written answers will be provided to all potential bidders via email by 5:00 pm Friday, January 28, 2011.

THE CALHOUN COUNTY LAND BANK AUTHORITY reserves the right to seek additional information to clarify responses to this RFP. Each response must include the following:

A. Letter of Interest

Please submit a Cover Letter of Interest signed by a duly authorized officer or representative of the Respondent, not to exceed two pages in length. The Letter of Interest must also include the following information:

1. The principal place of business and the contact person, title, telephone/fax numbers and email address.
2. A brief summary of the qualifications of the Respondent and team.
3. Description of organization (i.e. Corporation, Limited Liability Company, or Joint Venture).
4. The names and business addresses of all Principals of the Respondent. For purposes of this RFP “Principals” shall mean persons possessing an ownership interest in the Respondent.
 - If the Respondent is a partially owned or fully-owned subsidiary of another organization, identify the parent organization and describe the nature and extent of the parent organization’s approval rights, if any, over the activities of the Respondent.
 - If the Respondent is a partially owned or fully-owned subsidiary of another organization, identify the parent organization and describe the nature and extent of the parent organization’s approval rights, if any, over the activities of the Respondent.
5. The Certification attached hereto at the end of this RFP and incorporated herein by reference must be signed by Respondent and attached to the Letter of Interest.

B. Threshold Requirements

These documents must be submitted and acceptable along with your proposal:

1. Certificate of Good Standing (Corporation) or Certificate of Existence (Limited Liability Company) issued by the Michigan Secretary of State (If Respondent is a joint venture, a Certificate of Good Standing or Certificate of Existence, as applicable, must be submitted for each entity comprising the joint venture.)
2. Evidence of Insurance: Commercial General Liability with limits not less than \$2,000,000; Workers Compensation and Employers Liability with limits not less than \$500,000; Automobile Liability with limits not less than \$1,000,000 per occurrence; and, Professional Liability with limits not less than \$1,000,000. The selected Contractor shall agree to indemnify and hold harmless the CCLBA, Michigan State Housing Development Authority, U.S. Department of Housing and Urban Development, and its officers, agents, and employees from any and all claims, causes, or actions, and damages of any kind, for injury to or death of any person and damages to property arising out of or in connection with the work done by the Contractor under this contract, and including acts or omissions of the CCLBA, MSHDA, HUD, or its officer, agents, or employees in connection with said contact.
3. Non-For-Profit Documentation if applicable
 - IRS 501(c)(3) determination
 - Articles of Incorporation
 - Corporate By-Laws
 - Listing of Board Members
4. Evidence of Financial Stability: All Respondents shall include their most recent financial statements with the proposal response. This information will assist and THE CALHOUN COUNTY LAND BANK AUTHORITY in determining the Respondent's financial condition. THE CALHOUN COUNTY LAND BANK AUTHORITY is seeking this information to ensure that the respondent has the financial stability and wherewithal to assure good faith performance.
5. Evidence of Lead-Based Paint/Asbestos Abatement certification under the Federal certification program or under an accredited State certification program.
6. Three (3) references of related projects, including date of project, contact person and phone number, and a brief description of the project.
7. Conflict of Interest Statement & Supporting Documentation: Respondent shall disclose any professional or personal financial interests that may be a conflict of interest in representing the CALHOUN COUNTY LAND BANK AUTHORITY. In addition, all Respondents shall further disclose arrangement to derive additional compensation from various investment and reinvestment products, including financial contracts.

C. Main Proposal

Please provide the following information:

1. Years of experience and detailed qualifications in lead-based paint - asbestos abatement and report writing in compliance with HUD standards. Capacity to produce housing and lead-based paint abatement and final compliance reports in an electronic format on a weekly basis.
2. Pricing proposal associated with each of the three environmental assessment surveys in appendix C.
3. Respondents should state whether they are an MBE/WBE or Section 3 business enterprise. If so, please provide a copy of a current MBE/WBE certification letter.

SELECTION PROCESS

The Selection Committee comprised of THE CALHOUN COUNTY LAND BANK AUTHORITY staff and the Calhoun County Purchasing Department will review qualifications in accordance with the evaluation criteria set forth herein and Michigan NSP2 Consortium objectives and policies. Proposals that are submitted timely and comply with the mandatory requirements of the RFP will be evaluated in accordance with the terms of the RFP. Any contract resulting from this RFP will not necessarily be awarded to the vendor with the lowest price. Instead, contract shall be awarded to vendor whose proposal received the most points in accordance with criteria set forth in RFP and can meet the capacity requirements.

QUESTIONS

Written questions must be submitted via email to lobrig@calhouncountymi.gov by 5:00 pm Wednesday February 16, 2011. Written answers will be provided to all potential bidders via email by 5:00 pm Friday, February 18, 2011.

SUBMITTAL DUE DATE

Responses to this RFP are due by 3 P.M. (local time) on **FEBRUARY 24, 2011**. The prevailing clock shall be www.time.gov

Each Respondent is responsible for labeling the exterior of the sealed envelope containing the proposal response with the proposal number, proposal name, proposal due date and time, and your firm's name. Hard copies must be delivered to:

Calhoun County
CCLBA
Purchasing Department
315 W. Green St.
Marshall MI 49068
ATTN: Leslie R. Obrig

LATE PROPOSALS WILL NOT BE CONSIDERED

CERTIFICATION FORM NOTE

THIS PAGE MUST BE COMPLETED AND INCLUDED WITH THE SUBMITTAL CERTIFICATION

The undersigned hereby certifies, on behalf of the Respondent named in this Certification (the “Respondent”), that the information provided in this RFP submittal to THE CALHOUN COUNTY LAND BANK AUTHORITY is accurate and complete ,and I am duly authorized to submit same. I hereby certify that the Respondent has reviewed this RFP in its entirety and accepts its terms and conditions.

(Name of Respondent)

(Signature of Authorized Representative)

(Typed Name of Authorized Representative)

(Title)

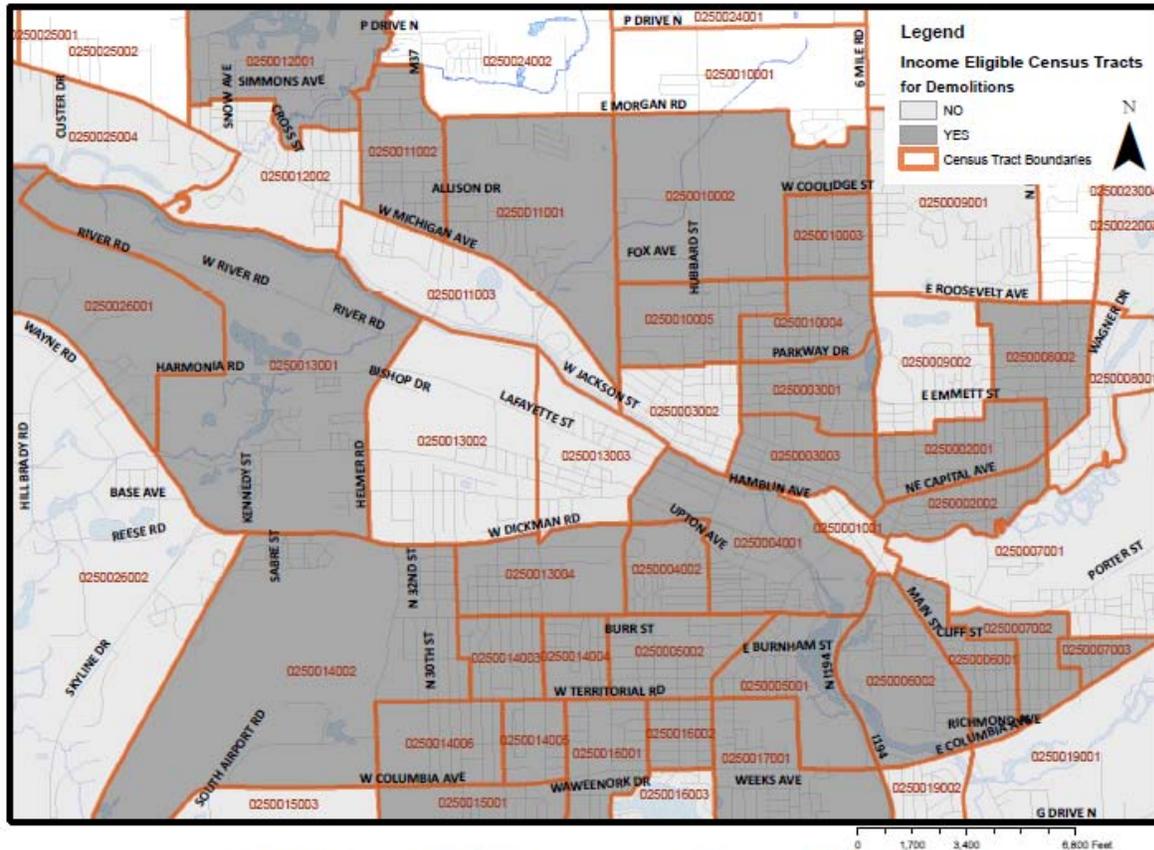
(Date)

RFP SUBMITTAL REQUIREMENTS CHECKLIST

Please provide Checklist with response to RFP

- Letter of Interest
- Certification
- Certificate of Good Standing (Corporation) or Certificate of Existence (Limited Liability Company) issued by the Michigan Secretary of State (If Respondent is a joint venture, a Certificate of Good Standing or Certificate of Existence, as applicable, must be submitted for each entity comprising the joint venture.)
- Evidence of Insurance
- Abatement of Asbestos License and or Certification
- Lead-based Paint Abatement Certification
- Evidence of Financial Stability
- References
- Conflict of Interest Statement & Supporting Documentation:
- Description of Company
- Capacity of Company
- Pricing Proposal based on the three surveys in Appendix C
- MBE/WBE, Local Hiring, HUD Section 3, if applicable
- RFP Submittal Requirements Checklist

APPENDIX A



NSP2 Income Eligible Census Tracts for Demolitions

APPENDIX B

In evaluating responses to this Request for Proposal, Calhoun County Land Bank Authority will take into consideration the experience, capacity, and costs that are being proposed by the Respondent. The following Evaluation Criteria will be considered in reviewing submittals:

D. Experience and Capacity

The point system is to evaluate the experience and capacity of the Respondent.

1. Experience in providing housing inspection and specification writing services

Less than one (1) year of experience in the abatement of Lead Based Paint and Asbestos	5 Points
One (1) to three (3) years of experience in the abatement of Lead Based Paint and Asbestos	10 Points
Greater than ten (10) years of experience in the abatement of Lead Based Paint and Asbestos	20 Points

2. Capacity to provide abatement services and ability of the firm to meet timelines.

Demonstrated capacity and experience to produce less than (5) asbestos and lead-based abatements per week.	5 Points
Demonstrated capacity and experience to produce up to (10) asbestos and lead-based paint abatements per week.	15 Points
Demonstrated capacity and experience to produce greater than (15) asbestos and lead-based paint abatements per week.	25 Points

3. Pricing Proposal

Lowest bid amount	60 Points
Next lowest bid amount	50 Points
Each additional lowest bid amount will be reduced by 10 points	

4. Local Preference

Principal Business Office Location within 20 miles of Battle Creek, MI	20 Points
Principal Business Office Location within 40 miles of Battle Creek, MI	10 Points
Principal Business Office Location outside 40 miles of Battle Creek, MI	5 Points

5. Section 3/MDE/WBE

Respondents meeting MBE/WBE requirements	10 Points
Respondents meeting HUD Section 3 requirements	10 Points

NOTE: RE APPENDIX C

APPENDIX C IS POSTED SEPARATELY IN PDF FORMAT ALONG WITH THE RFP DOCUMENT AND IS TO BE CONSIDERED AN INHERENT PART OF RFP#04-CCLBA-2011.





ANALYTICAL TESTING & CONSULTING SERVICES, INC.

***14625 Doster Road
Plainwell, Michigan 49080
Phone: 269-664-6474
FAX: 269-664-6406
E-mail: atcsinc@aol.com***

LEAD RISK ASSESSMENT REPORT FOR THE PROPERTY LOCATED AT

***202 Garfield Avenue
Battle Creek, Michigan 49017***

PREPARED FOR

***Attn: Jon Presecan
Calhoun County Treasure
315 W. Green Street
Marshall, Michigan 49068***

***REPORT PREPARED AND SUBMITTED BY
ANALYTICAL TESTING & CONSULTING SERVICES, INC.***

ON

January 7th, 2011

LAB # 6296

TABLE OF CONTENTS

- 0.0 Summary**
- 1.0 Lead Inspection Overview**
- 2.0 Visual Inspection**
- 3.0 Summary Discussion of XRF Inspection**
- 4.0 Dust Wipe Sampling**
- 5.0 Soil Sampling**
- 6.0 Friction & Impact Survey**
- 7.0 Recommendations**
- 8.0 Credentials**
- 9.0 Maps**
- 10.0 Lab Results**
- 11.0 Reevaluation Schedule**
- 12.0 Conclusion**

Appendix A: Site Location Map

Appendix B: XRF Data

Appendix C: Lab Analysis

Appendix D: Qualifications

Appendix E: Manufacturer's Performance

Characteristic Sheets

Appendix F: Standard Reevaluation Schedules



ANALYTICAL TESTING & CONSULTING SERVICES, INC.

14625 Doster Road
Plainwell, Michigan 49080
Phone: 269-664-6474
FAX: 269-664-6406
E-mail: atcsinc@aol.com

0.0 Summary

On January 3rd & 7th, 2011 a lead risk assessment was conducted by Doug Haase of Analytical Testing and Consulting Services at 202 Garfield Avenue, located in Battle Creek, Michigan. The inspected building was a single household that is vacant and is up for sale by the Calhoun County Treasurer. The 4 - bedroom household was built in the 1940s.

Most interior components of the house were found to be *negative* and *below* the regulatory for *lead standards of 1.0 mg/cm² per the XRF test results*, except for baseboards in rooms 8 & 9, the ceiling in room 2, walls in rooms 2, 3 & 8, and a number of door and window components throughout the house which tested *positive* and *above* the regulatory standards. The exact location of these components can be found in the table in the summary discussion of XRF results section and in the XRF data sheets in appendix B.

Most exterior components of the house were found to be *positive* and *above* the regulatory for *lead standards of 1.0 mg/cm² per the XRF test result*, except for the stairs window sash, ceiling and door on rear porch and ceiling on the front porch which tested *negative* and *below* the regulatory standards. The exact location of these components can be found in the table in the summary discussion of XRF results section and in the XRF data sheets in appendix B.

The lead wipe results showed that all window sills, most window wells and most floors tested *below* the regulatory standards so therefore aren't considered lead hazardous, however the window sill in room 9 and the floor in room 10 tested *above* the regulatory standards so therefore are considered lead hazardous. These lab results are found in appendix C.

1.0 Lead Inspection Overview

Doug Haase of Analytical Testing & Consulting Services, Inc. (ATCS) conducted a lead risk assessment on January 3rd & 7th, 2011 of the household located at 202 Garfield Avenue, located in Battle Creek, Michigan. Mr. Haase is a State of Michigan accredited Lead Risk Assessor; his certification number is P-0383. See Appendix E for copies of assessor qualifications.

The instrument used for this investigation was an X-ray fluorescence (XRF) NITON XLp-300A unit, serial number 24019. The NITON XRF Model XLp-300A is a hand held, portable lead detector, designed to make fast, accurate nondestructive measurements of lead concentration in lead-based paint. X-ray fluorescence is produced by exciting an atom with x-rays which causes the excited atoms to give

off its characteristic x-rays. Using the XRF, we “shoot” atoms with x-rays and capture the x-rays’ fluorescence, which we can measure to determine the identity of the atoms.

The subject property is a residential household with 4 bedrooms. This house was built in the 1940s. This house is vacant and is up for sale by the Calhoun County Treasure.

The following questionnaire is the HUD form 5.0, which details children’s habits and family use patterns for the building. The answers were generated from the household via the risk assessor.

Children/Children’s Habits

VACANT

1. (a) Do you have any children that live in your household? Yes ___ No ___
(If no children, skip to Question 5.)
(b) If yes, how many ___ Ages? ___
(c) Record blood levels, if known:
(d) Are there women of childbearing age present? Yes ___ No ___
2. Location of the rooms/areas where child sleeps, eats, and plays.

Name of child	Location of bedroom	Location of all rooms where child eats	Primary location where child plays indoors	Primary location where child plays outdoors

3. Where are the toys stored/ kept?
4. Is there any visible evidence of chewed or peeling paint on the woodwork, furniture, or toys?

Family Use Patterns

5. Which entrances are used most frequently?
6. Which windows are opened most frequently?
7. Do you use window air conditioners? If yes, where?
(Condensation often causes paint deterioration)
8. (a) Do any household members garden?
(b) Location of garden?
(c) Are you planning any landscaping activities that
Will remove grass or ground covering?
9. (a) How often is the household cleaned?
(b) What cleaning methods do you use?
10. (a) Did you recently complete any building renovations?
(b) If yes, where
(c) Was building debris stored in the yard? If yes, where?
11. Are you planning any building renovations? If yes, where?
12. (a) Do any household members work in a lead-related industry?
13. (b) If yes, where are dirty work clothes placed and cleaned?

The following report details the results of the investigation. See Appendix A for a site location map.

2.0 Visual Inspection

A visual inspection was performed on the exterior and the interior of the household to determine where deteriorated paint exists and if it contains lead. Sections of the household are labeled Side A, B, C or D. The side of the household from which the street address is given is Side A. Side B, C and D are then labeled clockwise from Side A. This labeling system applies to the exterior as well as each room in the household. Please see Appendix A for a site location map illustrating this labeling system.

The HUD Form 5.1, Building Condition Form, was used to assess the building's structural integrity as part of the visual assessment.

Condition	Yes	No
Roof missing parts of surfaces (tiles, boards, shakes, etc.)		X
Roof has holes or large cracks		X
Gutters or down-spouts broken		X
Chimney masonry cracked, bricks loose or missing, obviously out of plumb		X
Exterior of interior walls have obvious large cracks or holes, requiring more than routine pointing (if masonry) or painting	X	
Exterior siding has missing boards or shingles		X
Water stains on interior walls or ceilings	X	
Plaster walls or ceilings deteriorated	X	
Two or more windows or doors broken, missing, or boarded up		X
Porch or steps have major elements broken, missing, or boarded up		X
Foundation has major cracks, missing material, structure leans, or visibly unsound		X
*Total number	3	8

*If the "Yes" column has two or more checks, the dwelling is usually considered to be in poor condition for the purposes of a risk assessment. However, specific conditions and extenuating circumstances should be considered before determining the final condition of the dwelling and the appropriateness of a lead hazard screen.

3.0 Summary Discussion of XRF Inspection

During the risk assessment 198 XRF readings including calibrations were obtained, out of these 65 were *positive* which are listed below in the following table.

The following chart contains descriptions of components sampled with the XRF unit that tested *positive* for lead-based paint. As defined by the nature of a lead risk assessment, only areas with deteriorated paint need to be tested with the XRF unit. However, components that are in good condition will be tested if they are friction and impact surfaces, which are discussed in Section 6.

#	Room	Side	Structure	Feature	Substrate	Condition	Color	PbC	Units
15	Room 02	A	Wall	Upper	Drywall	Good	Purple	5.5	mg / cm ^2
16	Room 02	B	Wall	Upper	Drywall	Good	Purple	8.2	mg / cm ^2
18	Room 02	C	Wall	Upper	Plaster	Good	Purple	8.3	mg / cm ^2
20	Room 02	C	Wall	Lower	Plaster	Good	Green	14.4	mg / cm ^2

21	Room 02	B	Wall	Lower	Plaster	Good	Green	11.2	mg / cm ^2
22	Room 02	D	Wall	Lower	Plaster	Good	Green	11.4	mg / cm ^2
24	Room 02	C	Wall	Chair Rail	Wood	Good	White	2.5	mg / cm ^2
38	Room 02	B	Ceiling	Middle	Plaster	Fair	White	3.2	mg / cm ^2
44	Room 03	D	Wall	Middle	Plaster	Poor	Off-White	5.8	mg / cm ^2
87	Room 05 Entry	C	Door	Door	Wood	Good	White	11.9	mg / cm ^2
106	Room 07 Landing	A	Door	Casing	Wood	Fair	White	9.5	mg / cm ^2
107	Room 07 Landing	A	Door	Door	Wood	Fair	White	11.7	mg / cm ^2
108	Room 07 Landing	B/C	Door	Casing	Wood	Fair	White	10.9	mg / cm ^2
110	Room 07 Landing	C/D	Door	Casing	Wood	Fair	White	11	mg / cm ^2
111	Room 07 Landing	C/D	Door	Jamb	Wood	Fair	White	10.4	mg / cm ^2
114	Room 07 Landing	D	Door	Casing	Wood	Fair	White	13.4	mg / cm ^2
115	Room 07 Landing	D	Door	Door	Wood	Fair	White	10	mg / cm ^2
119	Room 08	D	Wall	Middle	Plaster	Good	Lime	1.02	mg / cm ^2
120	Room 08	A	Window	Casing	Wood	Good	White	13.5	mg / cm ^2
121	Room 08	A	Window	Sill	Wood	Good	White	3.3	mg / cm ^2
122	Room 08	A	Window	Sash	Wood	Friction	White	12.8	mg / cm ^2
123	Room 08	D	Window	Casing	Wood	Friction	White	10.3	mg / cm ^2
124	Room 08	D	Window	Sill	Wood	Friction	White	6.1	mg / cm ^2
125	Room 08	A	Window	Well	Wood	Friction	Beige	19.8	mg / cm ^2
126	Room 08	C	Door	Casing	Wood	Good	White	12.8	mg / cm ^2
127	Room 08	C	Door	Door	Wood	Good	White	14	mg / cm ^2
128	Room 08	C	Baseboard	Middle	Wood	Good	White	11.2	mg / cm ^2
133	Room 09	A	Window	Casing	Wood	Good	Purple	10.2	mg / cm ^2
134	Room 09	A	Window	Sill	Wood	Good	Purple	7.8	mg / cm ^2
135	Room 09	A	Window	Sash	Wood	Friction	White	14.8	mg / cm ^2
136	Room 09	A	Baseboard	Middle	Wood	Chip/Peel	White	10.3	mg / cm ^2
143	Room 10 Bath	B	Window	Sash	Wood	Friction	White	12.4	mg / cm ^2
144	Room 10 Bath	B	Window	Well	Wood	Poor	Beige	11.5	mg / cm ^2
149	Room 11	A	Door	Casing	Wood	Good	White	11.9	mg / cm ^2
151	Room 11	B	Window	Casing	Wood	Good	White	9.8	mg / cm ^2
152	Room 11	B	Window	Sill	Wood	Good	White	4.1	mg / cm ^2
153	Room 11	B	Window	Sash	Wood	Friction	White	12.1	mg / cm ^2
154	Room 11	D	Window	Casing	Wood	Friction	White	8.8	mg / cm ^2
155	Room 11	C	Window	Sill	Wood	Friction	White	6.7	mg / cm ^2
156	Room 11	C	Window	Sash	Wood	Friction	White	11.7	mg / cm ^2
157	Room 11	D	Door	Casing	Wood	Good	White	13	mg / cm ^2
158	Room 11	D	Door	Stop	Wood	Good	White	10.7	mg / cm ^2
159	Room 11	D	Door	Door	Wood	Good	White	11.1	mg / cm ^2
166	Room 12	A	Door	Casing	Wood	Good	White	9.1	mg / cm ^2
168	Room 12	B	Door	Casing	Wood	Good	White	9.9	mg / cm ^2
169	Room 12	B	Door	Door	Wood	Good	White	7.8	mg / cm ^2
170	Room 12	C	Window	Casing	Wood	Good	White	14.4	mg / cm ^2
171	Room 12	C	Window	Sill	Wood	Good	White	3.9	mg / cm ^2
172	Room 12	C	Window	Sash	Wood	Good	White	12	mg / cm ^2
173	Room 12	D	Window	Casing	Wood	Good	White	10.7	mg / cm ^2
174	Room 12	D	Window	Sill	Wood	Good	White	6.3	mg / cm ^2
175	Room 12	D	Window	Sash	Wood	Friction	White	11.8	mg / cm ^2
177	Front Porch	A	Porch	Column Post	Wood	Poor	White	17.6	mg / cm ^2
178	Front Porch	A	Porch	Header	Wood	Poor	White	23.6	mg / cm ^2
184	Rear Porch	C	Support Column	Middle	Wood	Poor	White	6.5	mg / cm ^2
186	Rear Porch	C	Soffit	Middle	Wood	Poor	White	7.3	mg / cm ^2
188	Rear Porch	A	Siding	Middle	Wood	Poor	Black	9.2	mg / cm ^2

189	Home Exterior	B	Basement Window	Casing	Wood	Poor	White	1.6	mg / cm ²
190	Home Exterior	B	Basement Window	Casing	Wood	Poor	White	18.2	mg / cm ²
192	Home Exterior	B	Stairs Window	Casing	Wood	Poor	White	7.4	mg / cm ²
194	Home Exterior	B	Stairs Window	Sill	Wood	Poor	White	4.5	mg / cm ²
195	Home Exterior	B	Stairs Window	Sash	Wood	Poor	White	5.4	mg / cm ²
196	Home Exterior	B	Kitchen Window	Sill	Wood	Poor	White	5.8	mg / cm ²
197	Home Exterior	C	Kitchen Window	Casing	Wood	Poor	White	6.8	mg / cm ²
198	Home Exterior	D	Storage Window	Casing	Wood	Poor	White	3.8	mg / cm ²

Please refer to the XRF Data forms in Appendix B. These forms contain the component's location, condition and whether they tested positive or negative for lead-based paint for all samples obtained using the XRF. Similar components in the same area of positive locations should also be assumed that they are positive too.

All surfaces were tested with the XRF unit according to Performance Characteristic Sheet recommendations, distributed by the U.S. Environmental Protection Agency (EPA) and Department of Housing and Urban Development (HUD). See Appendix E for a copy of the Manufacturer's Performance Characteristic Sheet.

XRF technology utilizes low level radiation to excite atoms within a painted surface. This excited state produces energy, which the XRF unit is able to analyze. Based upon its analysis, the unit is able to determine if lead-based paint is present. The XRF will report lead in micrograms per square centimeter (mg/cm²). HUD recognizes paint to be lead containing if it contains equal to or greater than 1.0 mg/cm². This investigation recognizes the HUD standard of 1.0 mg/cm².

Surfaces that tested positive for lead would be described above in the visual inspection section, which would include all of the positive lead results located in the XRF Lead Results table that can be found in Appendix B.

4.0 Dust Wipe Sampling

In addition to sampling with the XRF unit, other methods of locating lead were also utilized during this inspection. For example, dust wipe sampling was used and was conducted according to HUD guidelines.

Dust wipe samples are collected in the following manner:

1. An area located on the surface to be dust wiped no less than 0.1 ft² and no larger than 2 ft² is measured and recorded.
2. A single moist towelette is opened with a gloved hand and wiped across the sampling area in a series of "s" patterns.
3. The towelette is folded inward and placed into a container labeled with the site location identification, sample location and size of area wiped.
4. Samples are analyzed and reported by the laboratory in micrograms per square foot (ug/ft²).

Dust is considered lead burdened if a concentration above the following criteria for each surface is found to be present.

Floors	40 ug/ft ²
Window sills (stools)	250 ug/ft ²
Window troughs (wells)	400 ug/ft ²

The following chart illustrates the lead wipe locations and concentrations for all wipes taken during the investigation.

6296-01	Room 1, Side A, Window Well	28 µg/ft ²	#1
6296-02	Room 1, Side A, Floor	<5 µg/ft ²	#2
6296-03	Room 2, Side B, Window Sill	<5 µg/ft ²	#3
6296-04	Room 2, Side B, Floor	<5 µg/ft ²	#4
6296-05	Room 3, Side C, Window Well	310 µg/ft ²	#5
6296-06	Room 3, Side C, Floor	29 µg/ft ²	#6
6296-07	Room 9, Side D, Window Sill	330 µg/ft²	#7
6296-08	Room 9, Side D, Floor	<5 µg/ft ²	#8
6296-09	Room 10, Side A, Window Well	72 µg/ft ²	#09
6296-10	Room 10, Side A, Floor	6,200 µg/ft²	#10
6296-11	Room 11, Side B, Window Sill	98 µg/ft ²	#11
6296-12	Room 11, Side B, Floor	<5 µg/ft ²	#12

For a complete listing of all wipe results, please see Appendix C.

5.0 Soil Sampling

Soil samples, if collected, were following HUD guidelines from areas of exposed soil located on the property. Composite samples of soil from the upper ½ inch were collected and analyzed by Environmental Hazards Services, L.L.C. According to EPA and HUD guidelines, a limit of 400 mg/kg (ppm) of lead is allowed in high contact area such as play areas and/or the exposed soil directly around the perimeter of the household. A limit of 1,200 mg/kg (ppm) is allowed in low contact areas such as the other parts of the yard.

No soil samples were collected during this assessment due to no bare soil around the house or yard.

6.0 Friction and Impact Survey

Paint containing lead is most hazardous when it is chipping, peeling, cracking, chalking or on components such as doors, windows, and floors which encounter friction. Friction is the result of two objects rubbing together. Doors and door trim, as well as windows and window trim, encounter a significant amount of friction from being repeatedly open and shut. Painted flooring can also be considered a friction surface due to foot traffic, hard-soled shoes or roller chairs. These actions cause lead containing paints to be ground into fine dusts, making the lead available for human consumption.

7.0 Recommendations

Component	Location	Recommendations
Doors & Components	Throughout where positive	<p>Interim – Replace the door stop. Wet-plane the corner edges of the door on its latch side where it contacts the stop. Re-set the hinge screws if necessary, so the door does not make any wood to wood contact. It is also recommended that any chipping lead paint surrounding the door be wet scraped and repainted.</p> <p>Abatement – Remove and replace doors or encapsulate by following the lead hazard control program set by the State of Michigan. Qualified personnel should perform all abatement work.</p>
Walls	Throughout house where positive	<p>Interim- To temporarily avoid lead dust surfaces can be wet scraped and repainted or covered with new material.</p> <p>Abatement- Remove, encapsulate or replace all materials or replace all materials containing lead paint by following the lead hazard control program set by the State of Michigan. Qualified personnel should perform all abatement work.</p>
Windows & Components	Throughout house where positive	<p>Interim – Remove any paint on friction surfaces and paint the window well.</p> <p>Abatement – Remove and replace windows or encapsulate by following the lead hazard control program set by the State of Michigan. Qualified personnel should perform all abatement work.</p>
Exterior Components	Soffit, Siding & Support Column on Rear Porch Window Sills & Casings Front Porch Column Post & Header	<p>Interim – Scrape and paint house with high grade primer and paint or remove and replace windows or encapsulate by following the lead hazard program.</p> <p>Abatement – Remove and replace all painted materials containing lead paint by following the lead hazard control program set by the State of Michigan. Qualified personnel should perform all abatement work.</p>
Miscellaneous Surfaces	Ceiling in Room 2 Room 8 & 9 Baseboard	<p>Interim- To temporarily avoid lead dust surfaces can be wet scraped and repainted or covered with new material.</p> <p>Abatement- Remove, encapsulate or replace all materials or replace all materials containing lead paint by following the lead hazard control program set by the State of Michigan. Qualified personnel should perform all abatement work.</p>
Floors	Throughout house where positive	<p>Interim – To temporarily avoid lead dust, floors can be wet scraped and repainted or covered up with new material.</p> <p>Abatement – Remove, encapsulate or replace all materials containing lead paint by following the lead hazard control program set by the State of Michigan. Qualified personnel should perform all abatement work.</p>
Lead Dust	Throughout house where positive	<p>Interim- Utilize 8-hr trained people to clean the house following interim control work.</p> <p>Abatement- Utilize 32-hr trained people to clean the house if abatement work took place.</p>

The simplest way to reduce lead exposures is to wash hands and horizontal surfaces regularly. Regular household soaps such as liquid soap or dish soap are the best solutions. However, it is important to remember not to re-contaminate surfaces.

8.0 Credentials

See Appendix D for copies of assessor and inspector qualifications.

9.0 Maps

A site location map is enclosed in Appendix A.

10.0 Lab Results

Appendix C contains all lab results along with a map detailing where wipe samples were obtained.

11.0 Reevaluation Schedule

Based on the HUD Table 6.1 Standard Reevaluation Schedule, all surfaces that were found to contain deteriorating lead-based paint during this risk assessment should be reevaluated every year to maintain lead-safe conditions. Any surfaces that are currently in good condition and therefore do not require any immediate action should be visually monitored every year to maintain good condition. These tables can be found in Appendix F.

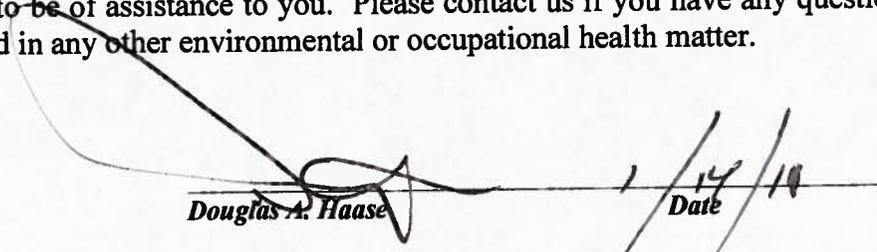
12.0 Conclusion

Most interior components of the house were found to be *negative* and *below* the regulatory for *lead standards of 1.0 mg/cm² per the XRF test results*, except for baseboards in rooms 8 & 9, the ceiling in room 2, walls in rooms 2, 3 & 8, and a number of door and window components throughout the house which tested *positive* and *above* the regulatory standards. The exact location of these components can be found in the table in the summary discussion of XRF results section and in the XRF data sheets in appendix B.

Most exterior components of the house were found to be *positive* and *above* the regulatory for *lead standards of 1.0 mg/cm² per the XRF test result*, except for the stairs window sash, ceiling and door on rear porch and ceiling on the front porch which tested *negative* and *below* the regulatory standards. The exact location of these components can be found in the table in the summary discussion of XRF results section and in the XRF data sheets in appendix B.

The lead wipe results showed that all window sills, most window wells and most floors tested *below* the regulatory standards so therefore aren't considered lead hazardous, however the window sill in room 9 and the floor in room 10 tested *above* the regulatory standards so therefore are considered lead hazardous. These lab results are found in appendix C.

It has been a pleasure to be of assistance to you. Please contact us if you have any questions or when we can be of further aid in any other environmental or occupational health matter.


Douglas A. Haase

1/14/10
Date

Appendix Table of Contents

A) Site Location Map

B) XRF Data

C) Lab Analysis

D) Qualifications

**E) Manufacturer's
Performance
Characteristic Sheets**

**F) Standard
Reevaluation
Schedules**

Appendix A

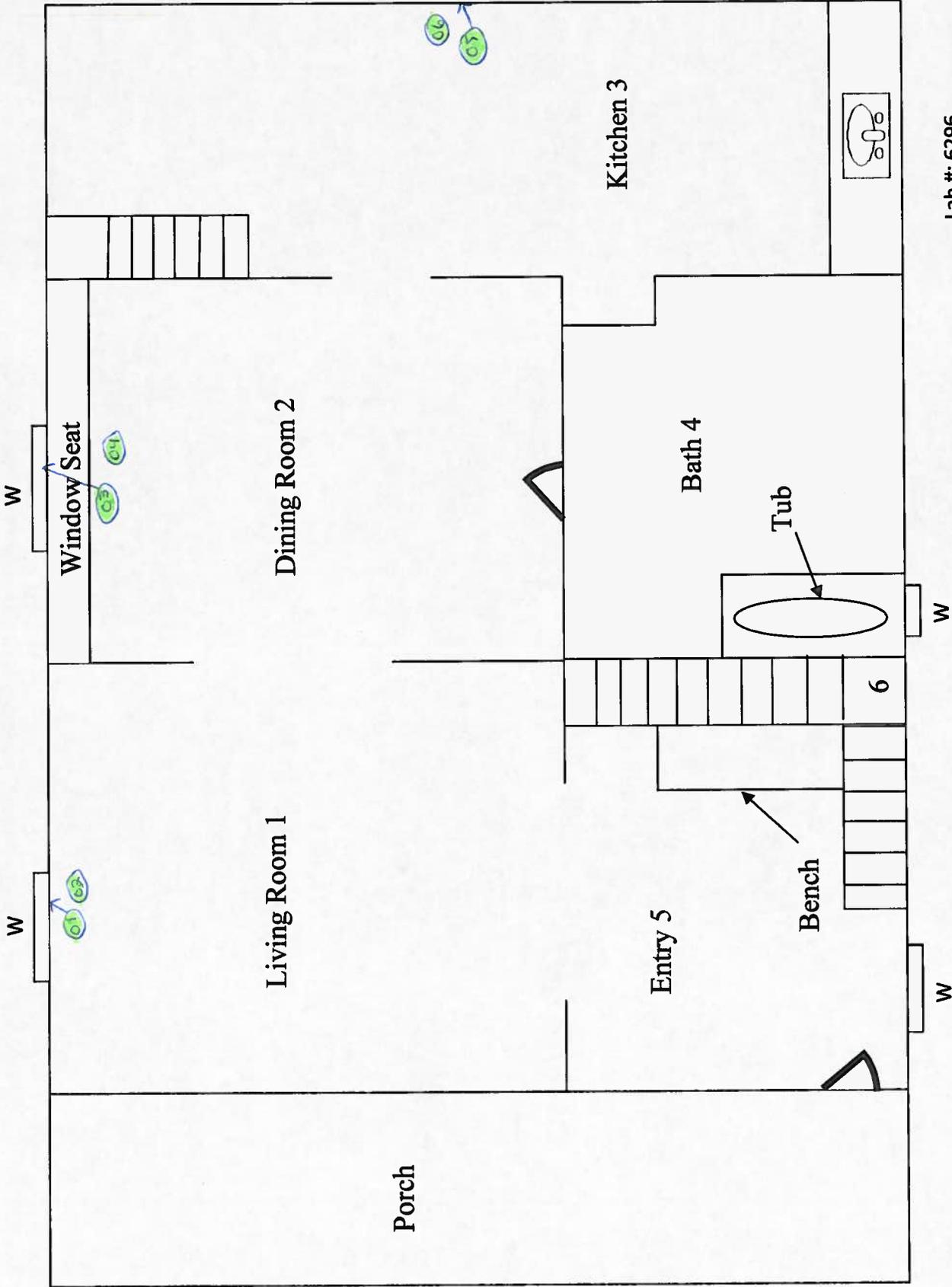
Site Location Map

B

C

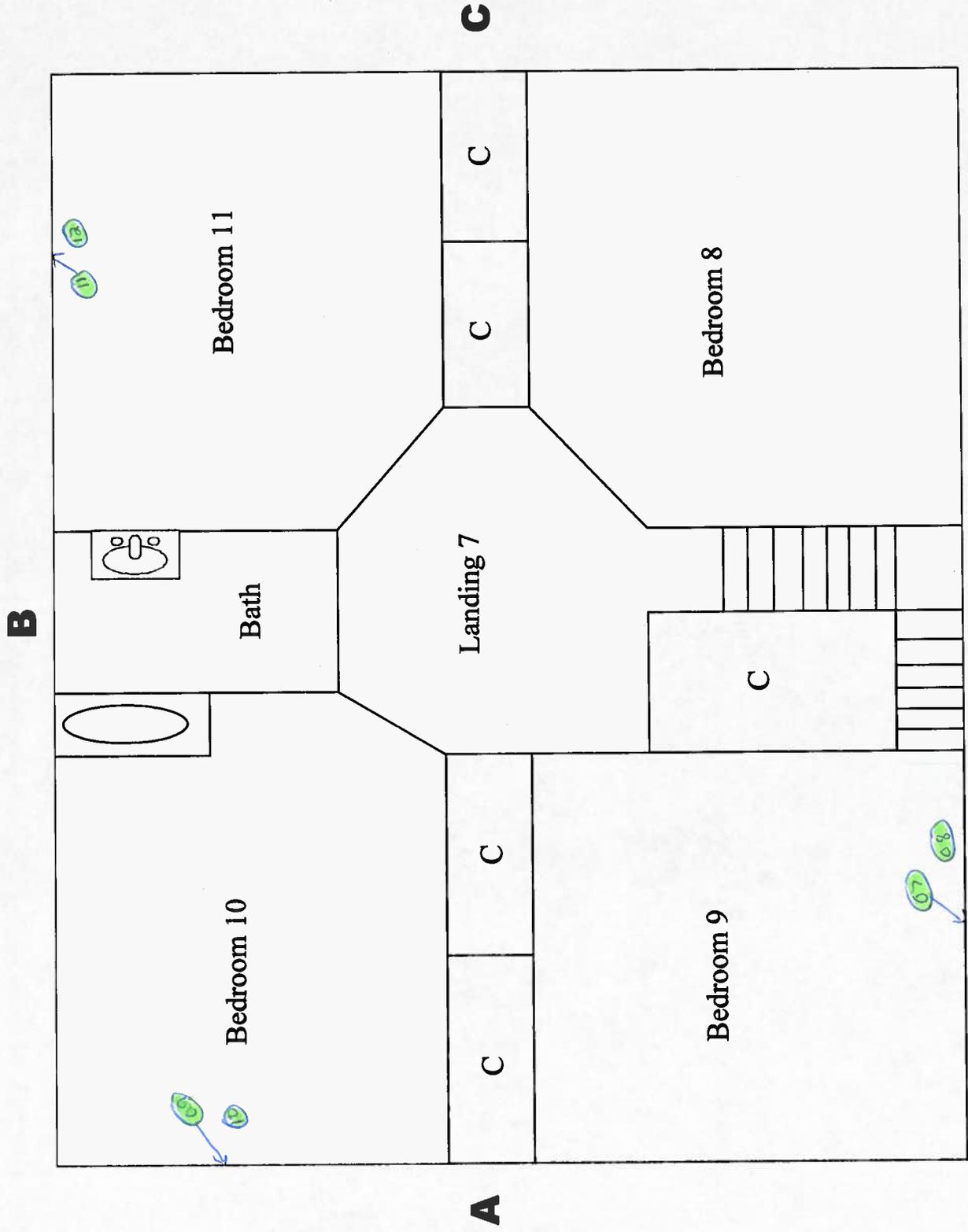
D

A



Lab #: 6296
 202 Garfield Ave.
 Battle Creek, MI 49017

1st Floor



Lab #6296
 202 Garfield Ave.
 Battle Creek, MI 49017

2nd Floor

Appendix B

XRF Data

Reading No	Room	Side	Structure	Feature	Substrate	Condition	Color	Results	PbC	Units
1									3.86	cps
2	Cal <0.01	Cal	Cal	Cal	Cal	Cal	Cal	Negative	0	mg / cm ^2
3	Cal 1.04	West	Cal	Cal	Cal	Cal	Cal	Positive	1.1	mg / cm ^2
4	Cal 1.53	Cal	Cal	Cal	Cal	Cal	Cal	Positive	1.5	mg / cm ^2
5	Room 01	A	Wall	Middle	Plaster	Good	Purple	Negative	0	mg / cm ^2
6	Room 01	B	Wall	Middle	Plaster	Good	Green	Negative	0	mg / cm ^2
7	Room 01	C	Wall	Middle	Plaster	Good	Green	Negative	0	mg / cm ^2
8	Room 01	D	Wall	Middle	Plaster	Good	Green	Negative	0	mg / cm ^2
9	Room 01	A	Window	Casing	Wood	Good	White	Negative	0.2	mg / cm ^2
10	Room 01	A	Window	Sill	Wood	Good	White	Negative	0	mg / cm ^2
11	Room 01	B	Window	Casing	Wood	Good	White	Negative	0.17	mg / cm ^2
12	Room 01	B	Window	Sill	Wood	Good	White	Negative	0.27	mg / cm ^2
13	Room 01	A	Baseboard	Middle	Wood	Good	White	Negative	0.23	mg / cm ^2
14	Room 01	C	Baseboard	Middle	Wood	Good	White	Negative	0.08	mg / cm ^2
15	Room 02	A	Wall	Upper	Drywall	Good	Purple	Positive	5.5	mg / cm ^2
16	Room 02	B	Wall	Upper	Drywall	Good	Purple	Positive	8.2	mg / cm ^2
17	Room 02	C	Wall	Upper	Drywall	Good	Purple	Negative	0.5	mg / cm ^2
18	Room 02	C	Wall	Upper	Plaster	Good	Purple	Positive	8.3	mg / cm ^2
19	Room 02	A	Wall	Lower	Plaster	Good	Green	Negative	0.18	mg / cm ^2
20	Room 02	C	Wall	Lower	Plaster	Good	Green	Positive	14.4	mg / cm ^2
21	Room 02	B	Wall	Lower	Plaster	Good	Green	Positive	11.2	mg / cm ^2
22	Room 02	D	Wall	Lower	Plaster	Good	Green	Positive	11.4	mg / cm ^2
23	Room 02	A	Wall	Chair Rail	Wood	Good	White	Negative	0.4	mg / cm ^2
24	Room 02	C	Wall	Chair Rail	Wood	Good	White	Positive	2.5	mg / cm ^2
25	Room 02	D	Wall	Chair Rail	Wood	Good	White	Negative	0.3	mg / cm ^2
26	Room 02	A	Baseboard	Middle	Wood	Good	White	Negative	0.4	mg / cm ^2
27	Room 02	B	Baseboard	Middle	Wood	Good	White	Negative	0.21	mg / cm ^2
28	Room 02	C	Baseboard	Middle	Wood	Good	White	Negative	0.19	mg / cm ^2
29	Room 02	D	Baseboard	Middle	Wood	Good	White	Negative	0.4	mg / cm ^2
30	Room 02	B	Window	Casing	Wood	Good	White	Negative	0.23	mg / cm ^2
31	Room 02	B	Window	Sill	Wood	Good	White	Negative	0	mg / cm ^2
32	Room 02	B	Window	Seat	Wood	Good	Green	Negative	0.4	mg / cm ^2
33	Room 02	C	Door	Casing	Wood	Good	Green	Negative	0.07	mg / cm ^2
34	Room 02	C	Door	Jamb	Wood	Good	Green	Negative	0.15	mg / cm ^2
35	Room 02	D	Door	Casing	Wood	Good	White	Negative	0.13	mg / cm ^2
36	Room 02	D	Door	Hinge Jamb	Wood	Poor	White	Negative	0.26	mg / cm ^2

37	Room 02	Door	Door	Wood	Poor	White	Negative	0.17	mg / cm ^2
38	Room 02	Ceiling	Middle	Plaster	Fair	White	Positive	3.2	mg / cm ^2
39	Room 02	Ceiling	Casing	Wood	Good	Off-White	Negative	0.23	mg / cm ^2
40	Room 02	Ceiling	Casing	Wood	Good	Off-White	Negative	0.4	mg / cm ^2
41	Room 03	Wall	Middle	Plaster	Poor	Off-White	Negative	0.12	mg / cm ^2
42	Room 03	Wall	Upper	Plaster	Poor	Off-White	Negative	0.26	mg / cm ^2
43	Room 03	Wall	Middle	Plaster	Poor	Off-White	Negative	0.4	mg / cm ^2
44	Room 03	Wall	Middle	Plaster	Poor	Off-White	Positive	5.8	mg / cm ^2
45	Room 03	Door	Casing	Wood	Good	Off-White	Negative	0.19	mg / cm ^2
46	Room 03	Door	Casing	Wood	Good	Off-White	Negative	0.08	mg / cm ^2
47	Room 03	Door	Door	Wood	Good	White	Negative	0.2	mg / cm ^2
48	Room 03	Door	Door	Wood	Poor	White	Negative	0.07	mg / cm ^2
49	Room 03	Door	Jamb	Wood	Poor	White	Negative	0	mg / cm ^2
50	Room 03	Window	Casing	Wood	Poor	White	Negative	0	mg / cm ^2
51	Room 03	Window	Sill	Wood	Poor	White	Negative	0	mg / cm ^2
52	Room 03	Cabinet	Lower	Wood	Poor	White	Negative	0	mg / cm ^2
53	Room 03	Cabinet	Upper	Wood	Poor	White	Negative	0	mg / cm ^2
54	Room 03	Cabinet	Shelf	Wood	Poor	White	Negative	0	mg / cm ^2
55	Room 03 B	Wall	Lower	Plaster	Fair	Off-White	Negative	0	mg / cm ^2
56	Room 03 B	Wall	Lower	Plaster	Poor	Off-White	Negative	0.2	mg / cm ^2
57	Room 03 B	Wall	Lower	Plaster	Poor	Off-White	Negative	0	mg / cm ^2
58	Room 03 B	Wall Shelf	Shelf	Wood	Poor	White	Negative	0.09	mg / cm ^2
59	Room 03 B	Window	Casing	Wood	Poor	White	Negative	0	mg / cm ^2
60	Room 03 B	Window	Sill	Wood	Poor	White	Negative	0	mg / cm ^2
61	Room 03 B	Window	Casing	Wood	Poor	White	Negative	0	mg / cm ^2
62	Room 03 B	Window	Sill	Wood	Poor	White	Negative	0	mg / cm ^2
63	Room 03 B	Ceiling	Middle	Plaster	Poor	White	Negative	0.13	mg / cm ^2
64	Room 04	Wall	Middle	Plaster	Fair	Off-White	Negative	0	mg / cm ^2
65	Room 04	Wall	Middle	Plaster	Fair	Off-White	Negative	0	mg / cm ^2
66	Room 04	Wall	Middle	Plaster	Fair	Off-White	Negative	0	mg / cm ^2
67	Room 04	Wall	Closet	Plaster	Poor	Off-White	Negative	0	mg / cm ^2
68	Room 04	Closet	Casing	Wood	Good	White	Negative	0	mg / cm ^2
69	Room 04	Closet	Door	Wood	Good	White	Negative	0	mg / cm ^2
70	Room 04	Door	Casing	Wood	Good	White	Negative	0	mg / cm ^2
71	Room 04	Door	Door	Wood	Good	White	Negative	0	mg / cm ^2
72	Room 04	Closet	Casing	Wood	Friction	White	Negative	0.18	mg / cm ^2
73	Room 04	Closet	Jamb	Wood	Friction	White	Negative	0	mg / cm ^2
					Friction	White	Negative	0.04	mg / cm ^2

74	Room 04	Window	Casing	Wood	Friction	White	Negative	0	mg / cm ^2
75	Room 04	Window	Sill	Wood	Friction	White	Negative	0.29	mg / cm ^2
76	Room 05 Entry	Wall	Upper	Plaster	Poor	Off-White	Negative	0	mg / cm ^2
77	Room 05 Entry	Wall	Upper	Plaster	Poor	Off-White	Negative	0	mg / cm ^2
78	Room 05 Entry	Wall	Lower	Plaster	Poor	Off-White	Negative	0	mg / cm ^2
79	Room 05 Entry	Wall	Upper	Plaster	Poor	Off-White	Negative	0	mg / cm ^2
80	Room 05 Entry	Wall	Lower	Plaster	Poor	Off-White	Negative	0.11	mg / cm ^2
81	Room 05 Entry	Wall	Lower	Plaster	Poor	Off-White	Negative	0	mg / cm ^2
82	Room 05 Entry	Wall	Lower	Plaster	Poor	Off-White	Negative	0	mg / cm ^2
83	Room 05 Entry	Door	Casing	Wood	Good	White	Negative	0.04	mg / cm ^2
84	Room 05 Entry	Wall	Chair Rail	Wood	Good	White	Negative	0	mg / cm ^2
85	Room 05 Entry	Wall	Chair Rail	Wood	Good	White	Negative	0	mg / cm ^2
86	Room 05 Entry	Door	Casing	Wood	Good	White	Negative	0.05	mg / cm ^2
87	Room 05 Entry	Door	Door	Wood	Good	White	Positive	11.9	mg / cm ^2
88	Room 05 Entry	Door	Latch Jamb	Wood	Good	White	Negative	0.11	mg / cm ^2
89	Room 05 Entry	Door	Stop	Wood	Good	White	Negative	0.17	mg / cm ^2
90	Room 05 Entry	Stringer	Middle	Wood	Good	White	Negative	0.11	mg / cm ^2
91	Room 05 Entry	Wall	Shelf	Wood	Good	White	Negative	0.11	mg / cm ^2
92	Room 05 Entry	Wall	Seat	Wood	Good	White	Negative	0.08	mg / cm ^2
93	Room 05 Entry	Window	Casing	Wood	Good	White	Negative	0.11	mg / cm ^2
94	Room 05 Entry	Window	Sill	Wood	Good	White	Negative	0.13	mg / cm ^2
95	Room 06 Stairs	Baluster	Middle	Wood	Good	White	Negative	0.06	mg / cm ^2
96	Room 06 Stairs	Cabinet	Handrail	Wood	Good	White	Negative	0.06	mg / cm ^2
97	Room 06 Stairs	Stairs Window	Knowl Post	Wood	Good	White	Negative	0.13	mg / cm ^2
98	Room 06 Stairs	Window	Casing	Wood	Good	White	Negative	0.3	mg / cm ^2
99	Room 06 Stairs	Window	Sill	Wood	Good	White	Negative	0.3	mg / cm ^2
100	Room 06 Stairs	Wall	Middle	Plaster	Fair	Off-White	Negative	0	mg / cm ^2
101	Room 06 Stairs	Wall	Middle	Plaster	Fair	Off-White	Negative	0	mg / cm ^2
102	Room 06 Stairs	Wallstairs	Handrail	Wood	Fair	White	Negative	0	mg / cm ^2
103	Room 07 Landing	Wall	Middle	Plaster	Good	Mauve	Negative	0	mg / cm ^2
104	Room 07 Landing	Wall	Middle	Plaster	Good	Mauve	Negative	0	mg / cm ^2
105	Room 07 Landing	Wall	Middle	Plaster	Good	Mauve	Negative	0	mg / cm ^2
106	Room 07 Landing	Door	Casing	Wood	Fair	White	Positive	9.5	mg / cm ^2
107	Room 07 Landing	Door	Door	Wood	Fair	White	Positive	11.7	mg / cm ^2
108	Room 07 Landing	Door	Casing	Wood	Fair	White	Positive	10.9	mg / cm ^2
109	Room 07 Landing	Door	Door	Wood	Fair	White	Negative	0.15	mg / cm ^2
110	Room 07 Landing	Door	Casing	Wood	Fair	White	Positive	11	mg / cm ^2

111	Room 07 Landing	C/D	Door	Jamb	Wood	Fair	White	Positive	10.4	mg / cm ^2
112	Room 07 Landing	C/D	Door	Door	Wood	Fair	White	Negative	0.04	mg / cm ^2
113	Room 07 Landing	D	Door	Casing	Wood	Fair	White	Negative	0.18	mg / cm ^2
114	Room 07 Landing	D	Door	Casing	Wood	Fair	White	Positive	13.4	mg / cm ^2
115	Room 07 Landing	D	Door	Door	Wood	Fair	White	Positive	10	mg / cm ^2
116	Room 08	A	Wall	Middle	Plaster	Good	Lime	Negative	0.57	mg / cm ^2
117	Room 08	B	Wall	Middle	Plaster	Good	Lime	Negative	0	mg / cm ^2
118	Room 08	C	Wall	Middle	Plaster	Good	Lime	Negative	0.02	mg / cm ^2
119	Room 08	D	Wall	Middle	Plaster	Good	Lime	Positive	1.02	mg / cm ^2
120	Room 08	A	Window	Casing	Wood	Good	White	Positive	13.5	mg / cm ^2
121	Room 08	A	Window	Sill	Wood	Good	White	Positive	3.3	mg / cm ^2
122	Room 08	A	Window	Sash	Wood	Friction	White	Positive	12.8	mg / cm ^2
123	Room 08	D	Window	Casing	Wood	Friction	White	Positive	10.3	mg / cm ^2
124	Room 08	D	Window	Sill	Wood	Friction	White	Positive	6.1	mg / cm ^2
125	Room 08	A	Window	Well	Wood	Friction	Beige	Positive	19.8	mg / cm ^2
126	Room 08	C	Door	Casing	Wood	Good	White	Positive	12.8	mg / cm ^2
127	Room 08	C	Door	Door	Wood	Good	White	Positive	14	mg / cm ^2
128	Room 08	C	Baseboard	Middle	Wood	Good	White	Positive	11.2	mg / cm ^2
129	Room 09	A	Wall	Middle	Plaster	Good	Purple	Negative	0.49	mg / cm ^2
130	Room 09	B	Wall	Middle	Plaster	Good	Purple	Negative	0	mg / cm ^2
131	Room 09	C	Wall	Middle	Plaster	Good	Purple	Negative	0	mg / cm ^2
132	Room 09	D	Wall	Middle	Plaster	Good	Purple	Negative	0	mg / cm ^2
133	Room 09	A	Window	Casing	Wood	Good	Purple	Positive	10.2	mg / cm ^2
134	Room 09	A	Window	Sill	Wood	Good	Purple	Positive	7.8	mg / cm ^2
135	Room 09	A	Window	Sash	Wood	Friction	White	Positive	14.8	mg / cm ^2
136	Room 09	A	Baseboard	Middle	Wood	Chipping/Peeling	White	Positive	10.3	mg / cm ^2
137	Room 09	C/D	Door	Casing	Wood	Good	Purple	Negative	0	mg / cm ^2
138	Room 10 Bath	A	Wall	Middle	Drywall	Good	Blue	Negative	0	mg / cm ^2
139	Room 10 Bath	B	Wall	Middle	Drywall	Good	Blue	Negative	0	mg / cm ^2
140	Room 10 Bath	C	Wall	Middle	Drywall	Good	Blue	Negative	0	mg / cm ^2
141	Room 10 Bath	B	Window	Casing	Wood	Good	White	Negative	0	mg / cm ^2
142	Room 10 Bath	B	Window	Sill	Wood	Good	White	Negative	0	mg / cm ^2
143	Room 10 Bath	B	Window	Sash	Wood	Friction	White	Positive	12.4	mg / cm ^2
144	Room 10 Bath	B	Window	Well	Wood	Poor	Beige	Positive	11.5	mg / cm ^2
145	Room 11	A	Wall	Middle	Plaster	Good	Blue	Negative	0	mg / cm ^2
146	Room 11	B	Wall	Lower	Plaster	Good	Blue	Negative	0	mg / cm ^2
147	Room 11	C	Wall	Middle	Plaster	Good	Blue	Negative	0	mg / cm ^2

148	Room 11	D	Wall	Middle	Plaster	Good	Blue	Negative	0	mg / cm ^2
149	Room 11	A	Door	Casing	Wood	Good	White	Positive	11.9	mg / cm ^2
150	Room 11	A	Door	Door	Wood	Good	White	Negative	0.02	mg / cm ^2
151	Room 11	B	Window	Casing	Wood	Good	White	Positive	9.8	mg / cm ^2
152	Room 11	B	Window	Sill	Wood	Good	White	Positive	4.1	mg / cm ^2
153	Room 11	B	Window	Sash	Wood	Friction	White	Positive	12.1	mg / cm ^2
154	Room 11	D	Window	Casing	Wood	Friction	White	Positive	8.8	mg / cm ^2
155	Room 11	C	Window	Sill	Wood	Friction	White	Positive	6.7	mg / cm ^2
156	Room 11	C	Window	Sash	Wood	Friction	White	Positive	11.7	mg / cm ^2
157	Room 11	D	Door	Casing	Wood	Good	White	Positive	13	mg / cm ^2
158	Room 11	D	Door	Stop	Wood	Good	White	Positive	10.7	mg / cm ^2
159	Room 11	D	Door	Door	Wood	Good	White	Positive	11.1	mg / cm ^2
160	Room 12	A	Wall	Middle	Plaster	Good	Blue	Negative	0.08	mg / cm ^2
161	Room 12	B	Wall	Middle	Plaster	Good	Blue	Negative	0.6	mg / cm ^2
162	Room 12	C	Wall	Middle	Plaster	Good	Blue	Negative	0	mg / cm ^2
163	Room 12	D	Wall	Middle	Plaster	Good	Blue	Negative	0.76	mg / cm ^2
164	Room 12	A	Ceiling	Middle	Plaster	Good	White	Negative	0.4	mg / cm ^2
165	Room 12	A	Ceiling	Middle	Plaster	Good	White	Negative	0.62	mg / cm ^2
166	Room 12	A	Door	Casing	Wood	Good	White	Positive	9.1	mg / cm ^2
167	Room 12	A	Door	Door	Wood	Good	White	Negative	0.14	mg / cm ^2
168	Room 12	B	Door	Casing	Wood	Good	White	Positive	9.9	mg / cm ^2
169	Room 12	B	Door	Door	Wood	Good	White	Positive	7.8	mg / cm ^2
170	Room 12	C	Window	Casing	Wood	Good	White	Positive	14.4	mg / cm ^2
171	Room 12	C	Window	Sill	Wood	Good	White	Positive	3.9	mg / cm ^2
172	Room 12	C	Window	Sash	Wood	Good	White	Positive	12	mg / cm ^2
173	Room 12	D	Window	Casing	Wood	Good	White	Positive	10.7	mg / cm ^2
174	Room 12	D	Window	Sill	Wood	Good	White	Positive	6.3	mg / cm ^2
175	Room 12	D	Window	Sash	Wood	Friction	White	Positive	11.8	mg / cm ^2
176	Room 12	A	Ceiling	Middle	Plaster	Fair	White	Negative	0.64	mg / cm ^2
177	Front Porch	A	Porch	Column Post	Wood	Poor	White	Positive	17.6	mg / cm ^2
178	Front Porch	A	Porch	Header	Wood	Poor	White	Positive	23.6	mg / cm ^2
179	Front Porch	A	Porch	Ceiling	Wood	Poor	White	Negative	0	mg / cm ^2
180	Basement Stairs	A	Wall	Middle	Plaster	Poor	Beige	Negative	0.46	mg / cm ^2
181	Basement Stairs	C	Wall	Middle	Plaster	Poor	Beige	Negative	0.49	mg / cm ^2
182	Basement Stairs	B	Door	Casing	Wood	Poor	Beige	Negative	0.27	mg / cm ^2
183	Basement Stairs	A	Run	Middle	Wood	Friction	Gray	Negative	0.03	mg / cm ^2
184	Rear Porch	C	Support Column	Middle	Wood	Poor	White	Positive	6.5	mg / cm ^2

185	Rear Porch	C	Ceiling	Middle	Wood	Poor	White	Negative	0.11	mg / cm ^2
186	Rear Porch	C	Soffit	Middle	Wood	Poor	White	Positive	7.3	mg / cm ^2
187	Rear Porch	A	Door	Casing	Wood	Poor	White	Negative	0	mg / cm ^2
188	Rear Porch	A	Siding	Middle	Wood	Poor	Black	Positive	9.2	mg / cm ^2
189	Home Exterior	B	Basement Window	Casing	Wood	Poor	White	Positive	1.6	mg / cm ^2
190	Home Exterior	B	Basement Window	Casing	Wood	Poor	White	Positive	18.2	mg / cm ^2
191	Home Exterior	B	Stairs Window	Sash	Wood	Poor	White	Negative	0.02	mg / cm ^2
192	Home Exterior	B	Stairs Window	Casing	Wood	Poor	White	Positive	7.4	mg / cm ^2
193	Home Exterior	B	Stairs Window	Sash	Wood	Poor	White	Negative	0.16	mg / cm ^2
194	Home Exterior	B	Stairs Window	Sill	Wood	Poor	White	Positive	4.5	mg / cm ^2
195	Home Exterior	B	Stairs Window	Sash	Wood	Poor	White	Positive	5.4	mg / cm ^2
196	Home Exterior	B	Stairs Window	Sill	Wood	Poor	White	Positive	5.8	mg / cm ^2
197	Home Exterior	C	Kitchen Window	Casing	Wood	Poor	White	Positive	6.8	mg / cm ^2
198	Home Exterior	D	Storage Window	Casing	Wood	Poor	White	Positive	3.8	mg / cm ^2

Appendix C

Lab Analysis

ANALYTICAL LABORATORY REPORT

Thursday, January 6, 2011

Page 1 of 5

CUSTOMER: Analytical Testing & Consulting Services, Inc.
14625 Doster Road
Plainwell, MI 49080

DATE RECEIVED: Wednesday, January 5, 2011
PO/PROJECT #: 6296
SUBMITTAL #: 2011-01-05-004

LAB NUMBER: AA92824

Sampled By: Doug Haase
Job Location: 202 Garfield B.C. MI
Sample Identification: 01 - Room 1, Side A, Window Well

Date Sampled: Monday, January 3, 2011
Sample Description: Dust Wipe

Preparation Method: EPA 600/R-93/200M-W (Metals in Surface Wipe Samples, Sonication)
Analysis Method: EPA 6010B (ICP-AES Method for Determination of Metals)
Date Analyzed: Thursday, January 6, 2011

*Sample Area: 0.46 sq ft

ELEMENT	ANALYTE CONCENTRATION	ANALYTE REPORTING LIMIT (RL)	*AREA CONCENTRATION	*CALCULATED REPORTING LIMIT (RL)
Lead	13 ug	5.0 ug	28ug/ft ²	11 ug/ft ²

*Based on sampling information supplied by the client.

LAB NUMBER: AA92825

Sampled By: Doug Haase
Job Location: 202 Garfield B.C. MI
Sample Identification: 02 - Room 1, Side A, Floor

Date Sampled: Monday, January 3, 2011
Sample Description: Dust Wipe

Preparation Method: EPA 600/R-93/200M-W (Metals in Surface Wipe Samples, Sonication)
Analysis Method: EPA 6010B (ICP-AES Method for Determination of Metals)
Date Analyzed: Thursday, January 6, 2011

*Sample Area: 1.0 sq ft

ELEMENT	ANALYTE CONCENTRATION	ANALYTE REPORTING LIMIT (RL)	*AREA CONCENTRATION	*CALCULATED REPORTING LIMIT (RL)
Lead	- < RL	5.0 ug	- < RL	5.0 ug/ft ²

*Based on sampling information supplied by the client.

LAB NUMBER: AA92826

Sampled By: Doug Haase
Job Location: 202 Garfield B.C. MI
Sample Identification: 03 - Room 2, Side B, Window Sill

Date Sampled: Monday, January 3, 2011
Sample Description: Dust Wipe

Preparation Method: EPA 600/R-93/200M-W (Metals in Surface Wipe Samples, Sonication)
Analysis Method: EPA 6010B (ICP-AES Method for Determination of Metals)
Date Analyzed: Thursday, January 6, 2011

*Sample Area: 1.0 sq ft

ELEMENT	ANALYTE CONCENTRATION	ANALYTE REPORTING LIMIT (RL)	*AREA CONCENTRATION	*CALCULATED REPORTING LIMIT (RL)
Lead	- < RL	5.0 ug	- < RL	5.0 ug/ft ²

*Based on sampling information supplied by the client.

This report shall not be reproduced except in full, without written approval of CCC&L.
Individual sample results relate only to the sample as received by the laboratory.

CORROSION CONTROL CONSULTANTS & LABS, INC. a GPI company

ANALYTICAL LABORATORY REPORT

Thursday, January 6, 2011

Page 2 of 5

CUSTOMER: Analytical Testing & Consulting Services, Inc.
14625 Doster Road
Plainwell, MI 49080

DATE RECEIVED: Wednesday, January 5, 2011
PO/PROJECT #: 6296
SUBMITTAL #: 2011-01-05-004

LAB NUMBER: AA92827

Sampled By: Doug Haase
Job Location: 202 Garfield B.C. MI
Sample Identification: 04 - Room 2, Side B, Floor

Date Sampled: Monday, January 3, 2011
Sample Description: Dust Wipe

Preparation Method: EPA 600/R-93/200M-W (Metals in Surface Wipe Samples, Sonication)
Analysis Method: EPA 6010B (ICP-AES Method for Determination of Metals)
Date Analyzed: Thursday, January 6, 2011

*Sample Area: 1.0 sq ft

ELEMENT	ANALYTE CONCENTRATION	ANALYTE REPORTING LIMIT (RL)	*AREA CONCENTRATION	*CALCULATED REPORTING LIMIT (RL)
Lead	- < RL	5.0 ug	- < RL	5.0 ug/ft ²

*Based on sampling information supplied by the client.

LAB NUMBER: AA92828

Sampled By: Doug Haase
Job Location: 202 Garfield B.C. MI
Sample Identification: 05 - Room 3, Side C, Window Well

Date Sampled: Monday, January 3, 2011
Sample Description: Dust Wipe

Preparation Method: EPA 600/R-93/200M-W (Metals in Surface Wipe Samples, Sonication)
Analysis Method: EPA 6010B (ICP-AES Method for Determination of Metals)
Date Analyzed: Thursday, January 6, 2011

*Sample Area: 0.19 sq ft

ELEMENT	ANALYTE CONCENTRATION	ANALYTE REPORTING LIMIT (RL)	*AREA CONCENTRATION	*CALCULATED REPORTING LIMIT (RL)
Lead	59 ug	5.0 ug	310ug/ft ²	26 ug/ft ²

*Based on sampling information supplied by the client.

LAB NUMBER: AA92829

Sampled By: Doug Haase
Job Location: 202 Garfield B.C. MI
Sample Identification: 06 - Room 3, Side C, Floor

Date Sampled: Monday, January 3, 2011
Sample Description: Dust Wipe

Preparation Method: EPA 600/R-93/200M-W (Metals in Surface Wipe Samples, Sonication)
Analysis Method: EPA 6010B (ICP-AES Method for Determination of Metals)
Date Analyzed: Thursday, January 6, 2011

*Sample Area: 1.0 sq ft

ELEMENT	ANALYTE CONCENTRATION	ANALYTE REPORTING LIMIT (RL)	*AREA CONCENTRATION	*CALCULATED REPORTING LIMIT (RL)
Lead	29 ug	5.0 ug	29ug/ft ²	5.0 ug/ft ²

*Based on sampling information supplied by the client.

This report shall not be reproduced except in full, without written approval of CCC&L.
Individual sample results relate only to the sample as received by the laboratory.

CORROSION CONTROL CONSULTANTS & LABS, INC. a GPI company

ANALYTICAL LABORATORY REPORT

Thursday, January 6, 2011

Page 3 of 5

CUSTOMER: Analytical Testing & Consulting Services, Inc.
14625 Doster Road
Plainwell, MI 49080

DATE RECEIVED: Wednesday, January 5, 2011
PO/PROJECT #: 6296
SUBMITTAL #: 2011-01-05-004

LAB NUMBER: AA92830

Sampled By: Doug Haase
Job Location: 202 Garfield B.C. MI
Sample Identification: 07 - Room 9, Side D, Window Sill

Date Sampled: Monday, January 3, 2011
Sample Description: Dust Wipe

Preparation Method: EPA 600/R-93/200M-W (Metals in Surface Wipe Samples, Sonication)
Analysis Method: EPA 6010B (ICP-AES Method for Determination of Metals)
Date Analyzed: Thursday, January 6, 2011

*Sample Area: 0.70 sq ft

ELEMENT	ANALYTE CONCENTRATION	ANALYTE REPORTING LIMIT (RL)	*AREA CONCENTRATION	*CALCULATED REPORTING LIMIT (RL)
Lead	230 ug	5.0 ug	330ug/ft ²	7.1 ug/ft ²

*Based on sampling information supplied by the client.

LAB NUMBER: AA92831

Sampled By: Doug Haase
Job Location: 202 Garfield B.C. MI
Sample Identification: 08 - Room 9, Side D, Floor

Date Sampled: Monday, January 3, 2011
Sample Description: Dust Wipe

Preparation Method: EPA 600/R-93/200M-W (Metals in Surface Wipe Samples, Sonication)
Analysis Method: EPA 6010B (ICP-AES Method for Determination of Metals)
Date Analyzed: Thursday, January 6, 2011

*Sample Area: 1.0 sq ft

ELEMENT	ANALYTE CONCENTRATION	ANALYTE REPORTING LIMIT (RL)	*AREA CONCENTRATION	*CALCULATED REPORTING LIMIT (RL)
Lead	- < RL	5.0 ug	- < RL	5.0 ug/ft ²

*Based on sampling information supplied by the client.

LAB NUMBER: AA92832

Sampled By: Doug Haase
Job Location: 202 Garfield B.C. MI
Sample Identification: 09 - Room 10, Side A, Window Well

Date Sampled: Monday, January 3, 2011
Sample Description: Dust Wipe

Preparation Method: EPA 600/R-93/200M-W (Metals in Surface Wipe Samples, Sonication)
Analysis Method: EPA 6010B (ICP-AES Method for Determination of Metals)
Date Analyzed: Thursday, January 6, 2011

*Sample Area: 0.53 sq ft

ELEMENT	ANALYTE CONCENTRATION	ANALYTE REPORTING LIMIT (RL)	*AREA CONCENTRATION	*CALCULATED REPORTING LIMIT (RL)
Lead	38 ug	5.0 ug	72ug/ft ²	9.4 ug/ft ²

*Based on sampling information supplied by the client.

This report shall not be reproduced except in full, without written approval of CCC&L.
Individual sample results relate only to the sample as received by the laboratory.

CORROSION CONTROL CONSULTANTS & LABS, INC. a GPI company

ANALYTICAL LABORATORY REPORT

Thursday, January 6, 2011

Page 4 of 5

CUSTOMER: Analytical Testing & Consulting Services, Inc.
14625 Doster Road
Plainwell, MI 49080

DATE RECEIVED: Wednesday, January 5, 2011
PO/PROJECT #: 6296
SUBMITTAL #: 2011-01-05-004

LAB NUMBER: AA92833

Sampled By: Doug Haase
Job Location: 202 Garfield B.C. MI
Sample Identification: 10 - Room 10, Side A, Floor

Date Sampled: Monday, January 3, 2011
Sample Description: Dust Wipe

Preparation Method: EPA 600/R-93/200M-W (Metals in Surface Wipe Samples, Sonication)
Analysis Method: EPA 6010B (ICP-AES Method for Determination of Metals)
Date Analyzed: Thursday, January 6, 2011

***Sample Area:** 1.0 sq ft

ELEMENT	ANALYTE CONCENTRATION	ANALYTE REPORTING LIMIT (RL)	*AREA CONCENTRATION	*CALCULATED REPORTING LIMIT (RL)
Lead	6,200 ug	5.0 ug	6,200ug/ft ²	5.0 ug/ft ²

*Based on sampling information supplied by the client.

LAB NUMBER: AA92834

Sampled By: Doug Haase
Job Location: 202 Garfield B.C. MI
Sample Identification: 11 - Room 11, Side D, Window Sill

Date Sampled: Monday, January 3, 2011
Sample Description: Dust Wipe

Preparation Method: EPA 600/R-93/200M-W (Metals in Surface Wipe Samples, Sonication)
Analysis Method: EPA 6010B (ICP-AES Method for Determination of Metals)
Date Analyzed: Thursday, January 6, 2011

***Sample Area:** 0.65 sq ft

ELEMENT	ANALYTE CONCENTRATION	ANALYTE REPORTING LIMIT (RL)	*AREA CONCENTRATION	*CALCULATED REPORTING LIMIT (RL)
Lead	64 ug	5.0 ug	98ug/ft ²	7.7 ug/ft ²

*Based on sampling information supplied by the client.

LAB NUMBER: AA92835

Sampled By: Doug Haase
Job Location: 202 Garfield B.C. MI
Sample Identification: 12 - Room 11, Side D. Floor

Date Sampled: Monday, January 3, 2011
Sample Description: Dust Wipe

Preparation Method: EPA 600/R-93/200M-W (Metals in Surface Wipe Samples, Sonication)
Analysis Method: EPA 6010B (ICP-AES Method for Determination of Metals)
Date Analyzed: Thursday, January 6, 2011

***Sample Area:** 1.0 sq ft

ELEMENT	ANALYTE CONCENTRATION	ANALYTE REPORTING LIMIT (RL)	*AREA CONCENTRATION	*CALCULATED REPORTING LIMIT (RL)
Lead	- < RL	5.0 ug	- < RL	5.0 ug/ft ²

*Based on sampling information supplied by the client.

This report shall not be reproduced except in full, without written approval of CCC&L.
Individual sample results relate only to the sample as received by the laboratory.

CORROSION CONTROL CONSULTANTS & LABS, INC. a GPI company

ANALYTICAL LABORATORY REPORT

Thursday, January 6, 2011

Page 5 of 5

CUSTOMER: Analytical Testing & Consulting Services, Inc.
14625 Doster Road
Plainwell, MI 49080

DATE RECEIVED: Wednesday, January 5, 2011
PO/PROJECT #: 6296
SUBMITTAL #: 2011-01-05-004

Unless otherwise noted, the condition of each sample was acceptable upon receipt, all laboratory quality control requirements were met, and sample results have not been adjusted based on field blank or other analytical blank results.

Tests Reviewed By: Jason Kraai, Analyst

 Jason Kraai
2011.01.06 16:40:08
05'00

Corrosion Control Consultants & Labs, Inc. is AIHA accredited in the Environmental Lead Program for paint, soil, dust wipes, and air; and in the Industrial Hygiene Program for metals in air.

This report shall not be reproduced except in full, without written approval of CCC&L.

Individual sample results relate only to the sample as received by the laboratory.

CHAIN OF CUSTODY RECORD

ANALYTICAL TESTING & CONSULTING SERVICES, INC. 14625 DOSTER ROAD PLAINWELL, MI 49009 PH: 269-664-6474 FAX: 269-664-6406

BILLED TO
 Name: Analytical Testing & Consulting Services, Inc.
 Address: 14625 Doster Rd.
 City: Plainwell
 State: MI 49080
 Phone No: 269/ 664-6474

PROJECT INFORMATION
 Project Name/Location: 267 GARFIELD BL MI
 Project No.: 6296
 Project Contact: D...
 Date Sampled: 1/3/11
 Fax No.: 269/ 664-6406

ANALYSIS REQUIRED
 Properly Contained Yes No
 ASTM E1792 wipes Yes No
 Adequate Cooling Yes No
 Adequate pH Adjustment Yes No
 Lab Acidified: By/Date *NA*

Sampled by: *Douglas H. Haxie*

Samples Preserved: Yes No
 Received Cold: Yes No

Sample #	Description	Time On Lab	Time Off Lab	Total Time	Start Flow	Stop Flow	Avg. Flow	COMMENTS/ WIPE AREA (ft ²)
01	Room 1 side A window well	MA92821						3" X 22" (0.46)
02	Room 1 side A Floor	MA92825						15F (1.0)
03	Room 2 side B window sill	MA92826						12" X 12" (0.14)
04	Room 2 side B Floor	MA92827						3" X 9" (0.70)
05	Room 3 side C window well	MA92828						15F (0.53)
06	Room 3 side C Floor	MA92829						3 1/2" X 2 1/2" (0.65)
07	Room 4 side D window sill	MA92830						15F
08	Room 4 side D Floor	MA92831						4 1/2" X 17" (0.53)
09	Room 10 side A window well	MA92832						15F
10	Room 10 side A Floor	MA92833						3 1/2" X 2 1/2" (0.65)
11	Room 11 side B window sill	MA92834						15F
12	Room 11 side B Floor	MA92835						15F

* Do wipe samples submitted meet ASTM E1792 requirements? Yes No

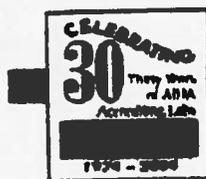
Samples Relinquished by: *[Signature]* Date: 1/3/10 1504
 Accepted by: _____ Date: _____

Special Instructions: *Next Day Read for lab by S Gerber 11511 1044am # 2011-01-05-004*

MAWA

Appendix D

Qualifications



LABORATORY QUALITY ASSURANCE PROGRAMS
 SOUND DATA
 SMART DECISIONS

AIHA
 Your Essential Connection: Advancing Occupational and Environmental Health and Safety Globally
 2700 Prosperity Ave., Suite 250, Fairfax, VA 22031 U.S.A.
 (703) 849-8888; Fax (703) 207-3561. www.aiha.org

AIHA Laboratory Quality Assurance Programs SCOPE OF ACCREDITATION

Corrosion Control Consultants & Labs, Inc.
 4403 Donker Court SE, Kentwood, MI 49512

Laboratory ID: 101030
 Issue Date: 06/30/2008

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or revocation. A complete listing of currently accredited Industrial Hygiene laboratories is available on the AIHA website at: <http://www.aiha.org/Content/LQAP/accred/AccreditedLabs.htm>

The EPA recognizes the AIHA ELLAP program as meeting the requirements of the National Lead Laboratory Accreditation Program (NLLAP) established under Title X of the Residential Lead-Based Paint Hazard Reduction Act of 1992 and includes paint, soil and dust wipe analysis. Air analysis is not included as part of the NLLAP.

Environmental Lead Laboratory Accreditation Program (ELLAP)

Initial Accreditation Date: 04/17/1995

Field of Testing (FoT)	Method	Method Description (for internal methods only)
Airborne Dust	EPA 600/R-93/200	
	EPA SW 846 6010B	
	NIOSH 7300	
Paint	EPA 600/R-93/200	
	EPA SW-846 6010B	
Settled Dust by Wipe	EPA 600/R-93/200	
	EPA SW-846 6010B	
Soil	EPA 600/R-93/200	
	EPA SW-846 6010B	

The laboratory participates in the following AIHA testing programs:

- Paint
- Soil
- Airborne Dust
- Settled Dust by Wipe



LABORATORY QUALITY ASSURANCE PROGRAMS

FOUND DATA

SMART DECISIONS

AIHA

Your Essential Connection: Advancing Occupational and Environmental Health and Safety Globally
 2700 Prosperity Ave Suite 250 Fairfax VA 22031 U.S.A.
 (703) 849-8888, Fax (703) 207-3561; www.aiha.org

**AIHA Laboratory Quality Assurance Programs
 SCOPE OF ACCREDITATION**

Corrosion Control Consultants & Labs, Inc.
 4403 Donker Court SE, Kentwood, MI 49512

Laboratory ID: 101030
 Issue Date: 06/30/2008

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or revocation. A complete listing of currently accredited Industrial Hygiene laboratories is available on the AIHA website at: <http://www.aiha.org/Content/LQAP/accred/AccreditedLabs.htm>

Industrial Hygiene Laboratory Accreditation Program (IHLAP)

Initial Accreditation Date: 08/01/1996

IHLAP Category	Field of Testing (FoT)	Method	Method Description <i>(for internal methods only)</i>
Core Program Testing	ICP	EPA 600/R-93/200	
		EPA SW-846 6010B	
		NIOSH 7300	

The laboratory participates in the following AIHA* or AHA-approved proficiency testing programs:

- Metals*
- Silica*
- Asbestos*
- Bulk Asbestos*
- Beryllium*
- WASP (Thermal Desorption Tubes)
- Pharmaceutical Round Robin
- Compressed/Breathing Air Round Robin
- NVLAP (determined at the time of site assessment)
- Organic Solvents*
- Diffusive Sampler (3M)*
- Diffusive Sampler (SKC)*
- Diffusive Sampler (AT)*
- WASP¹ (Formaldehyde)

¹ Workplace Analytical Scheme for Proficiency

CCC&L

a GPI company

4403 DONKER CT SE KENTWOOD MI 49512-4054 PHONE 616-940-3112 FAX 616-940-8139

Laboratory Personnel

Sarah Frank Olthof
Laboratory Manager
QA/QC Coordinator
Phone: (616) 940-3112
extension: 123
solthof@ccclabs.com

Megan Cornell - Senior Chemist
Phone: (616) 940-3112 x129
mcornell@ccclabs.com

Becky Walcott - Chemist **Sara Rashid - Chemist**
rwalcott@ccclabs.com srashid@ccclabs.com

Accreditations

- **AIHA- IHLAP/ ELLAP #101030**
Paint, Soil, Dust Wipes, Air Monitors
- **State of New York- Dept. of Health #11809**
Environmental Analyses/ Solid & Hazardous Waste: Air & Emissions, Non-potable Water
- **State of Ohio- Dept. of Health #10013**
- **Accredited to ISO 17025 standards**

Turn Around Times

- The laboratory is open Monday through Friday from 8 AM to 5 PM EST
- Standard turnaround time is 2-4 business days.
- One day turnaround is also available for no extra charge
TCLP and PM10 tests do not allow for a one day turn around
- Same day and 4 hour turnarounds are available for most analysis, additional charges will apply.
Contact the lab for pricing and availability

Waste Characterization

- Toxicity Characteristic Leaching Procedure (TCLP)
- Wastewaters
- pH
- Flash point
- Paint Filter

Air Monitoring Analysis

- PM10 Airborne particulate less than 10 microns
- TSP: Total Lead or Total Suspended Particulates
- 37mm Cassettes: For personal air monitoring
- All filters are available for purchase

Total Metal Analysis

- Matnces Paint Soil Dust Wipes
- Sampling containers are available at no charge
- CCC&L has ASTM E1792 approved dust wipes available for purchase.

Analytical Capabilities

- Inductively Coupled Plasma- Atomic Emission Spectrometry (ICP-AES)
- Mercury by Cold Vapor Atomic Absorption
- Gas Chromatography/ TCD
- Ion Chromatography



May 27, 2010

Lab ID#: 101030

Sarah Olthof
Corrosion Control Consultants & Labs, Inc.
4403 Donker Court SE
Kentwood, MI 49512

Dear Ms. Olthof:

AIHA Laboratory Accreditation Programs, (AIHA-LAP, LLC) has approved an extension to your laboratory's current certificate of accreditation in the Industrial Hygiene Laboratory Accreditation Program (IHLAP) and Environmental Lead Laboratory Accreditation Program (ELLAP). This extension will expire on July 01, 2010. Remember that your laboratory's proficiency rating in the PAT programs must be maintained for the new certificate to be issued.

Your laboratory remains an accredited laboratory in the IHLAP and ELLAP programs. Please keep a copy of this letter with your expired certificate. If you have questions or concerns, please feel free to contact Olena Bulgakova, Laboratory Accreditation Specialist at (703) 846-0792.

Sincerely,



Cheryl O. Morton
Director, Affiliate Laboratory Programs



June 25, 2010

Lab ID#: 101030

Sarah Diemer
Corrosion Control Consultants & Labs. Inc.
4403 Donker Court SE
Kentwood, MI 49512

Dear Ms. Diemer:

AIHA Laboratory Accreditation Programs, (AIHA-LAP, LLC) has approved an extension to your laboratory's current certificate of accreditation in the Industrial Hygiene Laboratory Accreditation Program (IHLAP) and Environmental Lead Laboratory Accreditation Program (ELLAP). This extension will expire on August 01, 2010. Remember that your laboratory's proficiency rating in the PAT programs must be maintained for the new certificate to be issued.

Your laboratory remains an accredited laboratory in the IHLAP and ELLAP programs. Please keep a copy of this letter with your expired certificate. If you have questions or concerns, please feel free to contact Olena Bulgakova, Laboratory Accreditation Specialist at (703) 846-0792.

Sincerely,



Cheryl O. Morton
Director, Affiliate Laboratory Programs

Appendix E

Manufacturer's Performance Characteristic Sheets

Performance Characteristic Sheet

EFFECTIVE DATE: September 24, 2004

EDITION NO.: 1

MANUFACTURER AND MODEL:

Make: Niton LLC

Tested Model: XLp 300

Source: ¹⁰⁹Cd

Note: This PCS is also applicable to the equivalent model variations indicated below, for the Lead-in-Paint K+L variable reading time mode, in the XLi and XLp series:

XLi 300A, XLi 301A, XLi 302A and XLi 303A.

XLp 300A, XLp 301A, XLp 302A and XLp 303A.

XLi 700A, XLi 701A, XLi 702A and XLi 703A.

XLp 700A, XLp 701A, XLp 702A, and XLp 703A.

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

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

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

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm² (inclusive)

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

SUBSTRATE CORRECTION:

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

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

INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE 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 from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

OPERATING PARAMETERS:

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

SUBSTRATE CORRECTION VALUE COMPUTATION:

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

EVALUATING THE QUALITY OF XRF TESTING:

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

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

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

Compute the Retest Tolerance Limit by the following steps:

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

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

Square the average for each testing combination.

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

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

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

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

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

Compute the average of all ten original XRF results

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

Find the absolute difference of the two averages.

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

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

TESTING TIMES:

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

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

CLASSIFICATION RESULTS:

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

DOCUMENTATION:

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

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

Appendix F

Standard Reevaluation Schedules

Table 6.1 Standard Reevaluation Schedules

Schedule	Evaluation Results	Action Taken	Reevaluation Frequency and Duration	Visual Survey (by owner or owner's representative)
1	Combination risk assessment/inspection finds no leaded dust or soil and no lead-based paint	None	None	None
2	No lead-based paint hazards found during risk assessment conducted before hazard control or at clearance (hazards include dust and soil)	None	3 Years	Annually and whenever information indicates a possible problem
3	The average of leaded dust levels on all floors, interior window sills, or window troughs sampled exceeds the applicable standard, but by less than a factor of 10	<p>A Interim controls and/or hazard abatement (or mixture of the two), including, but not necessarily limited to, dust removal. This schedule does not include window replacement</p> <p>B Treatments specified in section A plus replacement of all windows with lead hazards</p> <p>C Abatement of all lead-based paint using encapsulation or enclosure</p> <p>D Removal of all lead-based paint</p>	1 Year, 2 Years	Same as Schedule 2 except for encapsulants. The first visual survey of encapsulants should be done one month after clearance, the second should be done 6 months later and annually thereafter
4	The average of leaded dust levels on all floors, interior window sills, or window troughs sampled exceeds the applicable standard by a factor of 10 or more	<p>A Interim controls and/or hazard abatement (or mixture of the two), including, but not necessarily limited to dust removal. This schedule does not include window replacement.</p> <p>B Treatments specified in section A plus replacement of all windows with lead hazards</p> <p>C Abatement of all lead-based paint using encapsulation and enclosure</p> <p>D Removal of all lead-based paint</p>	<p>6 Months, 1 Year, 2 Years</p> <p>6 Months, 2 Years</p> <p>None</p> <p>None</p>	Same as Schedule 3 above

Table 6.1 Standard Reevaluation Schedules (continued)

Schedule	Evaluation Results	Action Taken	Reevaluation Frequency and Duration	Visual Survey (by owner or owner's representative)
5	No leaded dust or leaded soil hazards identified, but lead-based paint or lead-based paint hazards are found	<p>A Interim controls or mixture of interim controls and abatement (not including window replacement)</p> <p>B Mixture of interim controls and abatement, including window replacement</p> <p>C Abatement of all lead-based paint hazards, but not all lead-based paint</p> <p>D Abatement of all lead-based paint using encapsulation or enclosure</p> <p>E Removal of all lead-based paint</p>	<p>2 Years</p> <p>3 Years</p> <p>4 Years</p> <p>None</p> <p>None</p> <p>None</p>	<p>Same as Schedule 3</p> <p>Same as Schedule 3</p> <p>Same as Schedule 3</p> <p>Same as Schedule 3</p> <p>None</p> <p>Three months to check new ground cover, then annually to identify new bare spots</p> <p>None for removal, annually to identify new bare spots or deterioration of paving</p>
6	Bare leaded soil exceeds standard, but less than 5,000 µg/g	Interim controls	None	
7	Bare leaded soil greater than or equal to 5,000 µg/g	Abatement (paving or removal)	None	

See notes to table 6.1 on following page



ANALYTICAL TESTING & CONSULTING SERVICES, INC.

***14625 Doster Road
Plainwell, Michigan 49080
Phone: 269-664-6474
FAX: 269-664-6406
E-mail: atcsinc@aol.com***

LEAD RISK ASSESSMENT REPORT FOR THE PROPERTY LOCATED AT

***202 Garfield Avenue
Battle Creek, Michigan 49017***

PREPARED FOR

***Attn: Jon Presecan
Calhoun County Treasure
315 W. Green Street
Marshall, Michigan 49068***

***REPORT PREPARED AND SUBMITTED BY
ANALYTICAL TESTING & CONSULTING SERVICES, INC.***

ON

January 7th, 2011

LAB # 6296

TABLE OF CONTENTS

- 0.0 Summary**
- 1.0 Lead Inspection Overview**
- 2.0 Visual Inspection**
- 3.0 Summary Discussion of XRF Inspection**
- 4.0 Dust Wipe Sampling**
- 5.0 Soil Sampling**
- 6.0 Friction & Impact Survey**
- 7.0 Recommendations**
- 8.0 Credentials**
- 9.0 Maps**
- 10.0 Lab Results**
- 11.0 Reevaluation Schedule**
- 12.0 Conclusion**

Appendix A: Site Location Map

Appendix B: XRF Data

Appendix C: Lab Analysis

Appendix D: Qualifications

Appendix E: Manufacturer's Performance

Characteristic Sheets

Appendix F: Standard Reevaluation Schedules



ANALYTICAL TESTING & CONSULTING SERVICES, INC.

14625 Doster Road
Plainwell, Michigan 49080
Phone: 269-664-6474
FAX: 269-664-6406
E-mail: atcsinc@aol.com

0.0 Summary

On January 3rd & 7th, 2011 a lead risk assessment was conducted by Doug Haase of Analytical Testing and Consulting Services at 202 Garfield Avenue, located in Battle Creek, Michigan. The inspected building was a single household that is vacant and is up for sale by the Calhoun County Treasurer. The 4 - bedroom household was built in the 1940s.

Most interior components of the house were found to be *negative* and *below* the regulatory for *lead standards of 1.0 mg/cm² per the XRF test results*, except for baseboards in rooms 8 & 9, the ceiling in room 2, walls in rooms 2, 3 & 8, and a number of door and window components throughout the house which tested *positive* and *above* the regulatory standards. The exact location of these components can be found in the table in the summary discussion of XRF results section and in the XRF data sheets in appendix B.

Most exterior components of the house were found to be *positive* and *above* the regulatory for *lead standards of 1.0 mg/cm² per the XRF test result*, except for the stairs window sash, ceiling and door on rear porch and ceiling on the front porch which tested *negative* and *below* the regulatory standards. The exact location of these components can be found in the table in the summary discussion of XRF results section and in the XRF data sheets in appendix B.

The lead wipe results showed that all window sills, most window wells and most floors tested *below* the regulatory standards so therefore aren't considered lead hazardous, however the window sill in room 9 and the floor in room 10 tested *above* the regulatory standards so therefore are considered lead hazardous. These lab results are found in appendix C.

1.0 Lead Inspection Overview

Doug Haase of Analytical Testing & Consulting Services, Inc. (ATCS) conducted a lead risk assessment on January 3rd & 7th, 2011 of the household located at 202 Garfield Avenue, located in Battle Creek, Michigan. Mr. Haase is a State of Michigan accredited Lead Risk Assessor; his certification number is P-0383. See Appendix E for copies of assessor qualifications.

The instrument used for this investigation was an X-ray fluorescence (XRF) NITON XLp-300A unit, serial number 24019. The NITON XRF Model XLp-300A is a hand held, portable lead detector, designed to make fast, accurate nondestructive measurements of lead concentration in lead-based paint. X-ray fluorescence is produced by exciting an atom with x-rays which causes the excited atoms to give

off its characteristic x-rays. Using the XRF, we “shoot” atoms with x-rays and capture the x-rays’ fluorescence, which we can measure to determine the identity of the atoms.

The subject property is a residential household with 4 bedrooms. This house was built in the 1940s. This house is vacant and is up for sale by the Calhoun County Treasure.

The following questionnaire is the HUD form 5.0, which details children’s habits and family use patterns for the building. The answers were generated from the household via the risk assessor.

Children/Children’s Habits

VACANT

1. (a) Do you have any children that live in your household? Yes ___ No ___
(If no children, skip to Question 5.)
(b) If yes, how many ___ Ages? ___
(c) Record blood levels, if known:
(d) Are there women of childbearing age present? Yes ___ No ___
2. Location of the rooms/areas where child sleeps, eats, and plays.

Name of child	Location of bedroom	Location of all rooms where child eats	Primary location where child plays indoors	Primary location where child plays outdoors

3. Where are the toys stored/ kept?
4. Is there any visible evidence of chewed or peeling paint on the woodwork, furniture, or toys?

Family Use Patterns

5. Which entrances are used most frequently?
6. Which windows are opened most frequently?
7. Do you use window air conditioners? If yes, where?
(Condensation often causes paint deterioration)
8. (a) Do any household members garden?
(b) Location of garden?
(c) Are you planning any landscaping activities that
Will remove grass or ground covering?
9. (a) How often is the household cleaned?
(b) What cleaning methods do you use?
10. (a) Did you recently complete any building renovations?
(b) If yes, where
(c) Was building debris stored in the yard? If yes, where?
11. Are you planning any building renovations? If yes, where?
12. (a) Do any household members work in a lead-related industry?
13. (b) If yes, where are dirty work clothes placed and cleaned?

The following report details the results of the investigation. See Appendix A for a site location map.

2.0 Visual Inspection

A visual inspection was performed on the exterior and the interior of the household to determine where deteriorated paint exists and if it contains lead. Sections of the household are labeled Side A, B, C or D. The side of the household from which the street address is given is Side A. Side B, C and D are then labeled clockwise from Side A. This labeling system applies to the exterior as well as each room in the household. Please see Appendix A for a site location map illustrating this labeling system.

The HUD Form 5.1, Building Condition Form, was used to assess the building's structural integrity as part of the visual assessment.

Condition	Yes	No
Roof missing parts of surfaces (tiles, boards, shakes, etc.)		X
Roof has holes or large cracks		X
Gutters or down-spouts broken		X
Chimney masonry cracked, bricks loose or missing, obviously out of plumb		X
Exterior of interior walls have obvious large cracks or holes, requiring more than routine pointing (if masonry) or painting	X	
Exterior siding has missing boards or shingles		X
Water stains on interior walls or ceilings	X	
Plaster walls or ceilings deteriorated	X	
Two or more windows or doors broken, missing, or boarded up		X
Porch or steps have major elements broken, missing, or boarded up		X
Foundation has major cracks, missing material, structure leans, or visibly unsound		X
*Total number	3	8

*If the "Yes" column has two or more checks, the dwelling is usually considered to be in poor condition for the purposes of a risk assessment. However, specific conditions and extenuating circumstances should be considered before determining the final condition of the dwelling and the appropriateness of a lead hazard screen.

3.0 Summary Discussion of XRF Inspection

During the risk assessment 198 XRF readings including calibrations were obtained, out of these 65 were *positive* which are listed below in the following table.

The following chart contains descriptions of components sampled with the XRF unit that tested *positive* for lead-based paint. As defined by the nature of a lead risk assessment, only areas with deteriorated paint need to be tested with the XRF unit. However, components that are in good condition will be tested if they are friction and impact surfaces, which are discussed in Section 6.

#	Room	Side	Structure	Feature	Substrate	Condition	Color	PbC	Units
15	Room 02	A	Wall	Upper	Drywall	Good	Purple	5.5	mg / cm ^2
16	Room 02	B	Wall	Upper	Drywall	Good	Purple	8.2	mg / cm ^2
18	Room 02	C	Wall	Upper	Plaster	Good	Purple	8.3	mg / cm ^2
20	Room 02	C	Wall	Lower	Plaster	Good	Green	14.4	mg / cm ^2

21	Room 02	B	Wall	Lower	Plaster	Good	Green	11.2	mg / cm ^2
22	Room 02	D	Wall	Lower	Plaster	Good	Green	11.4	mg / cm ^2
24	Room 02	C	Wall	Chair Rail	Wood	Good	White	2.5	mg / cm ^2
38	Room 02	B	Ceiling	Middle	Plaster	Fair	White	3.2	mg / cm ^2
44	Room 03	D	Wall	Middle	Plaster	Poor	Off-White	5.8	mg / cm ^2
87	Room 05 Entry	C	Door	Door	Wood	Good	White	11.9	mg / cm ^2
106	Room 07 Landing	A	Door	Casing	Wood	Fair	White	9.5	mg / cm ^2
107	Room 07 Landing	A	Door	Door	Wood	Fair	White	11.7	mg / cm ^2
108	Room 07 Landing	B/C	Door	Casing	Wood	Fair	White	10.9	mg / cm ^2
110	Room 07 Landing	C/D	Door	Casing	Wood	Fair	White	11	mg / cm ^2
111	Room 07 Landing	C/D	Door	Jamb	Wood	Fair	White	10.4	mg / cm ^2
114	Room 07 Landing	D	Door	Casing	Wood	Fair	White	13.4	mg / cm ^2
115	Room 07 Landing	D	Door	Door	Wood	Fair	White	10	mg / cm ^2
119	Room 08	D	Wall	Middle	Plaster	Good	Lime	1.02	mg / cm ^2
120	Room 08	A	Window	Casing	Wood	Good	White	13.5	mg / cm ^2
121	Room 08	A	Window	Sill	Wood	Good	White	3.3	mg / cm ^2
122	Room 08	A	Window	Sash	Wood	Friction	White	12.8	mg / cm ^2
123	Room 08	D	Window	Casing	Wood	Friction	White	10.3	mg / cm ^2
124	Room 08	D	Window	Sill	Wood	Friction	White	6.1	mg / cm ^2
125	Room 08	A	Window	Well	Wood	Friction	Beige	19.8	mg / cm ^2
126	Room 08	C	Door	Casing	Wood	Good	White	12.8	mg / cm ^2
127	Room 08	C	Door	Door	Wood	Good	White	14	mg / cm ^2
128	Room 08	C	Baseboard	Middle	Wood	Good	White	11.2	mg / cm ^2
133	Room 09	A	Window	Casing	Wood	Good	Purple	10.2	mg / cm ^2
134	Room 09	A	Window	Sill	Wood	Good	Purple	7.8	mg / cm ^2
135	Room 09	A	Window	Sash	Wood	Friction	White	14.8	mg / cm ^2
136	Room 09	A	Baseboard	Middle	Wood	Chip/Peel	White	10.3	mg / cm ^2
143	Room 10 Bath	B	Window	Sash	Wood	Friction	White	12.4	mg / cm ^2
144	Room 10 Bath	B	Window	Well	Wood	Poor	Beige	11.5	mg / cm ^2
149	Room 11	A	Door	Casing	Wood	Good	White	11.9	mg / cm ^2
151	Room 11	B	Window	Casing	Wood	Good	White	9.8	mg / cm ^2
152	Room 11	B	Window	Sill	Wood	Good	White	4.1	mg / cm ^2
153	Room 11	B	Window	Sash	Wood	Friction	White	12.1	mg / cm ^2
154	Room 11	D	Window	Casing	Wood	Friction	White	8.8	mg / cm ^2
155	Room 11	C	Window	Sill	Wood	Friction	White	6.7	mg / cm ^2
156	Room 11	C	Window	Sash	Wood	Friction	White	11.7	mg / cm ^2
157	Room 11	D	Door	Casing	Wood	Good	White	13	mg / cm ^2
158	Room 11	D	Door	Stop	Wood	Good	White	10.7	mg / cm ^2
159	Room 11	D	Door	Door	Wood	Good	White	11.1	mg / cm ^2
166	Room 12	A	Door	Casing	Wood	Good	White	9.1	mg / cm ^2
168	Room 12	B	Door	Casing	Wood	Good	White	9.9	mg / cm ^2
169	Room 12	B	Door	Door	Wood	Good	White	7.8	mg / cm ^2
170	Room 12	C	Window	Casing	Wood	Good	White	14.4	mg / cm ^2
171	Room 12	C	Window	Sill	Wood	Good	White	3.9	mg / cm ^2
172	Room 12	C	Window	Sash	Wood	Good	White	12	mg / cm ^2
173	Room 12	D	Window	Casing	Wood	Good	White	10.7	mg / cm ^2
174	Room 12	D	Window	Sill	Wood	Good	White	6.3	mg / cm ^2
175	Room 12	D	Window	Sash	Wood	Friction	White	11.8	mg / cm ^2
177	Front Porch	A	Porch	Column Post	Wood	Poor	White	17.6	mg / cm ^2
178	Front Porch	A	Porch	Header	Wood	Poor	White	23.6	mg / cm ^2
184	Rear Porch	C	Support Column	Middle	Wood	Poor	White	6.5	mg / cm ^2
186	Rear Porch	C	Soffit	Middle	Wood	Poor	White	7.3	mg / cm ^2
188	Rear Porch	A	Siding	Middle	Wood	Poor	Black	9.2	mg / cm ^2

189	Home Exterior	B	Basement Window	Casing	Wood	Poor	White	1.6	mg / cm ²
190	Home Exterior	B	Basement Window	Casing	Wood	Poor	White	18.2	mg / cm ²
192	Home Exterior	B	Stairs Window	Casing	Wood	Poor	White	7.4	mg / cm ²
194	Home Exterior	B	Stairs Window	Sill	Wood	Poor	White	4.5	mg / cm ²
195	Home Exterior	B	Stairs Window	Sash	Wood	Poor	White	5.4	mg / cm ²
196	Home Exterior	B	Kitchen Window	Sill	Wood	Poor	White	5.8	mg / cm ²
197	Home Exterior	C	Kitchen Window	Casing	Wood	Poor	White	6.8	mg / cm ²
198	Home Exterior	D	Storage Window	Casing	Wood	Poor	White	3.8	mg / cm ²

Please refer to the XRF Data forms in Appendix B. These forms contain the component's location, condition and whether they tested positive or negative for lead-based paint for all samples obtained using the XRF. Similar components in the same area of positive locations should also be assumed that they are positive too.

All surfaces were tested with the XRF unit according to Performance Characteristic Sheet recommendations, distributed by the U.S. Environmental Protection Agency (EPA) and Department of Housing and Urban Development (HUD). See Appendix E for a copy of the Manufacturer's Performance Characteristic Sheet.

XRF technology utilizes low level radiation to excite atoms within a painted surface. This excited state produces energy, which the XRF unit is able to analyze. Based upon its analysis, the unit is able to determine if lead-based paint is present. The XRF will report lead in micrograms per square centimeter (mg/cm²). HUD recognizes paint to be lead containing if it contains equal to or greater than 1.0 mg/cm². This investigation recognizes the HUD standard of 1.0 mg/cm².

Surfaces that tested positive for lead would be described above in the visual inspection section, which would include all of the positive lead results located in the XRF Lead Results table that can be found in Appendix B.

4.0 Dust Wipe Sampling

In addition to sampling with the XRF unit, other methods of locating lead were also utilized during this inspection. For example, dust wipe sampling was used and was conducted according to HUD guidelines.

Dust wipe samples are collected in the following manner:

1. An area located on the surface to be dust wiped no less than 0.1 ft² and no larger than 2 ft² is measured and recorded.
2. A single moist towelette is opened with a gloved hand and wiped across the sampling area in a series of "s" patterns.
3. The towelette is folded inward and placed into a container labeled with the site location identification, sample location and size of area wiped.
4. Samples are analyzed and reported by the laboratory in micrograms per square foot (ug/ft²).

Dust is considered lead burdened if a concentration above the following criteria for each surface is found to be present.

Floors	40 ug/ft ²
Window sills (stools)	250 ug/ft ²
Window troughs (wells)	400 ug/ft ²

The following chart illustrates the lead wipe locations and concentrations for all wipes taken during the investigation.

6296-01	Room 1, Side A, Window Well	28 µg/ft ²	#1
6296-02	Room 1, Side A, Floor	<5 µg/ft ²	#2
6296-03	Room 2, Side B, Window Sill	<5 µg/ft ²	#3
6296-04	Room 2, Side B, Floor	<5 µg/ft ²	#4
6296-05	Room 3, Side C, Window Well	310 µg/ft ²	#5
6296-06	Room 3, Side C, Floor	29 µg/ft ²	#6
6296-07	Room 9, Side D, Window Sill	330 µg/ft²	#7
6296-08	Room 9, Side D, Floor	<5 µg/ft ²	#8
6296-09	Room 10, Side A, Window Well	72 µg/ft ²	#09
6296-10	Room 10, Side A, Floor	6,200 µg/ft²	#10
6296-11	Room 11, Side B, Window Sill	98 µg/ft ²	#11
6296-12	Room 11, Side B, Floor	<5 µg/ft ²	#12

For a complete listing of all wipe results, please see Appendix C.

5.0 Soil Sampling

Soil samples, if collected, were following HUD guidelines from areas of exposed soil located on the property. Composite samples of soil from the upper ½ inch were collected and analyzed by Environmental Hazards Services, L.L.C. According to EPA and HUD guidelines, a limit of 400 mg/kg (ppm) of lead is allowed in high contact area such as play areas and/or the exposed soil directly around the perimeter of the household. A limit of 1,200 mg/kg (ppm) is allowed in low contact areas such as the other parts of the yard.

No soil samples were collected during this assessment due to no bare soil around the house or yard.

6.0 Friction and Impact Survey

Paint containing lead is most hazardous when it is chipping, peeling, cracking, chalking or on components such as doors, windows, and floors which encounter friction. Friction is the result of two objects rubbing together. Doors and door trim, as well as windows and window trim, encounter a significant amount of friction from being repeatedly open and shut. Painted flooring can also be considered a friction surface due to foot traffic, hard-soled shoes or roller chairs. These actions cause lead containing paints to be ground into fine dusts, making the lead available for human consumption.

7.0 Recommendations

Component	Location	Recommendations
Doors & Components	Throughout where positive	<p>Interim – Replace the door stop. Wet-plane the corner edges of the door on its latch side where it contacts the stop. Re-set the hinge screws if necessary, so the door does not make any wood to wood contact. It is also recommended that any chipping lead paint surrounding the door be wet scraped and repainted.</p> <p>Abatement – Remove and replace doors or encapsulate by following the lead hazard control program set by the State of Michigan. Qualified personnel should perform all abatement work.</p>
Walls	Throughout house where positive	<p>Interim- To temporarily avoid lead dust surfaces can be wet scraped and repainted or covered with new material.</p> <p>Abatement- Remove, encapsulate or replace all materials or replace all materials containing lead paint by following the lead hazard control program set by the State of Michigan. Qualified personnel should perform all abatement work.</p>
Windows & Components	Throughout house where positive	<p>Interim – Remove any paint on friction surfaces and paint the window well.</p> <p>Abatement – Remove and replace windows or encapsulate by following the lead hazard control program set by the State of Michigan. Qualified personnel should perform all abatement work.</p>
Exterior Components	Soffit, Siding & Support Column on Rear Porch Window Sills & Casings Front Porch Column Post & Header	<p>Interim – Scrape and paint house with high grade primer and paint or remove and replace windows or encapsulate by following the lead hazard program.</p> <p>Abatement – Remove and replace all painted materials containing lead paint by following the lead hazard control program set by the State of Michigan. Qualified personnel should perform all abatement work.</p>
Miscellaneous Surfaces	Ceiling in Room 2 Room 8 & 9 Baseboard	<p>Interim- To temporarily avoid lead dust surfaces can be wet scraped and repainted or covered with new material.</p> <p>Abatement- Remove, encapsulate or replace all materials or replace all materials containing lead paint by following the lead hazard control program set by the State of Michigan. Qualified personnel should perform all abatement work.</p>
Floors	Throughout house where positive	<p>Interim – To temporarily avoid lead dust, floors can be wet scraped and repainted or covered up with new material.</p> <p>Abatement – Remove, encapsulate or replace all materials containing lead paint by following the lead hazard control program set by the State of Michigan. Qualified personnel should perform all abatement work.</p>
Lead Dust	Throughout house where positive	<p>Interim- Utilize 8-hr trained people to clean the house following interim control work.</p> <p>Abatement- Utilize 32-hr trained people to clean the house if abatement work took place.</p>

The simplest way to reduce lead exposures is to wash hands and horizontal surfaces regularly. Regular household soaps such as liquid soap or dish soap are the best solutions. However, it is important to remember not to re-contaminate surfaces.

8.0 Credentials

See Appendix D for copies of assessor and inspector qualifications.

9.0 Maps

A site location map is enclosed in Appendix A.

10.0 Lab Results

Appendix C contains all lab results along with a map detailing where wipe samples were obtained.

11.0 Reevaluation Schedule

Based on the HUD Table 6.1 Standard Reevaluation Schedule, all surfaces that were found to contain deteriorating lead-based paint during this risk assessment should be reevaluated every year to maintain lead-safe conditions. Any surfaces that are currently in good condition and therefore do not require any immediate action should be visually monitored every year to maintain good condition. These tables can be found in Appendix F.

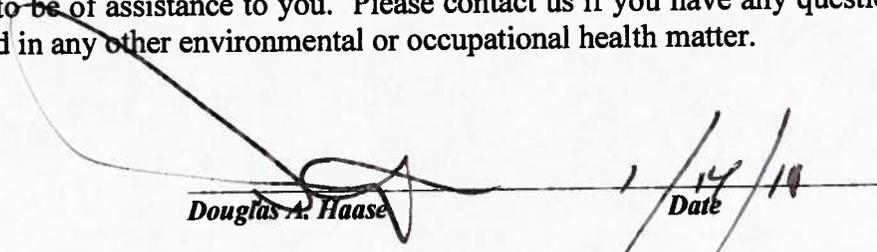
12.0 Conclusion

Most interior components of the house were found to be *negative* and *below* the regulatory for *lead standards of 1.0 mg/cm² per the XRF test results*, except for baseboards in rooms 8 & 9, the ceiling in room 2, walls in rooms 2, 3 & 8, and a number of door and window components throughout the house which tested *positive* and *above* the regulatory standards. The exact location of these components can be found in the table in the summary discussion of XRF results section and in the XRF data sheets in appendix B.

Most exterior components of the house were found to be *positive* and *above* the regulatory for *lead standards of 1.0 mg/cm² per the XRF test result*, except for the stairs window sash, ceiling and door on rear porch and ceiling on the front porch which tested *negative* and *below* the regulatory standards. The exact location of these components can be found in the table in the summary discussion of XRF results section and in the XRF data sheets in appendix B.

The lead wipe results showed that all window sills, most window wells and most floors tested *below* the regulatory standards so therefore aren't considered lead hazardous, however the window sill in room 9 and the floor in room 10 tested *above* the regulatory standards so therefore are considered lead hazardous. These lab results are found in appendix C.

It has been a pleasure to be of assistance to you. Please contact us if you have any questions or when we can be of further aid in any other environmental or occupational health matter.


Douglas A. Haase

1/14/10
Date

Appendix Table of Contents

A) Site Location Map

B) XRF Data

C) Lab Analysis

D) Qualifications

**E) Manufacturer's
Performance
Characteristic Sheets**

**F) Standard
Reevaluation
Schedules**

Appendix A

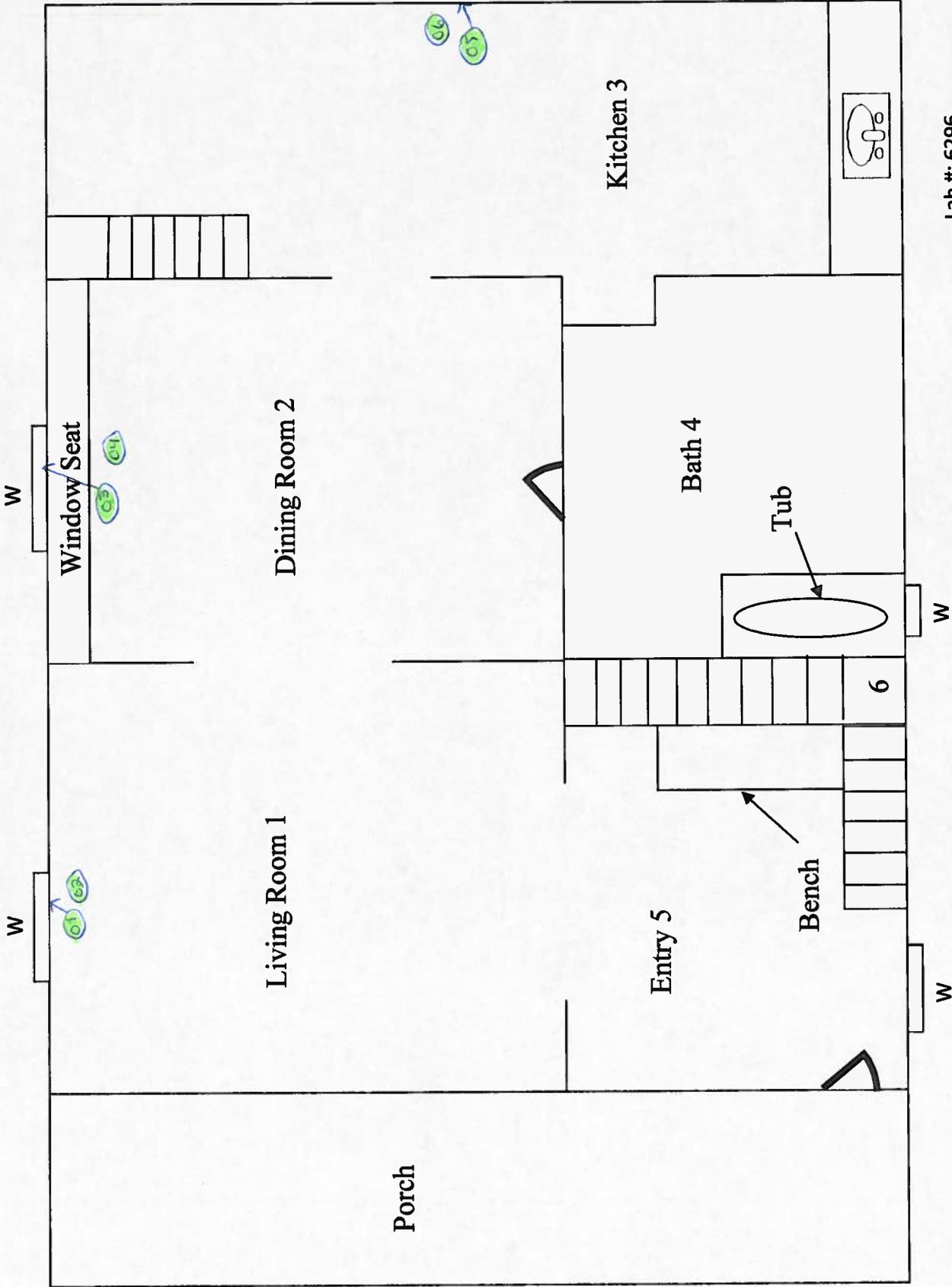
Site Location Map

B

C

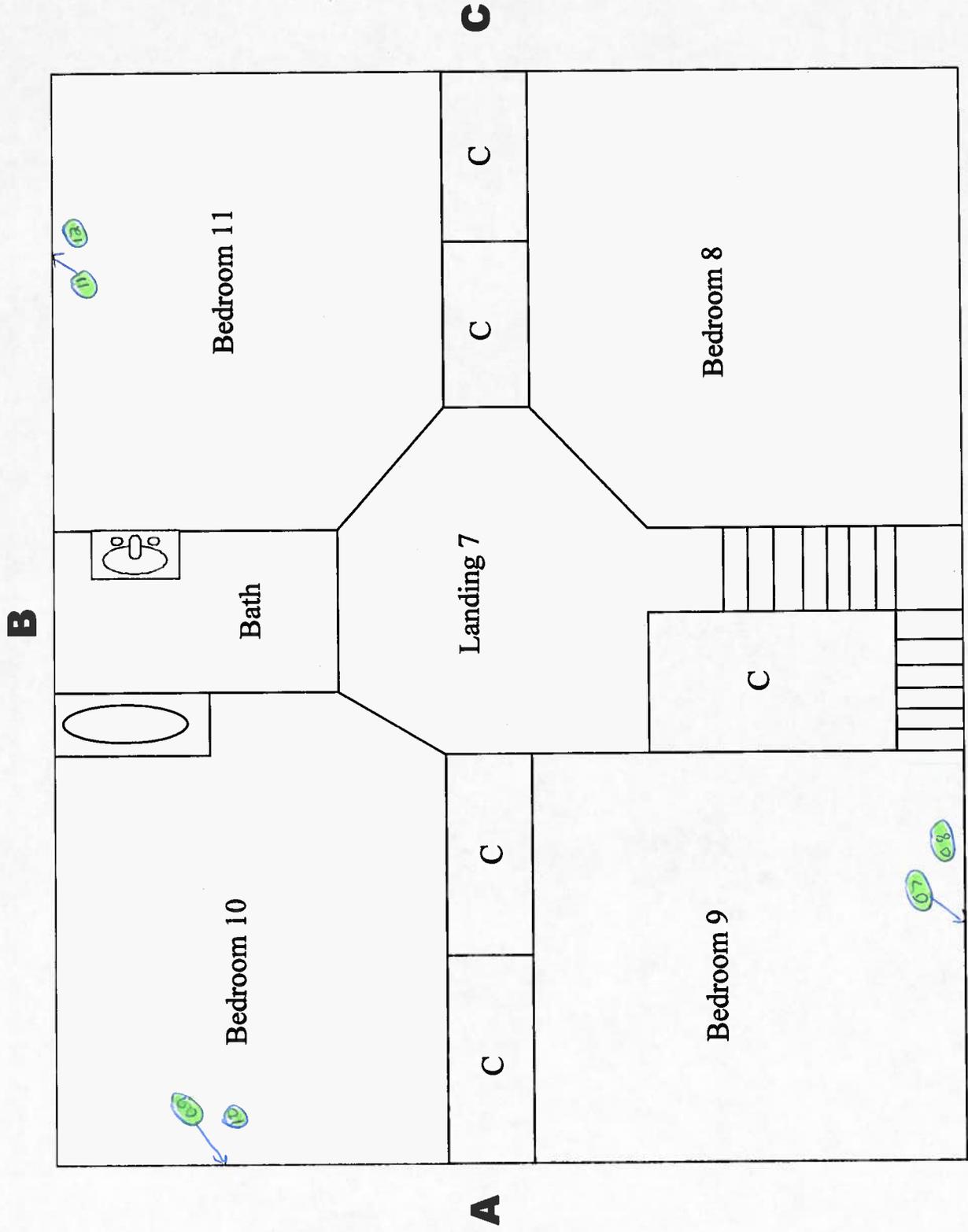
D

A



Lab #: 6296
 202 Garfield Ave.
 Battle Creek, MI 49017

1st Floor



Lab #6296
 202 Garfield Ave.
 Battle Creek, MI 49017

2nd Floor

Appendix B

XRF Data

Reading No	Room	Side	Structure	Feature	Substrate	Condition	Color	Results	PbC	Units
1									3.86	cps
2	Cal <0.01	Cal	Cal	Cal	Cal	Cal	Cal	Negative	0	mg / cm ^2
3	Cal 1.04	West	Cal	Cal	Cal	Cal	Cal	Positive	1.1	mg / cm ^2
4	Cal 1.53	Cal	Cal	Cal	Cal	Cal	Cal	Positive	1.5	mg / cm ^2
5	Room 01	A	Wall	Middle	Plaster	Good	Purple	Negative	0	mg / cm ^2
6	Room 01	B	Wall	Middle	Plaster	Good	Green	Negative	0	mg / cm ^2
7	Room 01	C	Wall	Middle	Plaster	Good	Green	Negative	0	mg / cm ^2
8	Room 01	D	Wall	Middle	Plaster	Good	Green	Negative	0	mg / cm ^2
9	Room 01	A	Window	Casing	Wood	Good	White	Negative	0.2	mg / cm ^2
10	Room 01	A	Window	Sill	Wood	Good	White	Negative	0	mg / cm ^2
11	Room 01	B	Window	Casing	Wood	Good	White	Negative	0.17	mg / cm ^2
12	Room 01	B	Window	Sill	Wood	Good	White	Negative	0.27	mg / cm ^2
13	Room 01	A	Baseboard	Middle	Wood	Good	White	Negative	0.23	mg / cm ^2
14	Room 01	C	Baseboard	Middle	Wood	Good	White	Negative	0.08	mg / cm ^2
15	Room 02	A	Wall	Upper	Drywall	Good	Purple	Positive	5.5	mg / cm ^2
16	Room 02	B	Wall	Upper	Drywall	Good	Purple	Positive	8.2	mg / cm ^2
17	Room 02	C	Wall	Upper	Drywall	Good	Purple	Negative	0.5	mg / cm ^2
18	Room 02	C	Wall	Upper	Plaster	Good	Purple	Positive	8.3	mg / cm ^2
19	Room 02	A	Wall	Lower	Plaster	Good	Green	Negative	0.18	mg / cm ^2
20	Room 02	C	Wall	Lower	Plaster	Good	Green	Positive	14.4	mg / cm ^2
21	Room 02	B	Wall	Lower	Plaster	Good	Green	Positive	11.2	mg / cm ^2
22	Room 02	D	Wall	Lower	Plaster	Good	Green	Positive	11.4	mg / cm ^2
23	Room 02	A	Wall	Chair Rail	Wood	Good	White	Negative	0.4	mg / cm ^2
24	Room 02	C	Wall	Chair Rail	Wood	Good	White	Positive	2.5	mg / cm ^2
25	Room 02	D	Wall	Chair Rail	Wood	Good	White	Negative	0.3	mg / cm ^2
26	Room 02	A	Baseboard	Middle	Wood	Good	White	Negative	0.4	mg / cm ^2
27	Room 02	B	Baseboard	Middle	Wood	Good	White	Negative	0.21	mg / cm ^2
28	Room 02	C	Baseboard	Middle	Wood	Good	White	Negative	0.19	mg / cm ^2
29	Room 02	D	Baseboard	Middle	Wood	Good	White	Negative	0.4	mg / cm ^2
30	Room 02	B	Window	Casing	Wood	Good	White	Negative	0.23	mg / cm ^2
31	Room 02	B	Window	Sill	Wood	Good	White	Negative	0	mg / cm ^2
32	Room 02	B	Window	Seat	Wood	Good	Green	Negative	0.4	mg / cm ^2
33	Room 02	C	Door	Casing	Wood	Good	Green	Negative	0.07	mg / cm ^2
34	Room 02	C	Door	Jamb	Wood	Good	Green	Negative	0.15	mg / cm ^2
35	Room 02	D	Door	Casing	Wood	Good	White	Negative	0.13	mg / cm ^2
36	Room 02	D	Door	Hinge Jamb	Wood	Poor	White	Negative	0.26	mg / cm ^2

37	Room 02	Door	Door	Wood	Poor	White	Negative	0.17	mg / cm ^2
38	Room 02	Ceiling	Middle	Plaster	Fair	White	Positive	3.2	mg / cm ^2
39	Room 02	Ceiling	Casing	Wood	Good	Off-White	Negative	0.23	mg / cm ^2
40	Room 02	Ceiling	Casing	Wood	Good	Off-White	Negative	0.4	mg / cm ^2
41	Room 03	Wall	Middle	Plaster	Poor	Off-White	Negative	0.12	mg / cm ^2
42	Room 03	Wall	Upper	Plaster	Poor	Off-White	Negative	0.26	mg / cm ^2
43	Room 03	Wall	Middle	Plaster	Poor	Off-White	Negative	0.4	mg / cm ^2
44	Room 03	Wall	Middle	Plaster	Poor	Off-White	Positive	5.8	mg / cm ^2
45	Room 03	Door	Casing	Wood	Good	Off-White	Negative	0.19	mg / cm ^2
46	Room 03	Door	Casing	Wood	Good	Off-White	Negative	0.08	mg / cm ^2
47	Room 03	Door	Door	Wood	Good	White	Negative	0.2	mg / cm ^2
48	Room 03	Door	Casing	Wood	Poor	White	Negative	0.07	mg / cm ^2
49	Room 03	Door	Jamb	Wood	Poor	White	Negative	0	mg / cm ^2
50	Room 03	Window	Casing	Wood	Poor	White	Negative	0	mg / cm ^2
51	Room 03	Window	Sill	Wood	Poor	White	Negative	0	mg / cm ^2
52	Room 03	Cabinet	Lower	Wood	Poor	White	Negative	0	mg / cm ^2
53	Room 03	Cabinet	Upper	Wood	Poor	White	Negative	0	mg / cm ^2
54	Room 03	Cabinet	Shelf	Wood	Poor	White	Negative	0	mg / cm ^2
55	Room 03 B	Wall	Lower	Plaster	Fair	Off-White	Negative	0	mg / cm ^2
56	Room 03 B	Wall	Lower	Plaster	Poor	Off-White	Negative	0.2	mg / cm ^2
57	Room 03 B	Wall	Lower	Plaster	Poor	Off-White	Negative	0	mg / cm ^2
58	Room 03 B	Wall Shelf	Shelf	Wood	Poor	White	Negative	0.09	mg / cm ^2
59	Room 03 B	Window	Casing	Wood	Poor	White	Negative	0	mg / cm ^2
60	Room 03 B	Window	Sill	Wood	Poor	White	Negative	0	mg / cm ^2
61	Room 03 B	Window	Casing	Wood	Poor	White	Negative	0	mg / cm ^2
62	Room 03 B	Window	Sill	Wood	Poor	White	Negative	0	mg / cm ^2
63	Room 03 B	Ceiling	Middle	Plaster	Poor	White	Negative	0.13	mg / cm ^2
64	Room 04	Wall	Middle	Plaster	Fair	Off-White	Negative	0	mg / cm ^2
65	Room 04	Wall	Middle	Plaster	Fair	Off-White	Negative	0	mg / cm ^2
66	Room 04	Wall	Middle	Plaster	Fair	Off-White	Negative	0	mg / cm ^2
67	Room 04	Wall	Closet	Plaster	Poor	Off-White	Negative	0	mg / cm ^2
68	Room 04	Closet	Casing	Wood	Good	White	Negative	0	mg / cm ^2
69	Room 04	Closet	Door	Wood	Good	White	Negative	0	mg / cm ^2
70	Room 04	Door	Casing	Wood	Good	White	Negative	0	mg / cm ^2
71	Room 04	Door	Door	Wood	Friction	White	Negative	0.18	mg / cm ^2
72	Room 04	Closet	Casing	Wood	Friction	White	Negative	0	mg / cm ^2
73	Room 04	Closet	Jamb	Wood	Friction	White	Negative	0.04	mg / cm ^2

74	Room 04	Window	Casing	Wood	Friction	White	Negative	0	mg / cm ^2
75	Room 04	Window	Sill	Wood	Friction	White	Negative	0.29	mg / cm ^2
76	Room 05 Entry	Wall	Upper	Plaster	Poor	Off-White	Negative	0	mg / cm ^2
77	Room 05 Entry	Wall	Upper	Plaster	Poor	Off-White	Negative	0	mg / cm ^2
78	Room 05 Entry	Wall	Lower	Plaster	Poor	Off-White	Negative	0	mg / cm ^2
79	Room 05 Entry	Wall	Upper	Plaster	Poor	Off-White	Negative	0	mg / cm ^2
80	Room 05 Entry	Wall	Lower	Plaster	Poor	Off-White	Negative	0.11	mg / cm ^2
81	Room 05 Entry	Wall	Lower	Plaster	Poor	Off-White	Negative	0	mg / cm ^2
82	Room 05 Entry	Wall	Lower	Plaster	Poor	Off-White	Negative	0	mg / cm ^2
83	Room 05 Entry	Door	Casing	Wood	Good	White	Negative	0.04	mg / cm ^2
84	Room 05 Entry	Wall	Chair Rail	Wood	Good	White	Negative	0	mg / cm ^2
85	Room 05 Entry	Wall	Chair Rail	Wood	Good	White	Negative	0	mg / cm ^2
86	Room 05 Entry	Door	Casing	Wood	Good	White	Negative	0.05	mg / cm ^2
87	Room 05 Entry	Door	Door	Wood	Good	White	Positive	11.9	mg / cm ^2
88	Room 05 Entry	Door	Latch Jamb	Wood	Good	White	Negative	0.11	mg / cm ^2
89	Room 05 Entry	Door	Stop	Wood	Good	White	Negative	0.17	mg / cm ^2
90	Room 05 Entry	Stringer	Middle	Wood	Good	White	Negative	0.11	mg / cm ^2
91	Room 05 Entry	Wall	Shelf	Wood	Good	White	Negative	0.11	mg / cm ^2
92	Room 05 Entry	Wall	Seat	Wood	Good	White	Negative	0.08	mg / cm ^2
93	Room 05 Entry	Window	Casing	Wood	Good	White	Negative	0.11	mg / cm ^2
94	Room 05 Entry	Window	Sill	Wood	Good	White	Negative	0.13	mg / cm ^2
95	Room 06 Stairs	Baluster	Middle	Wood	Good	White	Negative	0.06	mg / cm ^2
96	Room 06 Stairs	Cabinet	Handrail	Wood	Good	White	Negative	0.4	mg / cm ^2
97	Room 06 Stairs	Stairs Window	Knowl Post	Wood	Good	White	Negative	0.06	mg / cm ^2
98	Room 06 Stairs	Window	Casing	Wood	Good	White	Negative	0.13	mg / cm ^2
99	Room 06 Stairs	Window	Sill	Wood	Good	White	Negative	0.3	mg / cm ^2
100	Room 06 Stairs	Wall	Middle	Plaster	Fair	Off-White	Negative	0.3	mg / cm ^2
101	Room 06 Stairs	Wall	Middle	Plaster	Fair	Off-White	Negative	0	mg / cm ^2
102	Room 06 Stairs	Wallstairs	Handrail	Wood	Fair	White	Negative	0	mg / cm ^2
103	Room 07 Landing	Wall	Middle	Plaster	Good	Mauve	Negative	0	mg / cm ^2
104	Room 07 Landing	Wall	Middle	Plaster	Good	Mauve	Negative	0	mg / cm ^2
105	Room 07 Landing	Wall	Middle	Plaster	Good	Mauve	Negative	0	mg / cm ^2
106	Room 07 Landing	Door	Casing	Wood	Fair	White	Positive	9.5	mg / cm ^2
107	Room 07 Landing	Door	Door	Wood	Fair	White	Positive	11.7	mg / cm ^2
108	Room 07 Landing	Door	Casing	Wood	Fair	White	Positive	10.9	mg / cm ^2
109	Room 07 Landing	Door	Door	Wood	Fair	White	Negative	0.15	mg / cm ^2
110	Room 07 Landing	Door	Casing	Wood	Fair	White	Positive	11	mg / cm ^2

111	Room 07 Landing	C/D	Door	Jamb	Wood	Fair	White	Positive	10.4	mg / cm ^2
112	Room 07 Landing	C/D	Door	Door	Wood	Fair	White	Negative	0.04	mg / cm ^2
113	Room 07 Landing	D	Door	Casing	Wood	Fair	White	Negative	0.18	mg / cm ^2
114	Room 07 Landing	D	Door	Casing	Wood	Fair	White	Positive	13.4	mg / cm ^2
115	Room 07 Landing	D	Door	Door	Wood	Fair	White	Positive	10	mg / cm ^2
116	Room 08	A	Wall	Middle	Plaster	Good	Lime	Negative	0.57	mg / cm ^2
117	Room 08	B	Wall	Middle	Plaster	Good	Lime	Negative	0	mg / cm ^2
118	Room 08	C	Wall	Middle	Plaster	Good	Lime	Negative	0.02	mg / cm ^2
119	Room 08	D	Wall	Middle	Plaster	Good	Lime	Positive	1.02	mg / cm ^2
120	Room 08	A	Window	Casing	Wood	Good	White	Positive	13.5	mg / cm ^2
121	Room 08	A	Window	Sill	Wood	Good	White	Positive	3.3	mg / cm ^2
122	Room 08	A	Window	Sash	Wood	Friction	White	Positive	12.8	mg / cm ^2
123	Room 08	D	Window	Casing	Wood	Friction	White	Positive	10.3	mg / cm ^2
124	Room 08	D	Window	Sill	Wood	Friction	White	Positive	6.1	mg / cm ^2
125	Room 08	A	Window	Well	Wood	Friction	Beige	Positive	19.8	mg / cm ^2
126	Room 08	C	Door	Casing	Wood	Good	White	Positive	12.8	mg / cm ^2
127	Room 08	C	Door	Door	Wood	Good	White	Positive	14	mg / cm ^2
128	Room 08	C	Baseboard	Middle	Wood	Good	White	Positive	11.2	mg / cm ^2
129	Room 09	A	Wall	Middle	Plaster	Good	Purple	Negative	0.49	mg / cm ^2
130	Room 09	B	Wall	Middle	Plaster	Good	Purple	Negative	0	mg / cm ^2
131	Room 09	C	Wall	Middle	Plaster	Good	Purple	Negative	0	mg / cm ^2
132	Room 09	D	Wall	Middle	Plaster	Good	Purple	Negative	0	mg / cm ^2
133	Room 09	A	Window	Casing	Wood	Good	Purple	Positive	10.2	mg / cm ^2
134	Room 09	A	Window	Sill	Wood	Good	Purple	Positive	7.8	mg / cm ^2
135	Room 09	A	Window	Sash	Wood	Friction	White	Positive	14.8	mg / cm ^2
136	Room 09	A	Baseboard	Middle	Wood	Chipping/Peeling	White	Positive	10.3	mg / cm ^2
137	Room 09	C/D	Door	Casing	Wood	Good	Purple	Negative	0	mg / cm ^2
138	Room 10 Bath	A	Wall	Middle	Drywall	Good	Blue	Negative	0	mg / cm ^2
139	Room 10 Bath	B	Wall	Middle	Drywall	Good	Blue	Negative	0	mg / cm ^2
140	Room 10 Bath	C	Wall	Middle	Drywall	Good	Blue	Negative	0	mg / cm ^2
141	Room 10 Bath	B	Window	Casing	Wood	Good	White	Negative	0	mg / cm ^2
142	Room 10 Bath	B	Window	Sill	Wood	Good	White	Negative	0	mg / cm ^2
143	Room 10 Bath	B	Window	Sash	Wood	Friction	White	Positive	12.4	mg / cm ^2
144	Room 10 Bath	B	Window	Well	Wood	Poor	Beige	Positive	11.5	mg / cm ^2
145	Room 11	A	Wall	Middle	Plaster	Good	Blue	Negative	0	mg / cm ^2
146	Room 11	B	Wall	Lower	Plaster	Good	Blue	Negative	0	mg / cm ^2
147	Room 11	C	Wall	Middle	Plaster	Good	Blue	Negative	0	mg / cm ^2

148	Room 11	D	Wall	Middle	Plaster	Good	Blue	Negative	0	mg / cm ^2
149	Room 11	A	Door	Casing	Wood	Good	White	Positive	11.9	mg / cm ^2
150	Room 11	A	Door	Door	Wood	Good	White	Negative	0.02	mg / cm ^2
151	Room 11	B	Window	Casing	Wood	Good	White	Positive	9.8	mg / cm ^2
152	Room 11	B	Window	Sill	Wood	Good	White	Positive	4.1	mg / cm ^2
153	Room 11	B	Window	Sash	Wood	Friction	White	Positive	12.1	mg / cm ^2
154	Room 11	D	Window	Casing	Wood	Friction	White	Positive	8.8	mg / cm ^2
155	Room 11	C	Window	Sill	Wood	Friction	White	Positive	6.7	mg / cm ^2
156	Room 11	C	Window	Sash	Wood	Friction	White	Positive	11.7	mg / cm ^2
157	Room 11	D	Door	Casing	Wood	Good	White	Positive	13	mg / cm ^2
158	Room 11	D	Door	Stop	Wood	Good	White	Positive	10.7	mg / cm ^2
159	Room 11	D	Door	Door	Wood	Good	White	Positive	11.1	mg / cm ^2
160	Room 12	A	Wall	Middle	Plaster	Good	Blue	Negative	0.08	mg / cm ^2
161	Room 12	B	Wall	Middle	Plaster	Good	Blue	Negative	0.6	mg / cm ^2
162	Room 12	C	Wall	Middle	Plaster	Good	Blue	Negative	0	mg / cm ^2
163	Room 12	D	Wall	Middle	Plaster	Good	Blue	Negative	0.76	mg / cm ^2
164	Room 12	A	Ceiling	Middle	Plaster	Good	White	Negative	0.4	mg / cm ^2
165	Room 12	A	Ceiling	Middle	Plaster	Good	White	Negative	0.62	mg / cm ^2
166	Room 12	A	Door	Casing	Wood	Good	White	Positive	9.1	mg / cm ^2
167	Room 12	A	Door	Door	Wood	Good	White	Negative	0.14	mg / cm ^2
168	Room 12	B	Door	Casing	Wood	Good	White	Positive	9.9	mg / cm ^2
169	Room 12	B	Door	Door	Wood	Good	White	Positive	7.8	mg / cm ^2
170	Room 12	C	Window	Casing	Wood	Good	White	Positive	14.4	mg / cm ^2
171	Room 12	C	Window	Sill	Wood	Good	White	Positive	3.9	mg / cm ^2
172	Room 12	C	Window	Sash	Wood	Good	White	Positive	12	mg / cm ^2
173	Room 12	D	Window	Casing	Wood	Good	White	Positive	10.7	mg / cm ^2
174	Room 12	D	Window	Sill	Wood	Good	White	Positive	6.3	mg / cm ^2
175	Room 12	D	Window	Sash	Wood	Friction	White	Positive	11.8	mg / cm ^2
176	Room 12	A	Ceiling	Middle	Plaster	Fair	White	Negative	0.64	mg / cm ^2
177	Front Porch	A	Porch	Column Post	Wood	Poor	White	Positive	17.6	mg / cm ^2
178	Front Porch	A	Porch	Header	Wood	Poor	White	Positive	23.6	mg / cm ^2
179	Front Porch	A	Porch	Ceiling	Wood	Poor	White	Negative	0	mg / cm ^2
180	Basement Stairs	A	Wall	Middle	Plaster	Poor	Beige	Negative	0.46	mg / cm ^2
181	Basement Stairs	C	Wall	Middle	Plaster	Poor	Beige	Negative	0.49	mg / cm ^2
182	Basement Stairs	B	Door	Casing	Wood	Poor	Beige	Negative	0.27	mg / cm ^2
183	Basement Stairs	A	Run	Middle	Wood	Friction	Gray	Negative	0.03	mg / cm ^2
184	Rear Porch	C	Support Column	Middle	Wood	Poor	White	Positive	6.5	mg / cm ^2

185	Rear Porch	C	Ceiling	Middle	Wood	Poor	White	Negative	0.11	mg / cm ^2
186	Rear Porch	C	Soffit	Middle	Wood	Poor	White	Positive	7.3	mg / cm ^2
187	Rear Porch	A	Door	Casing	Wood	Poor	White	Negative	0	mg / cm ^2
188	Rear Porch	A	Siding	Middle	Wood	Poor	Black	Positive	9.2	mg / cm ^2
189	Home Exterior	B	Basement Window	Casing	Wood	Poor	White	Positive	1.6	mg / cm ^2
190	Home Exterior	B	Basement Window	Casing	Wood	Poor	White	Positive	18.2	mg / cm ^2
191	Home Exterior	B	Stairs Window	Sash	Wood	Poor	White	Negative	0.02	mg / cm ^2
192	Home Exterior	B	Stairs Window	Casing	Wood	Poor	White	Positive	7.4	mg / cm ^2
193	Home Exterior	B	Stairs Window	Sash	Wood	Poor	White	Negative	0.16	mg / cm ^2
194	Home Exterior	B	Stairs Window	Sill	Wood	Poor	White	Positive	4.5	mg / cm ^2
195	Home Exterior	B	Stairs Window	Sash	Wood	Poor	White	Positive	5.4	mg / cm ^2
196	Home Exterior	B	Stairs Window	Sill	Wood	Poor	White	Positive	5.8	mg / cm ^2
197	Home Exterior	C	Kitchen Window	Casing	Wood	Poor	White	Positive	6.8	mg / cm ^2
198	Home Exterior	D	Storage Window	Casing	Wood	Poor	White	Positive	3.8	mg / cm ^2

Appendix C

Lab Analysis

ANALYTICAL LABORATORY REPORT

Thursday, January 6, 2011

Page 1 of 5

CUSTOMER: Analytical Testing & Consulting Services, Inc.
14625 Doster Road
Plainwell, MI 49080

DATE RECEIVED: Wednesday, January 5, 2011
PO/PROJECT #: 6296
SUBMITTAL #: 2011-01-05-004

LAB NUMBER: AA92824

Sampled By: Doug Haase
Job Location: 202 Garfield B.C. MI
Sample Identification: 01 - Room 1, Side A, Window Well

Date Sampled: Monday, January 3, 2011
Sample Description: Dust Wipe

Preparation Method: EPA 600/R-93/200M-W (Metals in Surface Wipe Samples, Sonication)
Analysis Method: EPA 6010B (ICP-AES Method for Determination of Metals)
Date Analyzed: Thursday, January 6, 2011

*Sample Area: 0.46 sq ft

ELEMENT	ANALYTE CONCENTRATION	ANALYTE REPORTING LIMIT (RL)	*AREA CONCENTRATION	*CALCULATED REPORTING LIMIT (RL)
Lead	13 ug	5.0 ug	28ug/ft ²	11 ug/ft ²

*Based on sampling information supplied by the client.

LAB NUMBER: AA92825

Sampled By: Doug Haase
Job Location: 202 Garfield B.C. MI
Sample Identification: 02 - Room 1, Side A, Floor

Date Sampled: Monday, January 3, 2011
Sample Description: Dust Wipe

Preparation Method: EPA 600/R-93/200M-W (Metals in Surface Wipe Samples, Sonication)
Analysis Method: EPA 6010B (ICP-AES Method for Determination of Metals)
Date Analyzed: Thursday, January 6, 2011

*Sample Area: 1.0 sq ft

ELEMENT	ANALYTE CONCENTRATION	ANALYTE REPORTING LIMIT (RL)	*AREA CONCENTRATION	*CALCULATED REPORTING LIMIT (RL)
Lead	- < RL	5.0 ug	- < RL	5.0 ug/ft ²

*Based on sampling information supplied by the client.

LAB NUMBER: AA92826

Sampled By: Doug Haase
Job Location: 202 Garfield B.C. MI
Sample Identification: 03 - Room 2, Side B, Window Sill

Date Sampled: Monday, January 3, 2011
Sample Description: Dust Wipe

Preparation Method: EPA 600/R-93/200M-W (Metals in Surface Wipe Samples, Sonication)
Analysis Method: EPA 6010B (ICP-AES Method for Determination of Metals)
Date Analyzed: Thursday, January 6, 2011

*Sample Area: 1.0 sq ft

ELEMENT	ANALYTE CONCENTRATION	ANALYTE REPORTING LIMIT (RL)	*AREA CONCENTRATION	*CALCULATED REPORTING LIMIT (RL)
Lead	- < RL	5.0 ug	- < RL	5.0 ug/ft ²

*Based on sampling information supplied by the client.

This report shall not be reproduced except in full, without written approval of CCC&L.
Individual sample results relate only to the sample as received by the laboratory.

CORROSION CONTROL CONSULTANTS & LABS, INC. a GPI company

ANALYTICAL LABORATORY REPORT

Thursday, January 6, 2011

Page 2 of 5

CUSTOMER: Analytical Testing & Consulting Services, Inc.
14625 Doster Road
Plainwell, MI 49080

DATE RECEIVED: Wednesday, January 5, 2011
PO/PROJECT #: 6296
SUBMITTAL #: 2011-01-05-004

LAB NUMBER: AA92827

Sampled By: Doug Haase
Job Location: 202 Garfield B.C. MI
Sample Identification: 04 - Room 2, Side B, Floor

Date Sampled: Monday, January 3, 2011
Sample Description: Dust Wipe

Preparation Method: EPA 600/R-93/200M-W (Metals in Surface Wipe Samples, Sonication)
Analysis Method: EPA 6010B (ICP-AES Method for Determination of Metals)
Date Analyzed: Thursday, January 6, 2011

*Sample Area: 1.0 sq ft

ELEMENT	ANALYTE CONCENTRATION	ANALYTE REPORTING LIMIT (RL)	*AREA CONCENTRATION	*CALCULATED REPORTING LIMIT (RL)
Lead	- < RL	5.0 ug	- < RL	5.0 ug/ft ²

*Based on sampling information supplied by the client.

LAB NUMBER: AA92828

Sampled By: Doug Haase
Job Location: 202 Garfield B.C. MI
Sample Identification: 05 - Room 3, Side C, Window Well

Date Sampled: Monday, January 3, 2011
Sample Description: Dust Wipe

Preparation Method: EPA 600/R-93/200M-W (Metals in Surface Wipe Samples, Sonication)
Analysis Method: EPA 6010B (ICP-AES Method for Determination of Metals)
Date Analyzed: Thursday, January 6, 2011

*Sample Area: 0.19 sq ft

ELEMENT	ANALYTE CONCENTRATION	ANALYTE REPORTING LIMIT (RL)	*AREA CONCENTRATION	*CALCULATED REPORTING LIMIT (RL)
Lead	59 ug	5.0 ug	310ug/ft ²	26 ug/ft ²

*Based on sampling information supplied by the client.

LAB NUMBER: AA92829

Sampled By: Doug Haase
Job Location: 202 Garfield B.C. MI
Sample Identification: 06 - Room 3, Side C, Floor

Date Sampled: Monday, January 3, 2011
Sample Description: Dust Wipe

Preparation Method: EPA 600/R-93/200M-W (Metals in Surface Wipe Samples, Sonication)
Analysis Method: EPA 6010B (ICP-AES Method for Determination of Metals)
Date Analyzed: Thursday, January 6, 2011

*Sample Area: 1.0 sq ft

ELEMENT	ANALYTE CONCENTRATION	ANALYTE REPORTING LIMIT (RL)	*AREA CONCENTRATION	*CALCULATED REPORTING LIMIT (RL)
Lead	29 ug	5.0 ug	29ug/ft ²	5.0 ug/ft ²

*Based on sampling information supplied by the client.

This report shall not be reproduced except in full, without written approval of CCC&L.
Individual sample results relate only to the sample as received by the laboratory.

CORROSION CONTROL CONSULTANTS & LABS, INC. a GPI company

ANALYTICAL LABORATORY REPORT

Thursday, January 6, 2011

Page 3 of 5

CUSTOMER: Analytical Testing & Consulting Services, Inc.
14625 Doster Road
Plainwell, MI 49080

DATE RECEIVED: Wednesday, January 5, 2011
PO/PROJECT #: 6296
SUBMITTAL #: 2011-01-05-004

LAB NUMBER: AA92830

Sampled By: Doug Haase
Job Location: 202 Garfield B.C. MI
Sample Identification: 07 - Room 9, Side D, Window Sill

Date Sampled: Monday, January 3, 2011
Sample Description: Dust Wipe

Preparation Method: EPA 600/R-93/200M-W (Metals in Surface Wipe Samples, Sonication)
Analysis Method: EPA 6010B (ICP-AES Method for Determination of Metals)
Date Analyzed: Thursday, January 6, 2011

*Sample Area: 0.70 sq ft

ELEMENT	ANALYTE CONCENTRATION	ANALYTE REPORTING LIMIT (RL)	*AREA CONCENTRATION	*CALCULATED REPORTING LIMIT (RL)
Lead	230 ug	5.0 ug	330ug/ft ²	7.1 ug/ft ²

*Based on sampling information supplied by the client.

LAB NUMBER: AA92831

Sampled By: Doug Haase
Job Location: 202 Garfield B.C. MI
Sample Identification: 08 - Room 9, Side D, Floor

Date Sampled: Monday, January 3, 2011
Sample Description: Dust Wipe

Preparation Method: EPA 600/R-93/200M-W (Metals in Surface Wipe Samples, Sonication)
Analysis Method: EPA 6010B (ICP-AES Method for Determination of Metals)
Date Analyzed: Thursday, January 6, 2011

*Sample Area: 1.0 sq ft

ELEMENT	ANALYTE CONCENTRATION	ANALYTE REPORTING LIMIT (RL)	*AREA CONCENTRATION	*CALCULATED REPORTING LIMIT (RL)
Lead	- < RL	5.0 ug	- < RL	5.0 ug/ft ²

*Based on sampling information supplied by the client.

LAB NUMBER: AA92832

Sampled By: Doug Haase
Job Location: 202 Garfield B.C. MI
Sample Identification: 09 - Room 10, Side A, Window Well

Date Sampled: Monday, January 3, 2011
Sample Description: Dust Wipe

Preparation Method: EPA 600/R-93/200M-W (Metals in Surface Wipe Samples, Sonication)
Analysis Method: EPA 6010B (ICP-AES Method for Determination of Metals)
Date Analyzed: Thursday, January 6, 2011

*Sample Area: 0.53 sq ft

ELEMENT	ANALYTE CONCENTRATION	ANALYTE REPORTING LIMIT (RL)	*AREA CONCENTRATION	*CALCULATED REPORTING LIMIT (RL)
Lead	38 ug	5.0 ug	72ug/ft ²	9.4 ug/ft ²

*Based on sampling information supplied by the client.

This report shall not be reproduced except in full, without written approval of CCC&L.
Individual sample results relate only to the sample as received by the laboratory.

CORROSION CONTROL CONSULTANTS & LABS, INC. a GPI company

ANALYTICAL LABORATORY REPORT

Thursday, January 6, 2011

Page 4 of 5

CUSTOMER: Analytical Testing & Consulting Services, Inc.
14625 Doster Road
Plainwell, MI 49080

DATE RECEIVED: Wednesday, January 5, 2011
PO/PROJECT #: 6296
SUBMITTAL #: 2011-01-05-004

LAB NUMBER: AA92833

Sampled By: Doug Haase
Job Location: 202 Garfield B.C. MI
Sample Identification: 10 - Room 10, Side A, Floor

Date Sampled: Monday, January 3, 2011
Sample Description: Dust Wipe

Preparation Method: EPA 600/R-93/200M-W (Metals in Surface Wipe Samples, Sonication)
Analysis Method: EPA 6010B (ICP-AES Method for Determination of Metals)
Date Analyzed: Thursday, January 6, 2011

***Sample Area:** 1.0 sq ft

ELEMENT	ANALYTE CONCENTRATION	ANALYTE REPORTING LIMIT (RL)	*AREA CONCENTRATION	*CALCULATED REPORTING LIMIT (RL)
Lead	6,200 ug	5.0 ug	6,200ug/ft ²	5.0 ug/ft ²

*Based on sampling information supplied by the client.

LAB NUMBER: AA92834

Sampled By: Doug Haase
Job Location: 202 Garfield B.C. MI
Sample Identification: 11 - Room 11, Side D, Window Sill

Date Sampled: Monday, January 3, 2011
Sample Description: Dust Wipe

Preparation Method: EPA 600/R-93/200M-W (Metals in Surface Wipe Samples, Sonication)
Analysis Method: EPA 6010B (ICP-AES Method for Determination of Metals)
Date Analyzed: Thursday, January 6, 2011

***Sample Area:** 0.65 sq ft

ELEMENT	ANALYTE CONCENTRATION	ANALYTE REPORTING LIMIT (RL)	*AREA CONCENTRATION	*CALCULATED REPORTING LIMIT (RL)
Lead	64 ug	5.0 ug	98ug/ft ²	7.7 ug/ft ²

*Based on sampling information supplied by the client.

LAB NUMBER: AA92835

Sampled By: Doug Haase
Job Location: 202 Garfield B.C. MI
Sample Identification: 12 - Room 11, Side D. Floor

Date Sampled: Monday, January 3, 2011
Sample Description: Dust Wipe

Preparation Method: EPA 600/R-93/200M-W (Metals in Surface Wipe Samples, Sonication)
Analysis Method: EPA 6010B (ICP-AES Method for Determination of Metals)
Date Analyzed: Thursday, January 6, 2011

***Sample Area:** 1.0 sq ft

ELEMENT	ANALYTE CONCENTRATION	ANALYTE REPORTING LIMIT (RL)	*AREA CONCENTRATION	*CALCULATED REPORTING LIMIT (RL)
Lead	- < RL	5.0 ug	- < RL	5.0 ug/ft ²

*Based on sampling information supplied by the client.

This report shall not be reproduced except in full, without written approval of CCC&L.
Individual sample results relate only to the sample as received by the laboratory.

CORROSION CONTROL CONSULTANTS & LABS, INC. a GPI company

ANALYTICAL LABORATORY REPORT

Thursday, January 6, 2011

Page 5 of 5

CUSTOMER: Analytical Testing & Consulting Services, Inc.
14625 Doster Road
Plainwell, MI 49080

DATE RECEIVED: Wednesday, January 5, 2011
PO/PROJECT #: 6296
SUBMITTAL #: 2011-01-05-004

Unless otherwise noted, the condition of each sample was acceptable upon receipt, all laboratory quality control requirements were met, and sample results have not been adjusted based on field blank or other analytical blank results.

Tests Reviewed By: Jason Kraai, Analyst

 Jason Kraai
2011.01.06 16:40:08
-05'00'

Corrosion Control Consultants & Labs, Inc. is AIHA accredited in the Environmental Lead Program for paint, soil, dust wipes, and air; and in the Industrial Hygiene Program for metals in air.

This report shall not be reproduced except in full, without written approval of CCC&L.

Individual sample results relate only to the sample as received by the laboratory.

CHAIN OF CUSTODY RECORD

ANALYTICAL TESTING & CONSULTING SERVICES, INC. 14625 DOSTER ROAD PLAINWELL, MI 49009 PH: 269-664-6474 FAX: 269-664-6406

BILLED TO
 Name: Analytical Testing & Consulting Services, Inc.
 Address: 14625 Doster Rd.
 City: Plainwell
 State: MI 49080
 Phone No: 269/ 664-6474

PROJECT INFORMATION
 Project Name/Location: 267 GARFIELD BL MI
 Project No.: 6296
 Project Contact: D...
 Date Sampled: 1/3/11
 Fax No.: 269/ 664-6406

ANALYSIS REQUIRED
 Properly Contained Yes No
 ASTM E1792 wipes Yes No
 Adequate Cooling Yes No
 Adequate pH Adjustment Yes No
 Lab Acidified: By/Date *NA*

Sample #	Description	Time On Lab		Time Off Lab	Total Time	Start Flow	Stop Flow	AVE. Flow	COMMENTS/ WIPE AREA (ft ²)
		Lab	Di.						
01	Room 1 side A window well	MA92821							3" X 22" (0.46)
02	Room 1 side A Floor	MA92825							15F (1.0)
03	Room 2 side B window sill	MA92826							12" X 12" (0.14)
04	Room 2 side B Floor	MA92827							3" X 9" (0.70)
05	Room 3 side C window well	MA92828							15F (0.53)
06	Room 3 side C Floor	MA92829							3 1/2" X 2 1/2" (0.65)
07	Room 4 side D window sill	MA92830							15F
08	Room 4 side D Floor	MA92831							4 1/2" X 17"
09	Room 10 side A window well	MA92832							15F
10	Room 10 side A Floor	MA92833							3 1/2" X 2 1/2"
11	Room 11 side B window sill	MA92834							15F
12	Room 11 side B Floor	MA92835							

Wipe pb

Samples Preserved: Yes No
 Received Cold: Yes No

Sampled by: *Douglas H. Haxie*

* Do wipe samples submitted meet ASTM E1792 requirements? Yes No

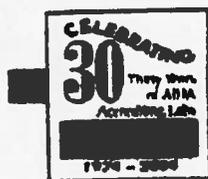
Samples Relinquished by: *[Signature]* Date: 1/3/10 1504
 Accepted by: _____ Date: _____
 Time: _____

Special Instructions: *Next Day Read for lab by S Gerber 11511 1044am # 2011-01-05-004*

MAWA

Appendix D

Qualifications



LABORATORY QUALITY ASSURANCE PROGRAMS
 SOUND DATA
 SMART DECISIONS

AIHA
 Your Essential Connection: Advancing Occupational and Environmental Health and Safety Globally
 2700 Prosperity Ave., Suite 250, Fairfax, VA 22031 U.S.A.
 (703) 849-8888; Fax (703) 207-3561. www.aiha.org

AIHA Laboratory Quality Assurance Programs SCOPE OF ACCREDITATION

Corrosion Control Consultants & Labs, Inc.
 4403 Donker Court SE, Kentwood, MI 49512

Laboratory ID: 101030
 Issue Date: 06/30/2008

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or revocation. A complete listing of currently accredited Industrial Hygiene laboratories is available on the AIHA website at: <http://www.aiha.org/Content/LQAP/accred/AccreditedLabs.htm>

The EPA recognizes the AIHA ELLAP program as meeting the requirements of the National Lead Laboratory Accreditation Program (NLLAP) established under Title X of the Residential Lead-Based Paint Hazard Reduction Act of 1992 and includes paint, soil and dust wipe analysis. Air analysis is not included as part of the NLLAP.

Environmental Lead Laboratory Accreditation Program (ELLAP)

Initial Accreditation Date: 04/17/1995

Field of Testing (FoT)	Method	Method Description (for internal methods only)
Airborne Dust	EPA 600/R-93/200	
	EPA SW 846 6010B	
	NIOSH 7300	
Paint	EPA 600/R-93/200	
	EPA SW-846 6010B	
Settled Dust by Wipe	EPA 600/R-93/200	
	EPA SW-846 6010B	
Soil	EPA 600/R-93/200	
	EPA SW-846 6010B	

The laboratory participates in the following AIHA testing programs:

- Paint
- Soil
- Airborne Dust
- Settled Dust by Wipe



LABORATORY QUALITY ASSURANCE PROGRAMS

OUND DATA

SMART DECISIONS

AIHA

Your Essential Connection: Advancing Occupational and Environmental Health and Safety Globally
 2700 Prosperity Ave Suite 250 Fairfax VA 22031 U.S.A.
 (703) 849-8888, Fax (703) 207-3561; www.aiha.org

**AIHA Laboratory Quality Assurance Programs
 SCOPE OF ACCREDITATION**

Corrosion Control Consultants & Labs, Inc.
 4403 Donker Court SE, Kentwood, MI 49512

Laboratory ID: 101030
 Issue Date: 06/30/2008

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or revocation. A complete listing of currently accredited Industrial Hygiene laboratories is available on the AIHA website at: <http://www.aiha.org/Content/LQAP/accred/AccreditedLabs.htm>

Industrial Hygiene Laboratory Accreditation Program (IHLAP)

Initial Accreditation Date: 08/01/1996

IHLAP Category	Field of Testing (FoT)	Method	Method Description <i>(for internal methods only)</i>
Core Program Testing	ICP	EPA 600/R-93/200	
		EPA SW-846 6010B	
		NIOSH 7300	

The laboratory participates in the following AIHA* or AHA-approved proficiency testing programs:

- Metals*
- Silica*
- Asbestos*
- Bulk Asbestos*
- Beryllium*
- WASP (Thermal Desorption Tubes)
- Pharmaceutical Round Robin
- Compressed/Breathing Air Round Robin
- NVLAP (determined at the time of site assessment)
- Organic Solvents*
- Diffusive Sampler (3M)*
- Diffusive Sampler (SKC)*
- Diffusive Sampler (AT)*
- WASP¹ (Formaldehyde)

¹ Workplace Analytical Scheme for Proficiency

CCC&L

a GPI company

4403 DONKER CT SE KENTWOOD MI 49512-4054 PHONE 616-940-3112 FAX 616-940-8139

Laboratory Personnel

Sarah Frank Olthof
Laboratory Manager
QA/QC Coordinator
Phone: (616) 940-3112
extension: 123
solthof@ccclabs.com

Megan Cornell - Senior Chemist
Phone: (616) 940-3112 x129
mcornell@ccclabs.com

Becky Walcott - Chemist **Sara Rashid - Chemist**
rwalcott@ccclabs.com srashid@ccclabs.com

Accreditations

- **AIHA- IHLAP/ ELLAP #101030**
Paint, Soil, Dust Wipes, Air Monitors
- **State of New York- Dept. of Health #11809**
Environmental Analyses/ Solid & Hazardous Waste: Air & Emissions, Non-potable Water
- **State of Ohio- Dept. of Health #10013**
- **Accredited to ISO 17025 standards**

Turn Around Times

- The laboratory is open Monday through Friday from 8 AM to 5 PM EST
- Standard turnaround time is 2-4 business days.
- One day turnaround is also available for no extra charge
TCLP and PM10 tests do not allow for a one day turn around
- Same day and 4 hour turnarounds are available for most analysis, additional charges will apply.
Contact the lab for pricing and availability

Waste Characterization

- Toxicity Characteristic Leaching Procedure (TCLP)
- Wastewaters
- pH
- Flash point
- Paint Filter

Air Monitoring Analysis

- PM10 Airborne particulate less than 10 microns
- TSP: Total Lead or Total Suspended Particulates
- 37mm Cassettes: For personal air monitoring
- All filters are available for purchase

Total Metal Analysis

- Matnces Paint Soil Dust Wipes
- Sampling containers are available at no charge
- CCC&L has ASTM E1792 approved dust wipes available for purchase.

Analytical Capabilities

- Inductively Coupled Plasma- Atomic Emission Spectrometry (ICP-AES)
- Mercury by Cold Vapor Atomic Absorption
- Gas Chromatography/ TCD
- Ion Chromatography



May 27, 2010

Lab ID#: 101030

Sarah Olthof
Corrosion Control Consultants & Labs, Inc.
4403 Donker Court SE
Kentwood, MI 49512

Dear Ms. Olthof:

AIHA Laboratory Accreditation Programs, (AIHA-LAP, LLC) has approved an extension to your laboratory's current certificate of accreditation in the Industrial Hygiene Laboratory Accreditation Program (IHLAP) and Environmental Lead Laboratory Accreditation Program (ELLAP). This extension will expire on July 01, 2010. Remember that your laboratory's proficiency rating in the PAT programs must be maintained for the new certificate to be issued.

Your laboratory remains an accredited laboratory in the IHLAP and ELLAP programs. Please keep a copy of this letter with your expired certificate. If you have questions or concerns, please feel free to contact Olena Bulgakova, Laboratory Accreditation Specialist at (703) 846-0792.

Sincerely,



Cheryl O. Morton
Director, Affiliate Laboratory Programs



June 25, 2010

Lab ID#: 101030

Sarah Diemer
Corrosion Control Consultants & Labs. Inc.
4403 Donker Court SE
Kentwood, MI 49512

Dear Ms. Diemer:

AIHA Laboratory Accreditation Programs, (AIHA-LAP, LLC) has approved an extension to your laboratory's current certificate of accreditation in the Industrial Hygiene Laboratory Accreditation Program (IHLAP) and Environmental Lead Laboratory Accreditation Program (ELLAP). This extension will expire on August 01, 2010. Remember that your laboratory's proficiency rating in the PAT programs must be maintained for the new certificate to be issued.

Your laboratory remains an accredited laboratory in the IHLAP and ELLAP programs. Please keep a copy of this letter with your expired certificate. If you have questions or concerns, please feel free to contact Olena Bulgakova, Laboratory Accreditation Specialist at (703) 846-0792.

Sincerely,



Cheryl O. Morton
Director, Affiliate Laboratory Programs

Appendix E

Manufacturer's Performance Characteristic Sheets

Performance Characteristic Sheet

EFFECTIVE DATE: September 24, 2004

EDITION NO.: 1

MANUFACTURER AND MODEL:

Make: Niton LLC

Tested Model: XLp 300

Source: ^{109}Cd

Note: This PCS is also applicable to the equivalent model variations indicated below, for the Lead-in-Paint K+L variable reading time mode, in the XLi and XLp series:

XLi 300A, XLi 301A, XLi 302A and XLi 303A.

XLp 300A, XLp 301A, XLp 302A and XLp 303A.

XLi 700A, XLi 701A, XLi 702A and XLi 703A.

XLp 700A, XLp 701A, XLp 702A, and XLp 703A.

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

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

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

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm² (inclusive)

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

SUBSTRATE CORRECTION:

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

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

INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE 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 from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

OPERATING PARAMETERS:

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

SUBSTRATE CORRECTION VALUE COMPUTATION:

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

EVALUATING THE QUALITY OF XRF TESTING:

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

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

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

Compute the Retest Tolerance Limit by the following steps:

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

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

Square the average for each testing combination.

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

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

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

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

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

Compute the average of all ten original XRF results

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

Find the absolute difference of the two averages.

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

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

TESTING TIMES:

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

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

CLASSIFICATION RESULTS:

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

DOCUMENTATION:

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

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

Appendix F

Standard Reevaluation Schedules

Table 6.1 Standard Reevaluation Schedules

Schedule	Evaluation Results	Action Taken	Reevaluation Frequency and Duration	Visual Survey (by owner or owner's representative)
1	Combination risk assessment/inspection finds no lead-based paint or soil and no lead-based paint	None	None	None
2	No lead-based paint hazards found during risk assessment conducted before hazard control or at clearance (hazards include dust and soil)	None	3 Years	Annually and whenever information indicates a possible problem
3	The average of leaded dust levels on all floors, interior window sills, or window troughs sampled exceeds the applicable standard, but by less than a factor of 10	<p>A. Interim controls and/or hazard abatement (or mixture of the two), including, but not necessarily limited to, dust removal. This schedule does not include window replacement</p> <p>B. Treatments specified in section A plus replacement of all windows with lead hazards</p> <p>C. Abatement of all lead-based paint using encapsulation or enclosure</p> <p>D. Removal of all lead-based paint</p>	1 Year, 2 Years	Same as Schedule 2 except for encapsulants. The first visual survey of encapsulants should be done one month after clearance, the second should be done 6 months later and annually thereafter
4	The average of leaded dust levels on all floors, interior window sills, or window troughs sampled exceeds the applicable standard by a factor of 10 or more	<p>A. Interim controls and/or hazard abatement (or mixture of the two), including, but not necessarily limited to dust removal. This schedule does not include window replacement.</p> <p>B. Treatments specified in section A plus replacement of all windows with lead hazards</p> <p>C. Abatement of all lead-based paint using encapsulation and enclosure</p> <p>D. Removal of all lead-based paint</p>	6 Months, 1 Year, 2 Years 6 Months, 2 Years	Same as Schedule 3 above None Same as Schedule 3

Table 6.1 Standard Reevaluation Schedules (continued)

Schedule	Evaluation Results	Action Taken	Reevaluation Frequency and Duration	Visual Survey (by owner or owner's representative)
5	No leaded dust or leaded soil hazards identified, but lead-based paint or lead-based paint hazards are found	<p>A Interim controls or mixture of interim controls and abatement (not including window replacement)</p> <p>B Mixture of interim controls and abatement, including window replacement</p> <p>C Abatement of all lead-based paint hazards, but not all lead-based paint</p> <p>D Abatement of all lead-based paint using encapsulation or enclosure</p> <p>E Removal of all lead-based paint</p>	<p>2 Years</p> <p>3 Years</p> <p>4 Years</p> <p>None</p> <p>None</p> <p>None</p>	<p>Same as Schedule 3</p> <p>Same as Schedule 3</p> <p>Same as Schedule 3</p> <p>Same as Schedule 3</p> <p>None</p> <p>Three months to check new ground cover, then annually to identify new bare spots</p> <p>None for removal, annually to identify new bare spots or deterioration of paving</p>
6	Bare leaded soil exceeds standard, but less than 5,000 µg/g	Interim controls	None	
7	Bare leaded soil greater than or equal to 5,000 µg/g	Abatement (paving or removal)	None	

See notes to table 6.1 on following page



ANALYTICAL TESTING & CONSULTING SERVICES, INC.

***14625 Doster Road
Plainwell, Michigan 49080
Phone: 269-664-6474
FAX: 269-664-6406
E-mail: atcsinc@aol.com***

LEAD RISK ASSESSMENT REPORT FOR THE PROPERTY LOCATED AT

***89 College Street
Battle Creek, Michigan 49017***

PREPARED FOR

***Calhoun County Treasure
315 W. Green Street
Marshall, Michigan 49068***

REPORT PREPARED AND SUBMITTED BY

ANALYTICAL TESTING & CONSULTING SERVICES, INC.

***ON
December 10th, 2010***

LAB # 6267

TABLE OF CONTENTS

- 0.0 Summary**
- 1.0 Lead Inspection Overview**
- 2.0 Visual Inspection**
- 3.0 Summary Discussion of XRF Inspection**
- 4.0 Dust Wipe Sampling**
- 5.0 Soil Sampling**
- 6.0 Friction & Impact Survey**
- 7.0 Recommendations**
- 8.0 Credentials**
- 9.0 Maps**
- 10.0 Lab Results**
- 11.0 Reevaluation Schedule**
- 12.0 Conclusion**

Appendix A: Site Location Map

Appendix B: XRF Data

Appendix C: Lab Analysis

Appendix D: Qualifications

Appendix E: Manufacturer's Performance

Characteristic Sheets

Appendix F: Standard Reevaluation Schedules



ANALYTICAL TESTING & CONSULTING SERVICES, INC.

14625 Doster Road
Plainwell, Michigan 49080
Phone: 269-664-6474
FAX: 269-664-6406
E-mail: atcsinc@aol.com

0.0 Summary

On December 3rd, 2010 a lead risk assessment was conducted by Doug Haase of Analytical Testing and Consulting Services at 89 College Street, located in Battle Creek, Michigan. The inspected building was a single household that is vacant and is up for sale by the Calhoun County Treasure. The 3 - bedroom household was built in the 1940s.

All interior components on the 1st floor of the house were found to be *negative* and *below* the regulatory for lead standards of 1.0 mg/cm² per the XRF test results, except for walls in rooms 1, 2, 4 & 5 which tested *positive* and *above* the regulatory standards. All interior components on the 2nd floor of the house were found to be *positive* and *above* the regulatory for lead standards of 1.0 mg/cm² per the XRF test results, except for the walls in room 10 & 11, window sash in room 11, door and ceiling in room 12 and the walls in room 13 which tested *negative* and *below* the regulatory standards.. Also all components tested in the basement were found to be *negative* and *below* the regulatory for lead standards of 1.0 mg/cm² per the XRF test results. The exact location of these components can be found in the table in the summary discussion of XRF results section and in the XRF data sheets in appendix B.

All exterior components of the house were found to be *positive* and *above* the regulatory for lead standards of 1.0 mg/cm² per the XRF test result, except for the soffit, fascia, riser, floor, support column and ceiling on the front porch and exterior door casing on side D which tested *negative* and *below* the regulatory standards. The exact location of these components can be found in the table in the summary discussion of XRF results section and in the XRF data sheets in appendix B.

The lead wipe results showed that all window sills, window wells and most floors tested *above* the regulatory standards so therefore are considered lead hazardous. The floor in room 4 tested *below* the regulatory standards so therefore isn't considered lead hazardous. These lab results are found in appendix C.

1.0 Lead Inspection Overview

Doug Haase of Analytical Testing & Consulting Services, Inc. (ATCS) conducted a lead risk assessment on December 3rd, 2010 of the household located at 89 College Street, located in Battle Creek, Michigan. Mr. Haase is a State of Michigan accredited Lead Risk Assessor; his certification number is P-0383. See Appendix E for copies of assessor qualifications.

The instrument used for this investigation was an X-ray fluorescence (XRF) NITON XLp-300A unit, serial number 24019. The NITON XRF Model XLp-300A is a hand held, portable lead detector, designed to make fast, accurate nondestructive measurements of lead concentration in lead-based paint.

X-ray fluorescence is produced by exciting an atom with x-rays which causes the excited atoms to give off its characteristic x-rays. Using the XRF, we "shoot" atoms with x-rays and capture the x-rays' fluorescence, which we can measure to determine the identity of the atoms.

The subject property is a residential household with 3 bedrooms. This house was built in the 1940s. This house is vacant and is up for sale by the Calhoun County Treasure.

The following questionnaire is the HUD form 5.0, which details children's habits and family use patterns for the building. The answers were generated from the household via the risk assessor.

Children/Children's Habits

VACANT

1. (a) Do you have any children that live in your household? Yes ___ No ___
(If no children, skip to Question 5.)
(b) If yes, how many ___ Ages? ___
(c) Record blood levels, if known:
(d) Are there women of childbearing age present? Yes ___ No ___
2. Location of the rooms/areas where child sleeps, eats, and plays.

Name of child	Location of bedroom	Location of all rooms where child eats	Primary location where child plays indoors	Primary location where child plays outdoors

3. Where are the toys stored/ kept?
4. Is there any visible evidence of chewed or peeling paint on the woodwork, furniture, or toys?

Family Use Patterns

5. Which entrances are used most frequently?
6. Which windows are opened most frequently?
7. Do you use window air conditioners? If yes, where?
(Condensation often causes paint deterioration)
8. (a) Do any household members garden?
(b) Location of garden?
(c) Are you planning any landscaping activities that
Will remove grass or ground covering?
9. (a) How often is the household cleaned?
(b) What cleaning methods do you use?
10. (a) Did you recently complete any building renovations?
(b) If yes, where
(c) Was building debris stored in the yard? If yes, where?
11. Are you planning any building renovations? If yes, where?
12. (a) Do any household members work in a lead-related industry?
13. (b) If yes, where are dirty work clothes placed and cleaned?

The following report details the results of the investigation. See Appendix A for a site location map.

2.0 Visual Inspection

A visual inspection was performed on the exterior and the interior of the household to determine where deteriorated paint exists and if it contains lead. Sections of the household are labeled Side A, B, C or D. The side of the household from which the street address is given is Side A. Side B, C and D are then labeled clockwise from Side A. This labeling system applies to the exterior as well as each room in the household. Please see Appendix A for a site location map illustrating this labeling system.

The HUD Form 5.1, Building Condition Form, was used to assess the building's structural integrity as part of the visual assessment.

Condition	Yes	No
Roof missing parts of surfaces (tiles, boards, shakes, etc.)	X	
Roof has holes or large cracks	X	
Gutters or down-spouts broken	X	
Chimney masonry cracked, bricks loose or missing, obviously out of plumb	X	
Exterior of interior walls have obvious large cracks or holes, requiring more than routine pointing (if masonry) or painting	X	
Exterior siding has missing boards or shingles	X	
Water stains on interior walls or ceilings	X	
Plaster walls or ceilings deteriorated	X	
Two or more windows or doors broken, missing, or boarded up	X	
Porch or steps have major elements broken, missing, or boarded up		X
Foundation has major cracks, missing material, structure leans, or visibly unsound		X
*Total number	9	2

*If the "Yes" column has two or more checks, the dwelling is usually considered to be in poor condition for the purposes of a risk assessment. However, specific conditions and extenuating circumstances should be considered before determining the final condition of the dwelling and the appropriateness of a lead hazard screen.

3.0 Summary Discussion of XRF Inspection

During the risk assessment 234 XRF readings including calibrations were obtained, out of these 145 were *positive* which are listed below in the following table.

The following chart contains descriptions of components sampled with the XRF unit that tested *positive* for lead-based paint. As defined by the nature of a lead risk assessment, only areas with deteriorated paint need to be tested with the XRF unit. However, components that are in good condition will be tested if they are friction and impact surfaces, which are discussed in Section 6.

#	Room	Side	Structure	Feature	Substrate	Condition	Color	PbC	Units
6	Home Exterior	A	Window	Header	Concrete	Fair	White	2.4	mg / cm ^2
8	Home Exterior	A	Door	Header	Concrete	Fair	White	4.9	mg / cm ^2
9	Home Exterior	A	Picture Window	Sill	Concrete	Fair	White	7.8	mg / cm ^2

11	Home Exterior	A	Picture Window	Header	Concrete	Fair	White	2.6	mg / cm ^2
12	Home Exterior	A	Picture Window	Header	Concrete	Fair	White	5.7	mg / cm ^2
14	Front Porch	A	Cap	Middle	Concrete	Chip/Peel	White	15	mg / cm ^2
19	Home Exterior	B	Window	Casing	Wood	Chip/Peel	Green	25.4	mg / cm ^2
20	Home Exterior	B	Window	Sill	Concrete	Chip/Peel	Red	13.8	mg / cm ^2
21	Home Exterior	B	Dining Window	Casing	Wood	Chip/Peel	Green	32.4	mg / cm ^2
22	Home Exterior	B	Dining Window	Sill	Concrete	Chip/Peel	Red	16	mg / cm ^2
23	Home Exterior	B	Concrete Siding	Lower	Concrete	Chip/Peel	Brown	1.5	mg / cm ^2
24	Home Exterior	B	Basement Window	Jamb	Wood	Chip/Peel	Red	28.2	mg / cm ^2
25	Home Exterior	C	Dining Window	Casing	Wood	Chip/Peel	Green	35	mg / cm ^2
26	Home Exterior	C	Dining Window	Sill	Concrete	Chip/Peel	Red	2.5	mg / cm ^2
27	Home Exterior	C	Porch	Concrete Cap	Concrete	Chip/Peel	Brown	3.9	mg / cm ^2
28	Home Exterior	C	Porch	Header	Wood	Chip/Peel	Brown	25.5	mg / cm ^2
30	Home Exterior	B	Porch	Door Casing	Wood	Chip/Peel	Brown	26.3	mg / cm ^2
31	Home Exterior	B	Porch	Door Header	Concrete	Chip/Peel	Brown	8.9	mg / cm ^2
32	Home Exterior	C	Concrete Siding	Lower	Concrete	Chip/Peel	Brown	1.5	mg / cm ^2
34	Home Exterior	D	Door	Header	Concrete	Fair	Brown	6.4	mg / cm ^2
35	Home Exterior	D	Kitchen Window	Casing	Wood	Chip/Peel	Green	34.7	mg / cm ^2
36	Home Exterior	C	Kitchen Window	Sill	Concrete	Chip/Peel	Red	12.9	mg / cm ^2
37	Home Exterior	D	Basement Window	Jamb	Wood	Chip/Peel	Red	1.3	mg / cm ^2
38	Home Exterior	D	Basement Window	Sash	Wood	Chip/Peel	Red	14.6	mg / cm ^2
39	Home Exterior	D	Window	Casing	Wood	Chip/Peel	Green	35.5	mg / cm ^2
40	Home Exterior	D	Bedroom Window	Sill	Concrete	Chip/Peel	Red	12.5	mg / cm ^2
41	Home Exterior	D	Bedroom Fascia	Lower	Wood	Chip/Peel	Brown	12.9	mg / cm ^2
42	Home Exterior	D	Bedroom Soffit	Lower	Wood	Chip/Peel	Brown	11.4	mg / cm ^2
43	Home Exterior	D	Concrete Siding	Lower	Concrete	Chip/Peel	Brown	4	mg / cm ^2
44	Room 01	A	Wall	Middle	Plaster	Fair	Pink	12.9	mg / cm ^2
45	Room 01	B	Wall	Lower	Plaster	Poor	Pink	12	mg / cm ^2
46	Room 01	C	Wall	Middle	Plaster	Poor	Pink	12.6	mg / cm ^2
47	Room 01	D	Wall	Middle	Plaster	Poor	Pink	10.7	mg / cm ^2
60	Room 02	A	Wall	Middle	Plaster	Fair	Pink	12.4	mg / cm ^2
61	Room 02	B	Wall	Middle	Plaster	Fair	Pink	7.8	mg / cm ^2
62	Room 02	C	Wall	Middle	Plaster	Fair	Pink	11.1	mg / cm ^2
63	Room 02	D	Wall	Middle	Plaster	Fair	Pink	13	mg / cm ^2
90	Room 04	D	Wall	Middle	Plaster	Fair	White	5.2	mg / cm ^2
97	Room 05	A	Wall	Middle	Plaster	Fair	Pink	13.2	mg / cm ^2
98	Room 05	D	Wall	Middle	Plaster	Fair	Pink	15.1	mg / cm ^2
105	Room 05 Closet	C	Wall	Middle	Plaster	Fair	White	1.7	mg / cm ^2
106	Room 05 Closet	D	Ceiling	Middle	Wood	Poor	Yellow	2	mg / cm ^2
110	Room 06	A	Wall	Middle	Plaster	Fair	Pink	14.3	mg / cm ^2
111	Room 06	B	Wall	Middle	Plaster	Fair	Pink	11.3	mg / cm ^2
112	Room 06	C	Wall	Middle	Plaster	Fair	Pink	9.2	mg / cm ^2
113	Room 06	D	Wall	Middle	Plaster	Fair	Pink	11.9	mg / cm ^2
114	Room 06	A	Window	Casing	Wood	Fair	White	14.1	mg / cm ^2
115	Room 06	A	Window	Sash	Wood	Poor	White	13.1	mg / cm ^2
116	Room 06	A	Window	Sill	Wood	Poor	White	15	mg / cm ^2
117	Room 06	B	Door	Casing	Wood	Fair	White	13.9	mg / cm ^2
118	Room 06	B	Door	Jamb	Wood	Fair	White	13.5	mg / cm ^2
119	Room 06	D	Railing Cap	Middle	Wood	Fair	White	16.6	mg / cm ^2
120	Room 06	D	Baluster	Middle	Wood	Fair	White	16.8	mg / cm ^2
121	Room 06	A	Baseboard	Middle	Wood	Fair	White	14.8	mg / cm ^2
122	Room 07	B	Wall	Middle	Plaster	Fair	Pink	12.8	mg / cm ^2
123	Room 07	D	Wall	Middle	Plaster	Fair	Pink	14.5	mg / cm ^2

124	Room 07	B	Door	Casing	Wood	Fair	White	15	mg / cm ^2
125	Room 07	D	Door	Jamb	Wood	Fair	White	13	mg / cm ^2
126	Room 07	B	Door	Door	Wood	Fair	White	18	mg / cm ^2
127	Room 07	C	Closet Door	Casing	Wood	Fair	White	15.2	mg / cm ^2
128	Room 07	C	Closet Door	Door	Wood	Fair	White	15.6	mg / cm ^2
129	Room 07	C	Door	Casing	Wood	Fair	White	14.1	mg / cm ^2
130	Room 07	C	Door	Door	Wood	Fair	White	23.7	mg / cm ^2
131	Room 07	D	Closet Door	Casing	Wood	Fair	White	13.1	mg / cm ^2
132	Room 07	D	Closet Door	Door	Wood	Fair	White	15.9	mg / cm ^2
133	Room 07	D	Bathroom Door	Casing	Wood	Fair	White	17.5	mg / cm ^2
134	Room 07	D	Bathroom Door	Jamb	Wood	Fair	White	12.1	mg / cm ^2
135	Room 07	D	Bathroom Door	Door	Wood	Fair	White	17.1	mg / cm ^2
136	Room 08	A	Wall	Middle	Plaster	Fair	White	4.3	mg / cm ^2
137	Room 08	B	Wall	Middle	Plaster	Fair	White	5.5	mg / cm ^2
138	Room 08	C	Wall	Middle	Plaster	Fair	White	6	mg / cm ^2
139	Room 08	D	Wall	Middle	Plaster	Fair	White	5.7	mg / cm ^2
140	Room 08	A	Window	Casing	Wood	Fair	Blue	14.7	mg / cm ^2
141	Room 08	A	Window	Sash	Wood	Fair	Blue	19	mg / cm ^2
142	Room 08	A	Window	Sill	Wood	Fair	Blue	8.1	mg / cm ^2
143	Room 08	A	Window	Well	Wood	Fair	Red	25.7	mg / cm ^2
145	Room 08	B	Window	Well	Wood	Chip/Peel	Red	29.5	mg / cm ^2
146	Room 08	B	Window	Casing	Wood	Fair	Blue	12.6	mg / cm ^2
147	Room 08	B	Window	Sash	Wood	Fair	Blue	11.3	mg / cm ^2
148	Room 08	C	Door	Casing	Wood	Fair	Blue	15.1	mg / cm ^2
149	Room 08	C	Door	Jamb	Wood	Fair	Blue	15.1	mg / cm ^2
150	Room 08	D	Door	Casing	Wood	Fair	Blue	15.9	mg / cm ^2
151	Room 08	D	Door	Door	Wood	Fair	Blue	13.4	mg / cm ^2
152	Room 08	A	Baseboard	Middle	Wood	Fair	Blue	14.2	mg / cm ^2
153	Room 09	A	Wall	Middle	Plaster	Poor	Beige	5.2	mg / cm ^2
154	Room 09	B	Wall	Middle	Plaster	Poor	Beige	8	mg / cm ^2
155	Room 09	C	Wall	Upper	Plaster	Poor	Beige	5.1	mg / cm ^2
156	Room 09	D	Wall	Middle	Plaster	Poor	Beige	8.8	mg / cm ^2
157	Room 09	A	Door	Casing	Wood	Fair	White	18	mg / cm ^2
158	Room 09	A	Door	Jamb	Wood	Fair	White	20.8	mg / cm ^2
159	Room 09	A	Door	Door	Wood	Fair	White	15.2	mg / cm ^2
160	Room 09	B	Window	Casing	Wood	Fair	White	15.2	mg / cm ^2
161	Room 09	B	Window	Sash	Wood	Fair	White	21.1	mg / cm ^2
162	Room 09	B	Window	Sill	Wood	Fair	White	21.6	mg / cm ^2
163	Room 09	C	Door	Casing	Wood	Fair	White	14.9	mg / cm ^2
164	Room 09	C	Door	Door	Wood	Fair	White	21.1	mg / cm ^2
165	Room 09	D	Door	Casing	Wood	Fair	White	15.5	mg / cm ^2
166	Room 09	D	Door	Door	Wood	Fair	White	17.9	mg / cm ^2
167	Room 09	A	Baseboard	Middle	Wood	Fair	White	18.9	mg / cm ^2
172	Room 10	A	Door	Casing	Wood	Poor	Blue	16.4	mg / cm ^2
173	Room 10	B	Door	Casing	Wood	Poor	Blue	18.7	mg / cm ^2
174	Room 10	B	Door	Door	Wood	Poor	Blue	16	mg / cm ^2
175	Room 10	C	Window	Casing	Wood	Poor	Blue	16.6	mg / cm ^2
176	Room 10	C	Window	Sash	Wood	Poor	Blue	15	mg / cm ^2
177	Room 10	C	Window	Sill	Wood	Poor	Blue	3.6	mg / cm ^2
178	Room 10	C	Window	Well	Wood	Poor	Red	28.3	mg / cm ^2
179	Room 10	D	Window	Casing	Wood	Poor	Blue	17.4	mg / cm ^2
180	Room 10	D	Window	Sash	Wood	Poor	Blue	15.7	mg / cm ^2
181	Room 10	D	Window	Sill	Wood	Poor	Blue	2.1	mg / cm ^2

182	Room 10	A	Baseboard	Middle	Wood	Poor	Blue	17.8	mg / cm ^2
186	Room 11	D	Wall	Middle	Plaster	Fair	White	8.1	mg / cm ^2
187	Room 11	B	Door	Casing	Wood	Poor	White	20	mg / cm ^2
188	Room 11	B	Door	Door	Wood	Poor	White	14.8	mg / cm ^2
189	Room 11	D	Window	Casing	Wood	Poor	White	15.3	mg / cm ^2
190	Room 11	D	Window	Sill	Wood	Poor	White	10.2	mg / cm ^2
192	Room 11	C	Tub	Middle	Metal	Poor	White	2.3	mg / cm ^2
193	Room 12	A	Window	Casing	Wood	Poor	Brown	29.1	mg / cm ^2
194	Room 12	A	Window	Sash	Wood	Poor	Brown	10.5	mg / cm ^2
195	Room 12	A	Window	Sill	Concrete	Poor	Brown	11.7	mg / cm ^2
196	Room 12	A	Door	Casing	Wood	Poor	Brown	26.6	mg / cm ^2
197	Room 12	A	Door	Jamb	Wood	Poor	Brown	24	mg / cm ^2
199	Room 12	B	Window	Sash	Wood	Poor	Brown	2.5	mg / cm ^2
200	Room 12	B	Window	Sash	Wood	Poor	Brown	1.4	mg / cm ^2
201	Room 12	C	Window	Sash	Wood	Poor	Brown	1.8	mg / cm ^2
202	Room 12	D	Window	Sash	Wood	Poor	Brown	2.5	mg / cm ^2
205	Room 12	B	Wall	Lower	Wood	Poor	Brown	1.9	mg / cm ^2
207	Room 12	A	Floor	Middle	Wood	Chip/Peel	Gray	10.9	mg / cm ^2
208	Home Exterior	C	Window	Casing	Wood	Chip/Peel	Green	33.4	mg / cm ^2
209	Home Exterior	C	Window	Sill	Concrete	Chip/Peel	Brown	13.7	mg / cm ^2
210	Home Exterior	C	Soffit	Middle	Wood	Chip/Peel	Brown	33.8	mg / cm ^2
211	Home Exterior	C	Fascia	Middle	Wood	Chip/Peel	Brown	36.6	mg / cm ^2
212	Home Exterior	D	Fascia	Middle	Wood	Chip/Peel	Brown	35.2	mg / cm ^2
213	Home Exterior	D	Soffit	Middle	Wood	Chip/Peel	Brown	31.6	mg / cm ^2
214	Room 12 Exterior	D	Window	Sash	Wood	Chip/Peel	Brown	6.9	mg / cm ^2
215	Room 12 Exterior	C	Window	Sash	Wood	Chip/Peel	Brown	9.5	mg / cm ^2
216	Room 12 Exterior	C	Window	Sill	Wood	Chip/Peel	Brown	14.3	mg / cm ^2
220	Room 13	C	Window	Casing	Wood	Fair	Beige	3	mg / cm ^2
221	Room 13	C	Window	Sill	Wood	Fair	Beige	6.2	mg / cm ^2
222	Room 13	D	Door	Casing	Wood	Fair	Beige	6.7	mg / cm ^2
223	Room 13	A	Stairs	Riser	Wood	Poor	Gray	5.9	mg / cm ^2
224	Room 13	A	Stairs	Run	Wood	Poor	Gray	6.7	mg / cm ^2
225	Room 14	B	Wall	Middle	Plaster	Poor	White	9	mg / cm ^2
226	Room 14	D	Wall	Middle	Plaster	Poor	White	9.9	mg / cm ^2
227	Room 14	D	Stairs	Riser	Wood	Poor	Gray	7.3	mg / cm ^2
228	Room 14	D	Stairs	Run	Wood	Poor	Gray	8.7	mg / cm ^2

Please refer to the XRF Data forms in Appendix B. These forms contain the component's location, condition and whether they tested positive or negative for lead-based paint for all samples obtained using the XRF. Similar components in the same area of positive locations should also be assumed that they are positive too.

All surfaces were tested with the XRF unit according to Performance Characteristic Sheet recommendations, distributed by the U.S. Environmental Protection Agency (EPA) and Department of Housing and Urban Development (HUD). See Appendix E for a copy of the Manufacturer's Performance Characteristic Sheet.

XRF technology utilizes low level radiation to excite atoms within a painted surface. This excited state produces energy, which the XRF unit is able to analyze. Based upon its analysis, the unit is able to determine if lead-based paint is present. The XRF will report lead in micrograms per square centimeter (mg/cm^2). HUD recognizes paint to be lead containing if it contains equal to or greater than $1.0 mg/cm^2$. This investigation recognizes the HUD standard of $1.0 mg/cm^2$

Surfaces that tested positive for lead would be described above in the visual inspection section, which would include all of the positive lead results located in the XRF Lead Results table that can be found in Appendix B.

4.0 Dust Wipe Sampling

In addition to sampling with the XRF unit, other methods of locating lead were also utilized during this inspection. For example, dust wipe sampling was used and was conducted according to HUD guidelines.

Dust wipe samples are collected in the following manner:

1. An area located on the surface to be dust wiped no less than 0.1 ft² and no larger than 2 ft² is measured and recorded.
2. A single moist towelette is opened with a gloved hand and wiped across the sampling area in a series of "s" patterns.
3. The towelette is folded inward and placed into a container labeled with the site location identification, sample location and size of area wiped.
4. Samples are analyzed and reported by the laboratory in micrograms per square foot (ug/ft²).

Dust is considered lead burdened if a concentration above the following criteria for each surface is found to be present.

Floors	40 ug/ft ²
Window sills (stools)	250 ug/ft ²
Window troughs (wells)	400 ug/ft ²

The following chart illustrates the lead wipe locations and concentrations for all wipes taken during the investigation.

6267-01	Room 1, Side A, Window Sill	250 µg/ft ²	#1
6267-02	Room 1, Side A, Floor	62 µg/ft ²	#2
6267-03	Room 2, Side B, Window Well	1,200,000 µg/ft ²	#3
6267-04	Room 2, Side B, Floor	320 µg/ft ²	#4
6267-05	Room 3, Side D, Window Sill	11,000 µg/ft ²	#5
6267-06	Room 3, Side D, Floor	150 µg/ft ²	#6
6267-07	Room 4, Side D, Window Well	17,000 µg/ft ²	#7
6267-08	Room 4, Side D, Floor	13 µg/ft ²	#8
6267-09	Room 8, Side B, Window Sill	16,000 µg/ft ²	#09
6267-10	Room 8, Side B, Floor	120 µg/ft ²	#10
6267-11	Room 10, Side C, Window Well	35,000 µg/ft ²	#11
6267-12	Room 10, Side C, Floor	49 µg/ft ²	#12

For a complete listing of all wipe results, please see Appendix C.

5.0 Soil Sampling

Soil samples, if collected, were following HUD guidelines from areas of exposed soil located on the property. Composite samples of soil from the upper ½ inch were collected and analyzed by Environmental Hazards Services, L.L.C. According to EPA and HUD guidelines, a limit of 400 mg/kg (ppm) of lead is allowed in high contact area such as play areas and/or the exposed soil directly around the perimeter of the household. A limit of 1,200 mg/kg (ppm) is allowed in low contact areas such as the other parts of the yard.

One soil sample was taken from the perimeter of the house where there was bare soil at the drip line.

6267-13	Drip line at perimeter of house	4,100 ug/g	#13
---------	---------------------------------	------------	-----

6.0 Friction and Impact Survey

Paint containing lead is most hazardous when it is chipping, peeling, cracking, chalking or on components such as doors, windows, and floors which encounter friction. Friction is the result of two objects rubbing together. Doors and door trim, as well as windows and window trim, encounter a significant amount of friction from being repeatedly open and shut. Painted flooring can also be considered a friction surface due to foot traffic, hard-soled shoes or roller chairs. These actions cause lead containing paints to be ground into fine dusts, making the lead available for human consumption.

7.0 Recommendations

Component	Location	Recommendations
Exterior Concrete Window Sill and Run of Decorative Concrete on Exterior House	Window Sills: throughout exterior Run: About 3 feet from the ground around entire home	Interim – Scrape and paint planter with high grade primer and paint. Abatement – Encapsulate by following the lead hazard control program set by the State of Michigan. Qualified personnel should perform all abatement work.
Doors & Components	Throughout where positive	Interim – Replace the door stop. Wet-plane the corner edges of the door on its latch side where it contacts the stop. Re-set the hinge screws if necessary, so the door does not make any wood to wood contact. It is also recommended that any chipping lead paint surrounding the door be wet scraped and repainted. Abatement – Remove and replace doors or encapsulate by following the lead hazard control program set by the State of Michigan. Qualified personnel should perform all abatement work.
Walls	Throughout house where positive	Interim - To temporarily avoid lead dust surfaces can be wet scraped and repainted or covered with new material. Abatement - Remove, encapsulate or replace all materials or replace all materials containing lead paint by following the lead hazard control program set by the State of Michigan. Qualified personnel should perform all abatement work.
Windows & Components	Throughout house where positive	Interim – Remove any paint on friction surfaces and paint the window well. Abatement – Remove and replace windows or encapsulate by following the lead hazard control program set by the State of Michigan. Qualified personnel should perform all abatement work.

Exterior Components	Soffit/Fascia on exterior	<p>Interim – Scrape and paint house with high grade primer and paint or remove and replace windows or encapsulate by following the lead hazard program.</p> <p>Abatement – Remove and replace all painted materials containing lead paint by following the lead hazard control program set by the State of Michigan. Qualified personnel should perform all abatement work.</p>
Miscellaneous Surfaces	<p>Room 6 , 13 & 14 Stair Components</p> <p>Room 6, 8, 9 & 10 Baseboard</p> <p>Metal Tub in Room 11</p>	<p>Interim- To temporarily avoid lead dust surfaces can be wet scraped and repainted or covered with new material.</p> <p>Abatement- Remove, encapsulate or replace all materials or replace all materials containing lead paint by following the lead hazard control program set by the State of Michigan. Qualified personnel should perform all abatement work.</p>
Floors	Throughout house where positive	<p>Interim – To temporarily avoid lead dust, floors can be wet scraped and repainted or covered up with new material.</p> <p>Abatement – Remove, encapsulate or replace all materials containing lead paint by following the lead hazard control program set by the State of Michigan. Qualified personnel should perform all abatement work.</p>
Soil	At direct perimeter of house	Abatement- Remove and replace the top 2 to 3 inches of contaminated soil, then seed over with new grass

The simplest way to reduce lead exposures is to wash hands and horizontal surfaces regularly. Regular household soaps such as liquid soap or dish soap are the best solutions. However, it is important to remember not to re-contaminate surfaces.

8.0 Credentials

See Appendix D for copies of assessor and inspector qualifications.

9.0 Maps

A site location map is enclosed in Appendix A.

10.0 Lab Results

Appendix C contains all lab results along with a map detailing where wipe samples were obtained.

11.0 Reevaluation Schedule

Based on the HUD Table 6.1 Standard Reevaluation Schedule, all surfaces that were found to contain deteriorating lead-based paint during this risk assessment should be reevaluated every year to maintain lead-safe conditions. Any surfaces that are currently in good condition and therefore do not require any immediate action should be visually monitored every year to maintain good condition. These tables can be found in Appendix F.

12.0 Conclusion

All interior components on the 1st floor of the house were found to be *negative* and *below* the regulatory for *lead standards of 1.0 mg/cm² per the XRF test results*, except for walls in rooms 1, 2, 4 & 5 which tested *positive* and *above* the regulatory standards. All interior components on the 2nd floor of the house were found to be *positive* and *above* the regulatory for *lead standards of 1.0 mg/cm² per the XRF test results*, except for the walls in room 10 & 11, window sash in room 11, door and ceiling in room 12 and the walls in room 13 which tested *negative* and *below* the regulatory standards.. Also all components tested in the basement were found to be *negative* and *below* the regulatory for *lead standards of 1.0 mg/cm² per the XRF test results*. The exact location of these components can be found in the table in the summary discussion of XRF results section and in the XRF data sheets in appendix B.

All exterior components of the house were found to be *positive* and *above* the regulatory for *lead standards of 1.0 mg/cm² per the XRF test result*, except for the soffit, fascia, riser, floor, support column and ceiling on the front porch and exterior door casing on side D which tested *negative* and *below* the regulatory standards. The exact location of these components can be found in the table in the summary discussion of XRF results section and in the XRF data sheets in appendix B.

The lead wipe results showed that all window sills, window wells and most floors tested *above* the regulatory standards so therefore are considered lead hazardous. The floor in room 4 tested *below* the regulatory standards so therefore isn't considered lead hazardous. These lab results are found in appendix C.

It has been a pleasure to be of assistance to you. Please contact us if you have any questions or when we can be of further aid in any other environmental or occupational health matter.



Douglas A. Hease

12/14/10

Date

Appendix Table of Contents

A) Site Location Map

B) XRF Data

C) Lab Analysis

D) Qualifications

**E) Manufacturer's
Performance
Characteristic Sheets**

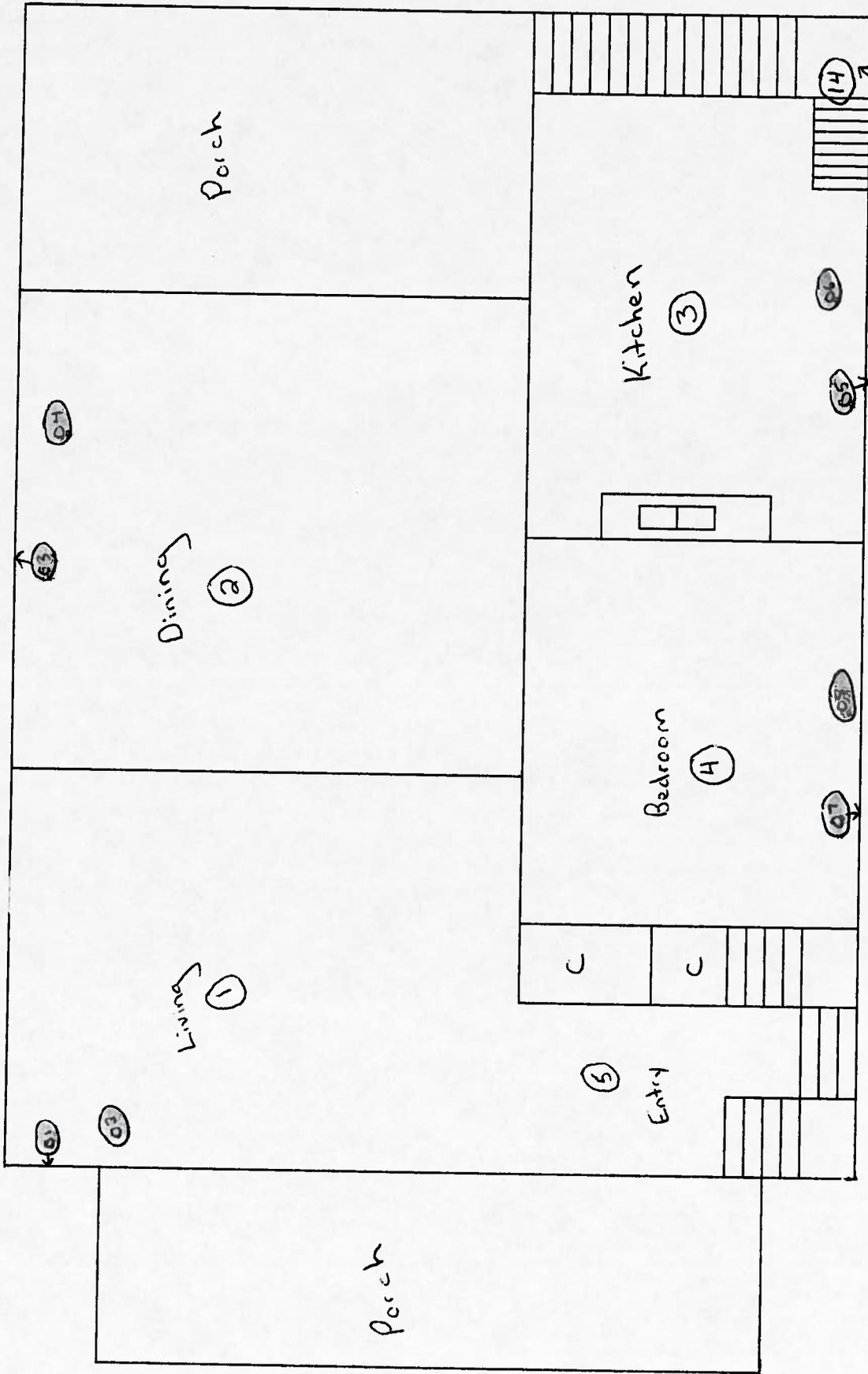
**F) Standard
Reevaluation
Schedules**

Appendix A

Site Location Map

89 College Street
Bottle Creek, MI 49017

B



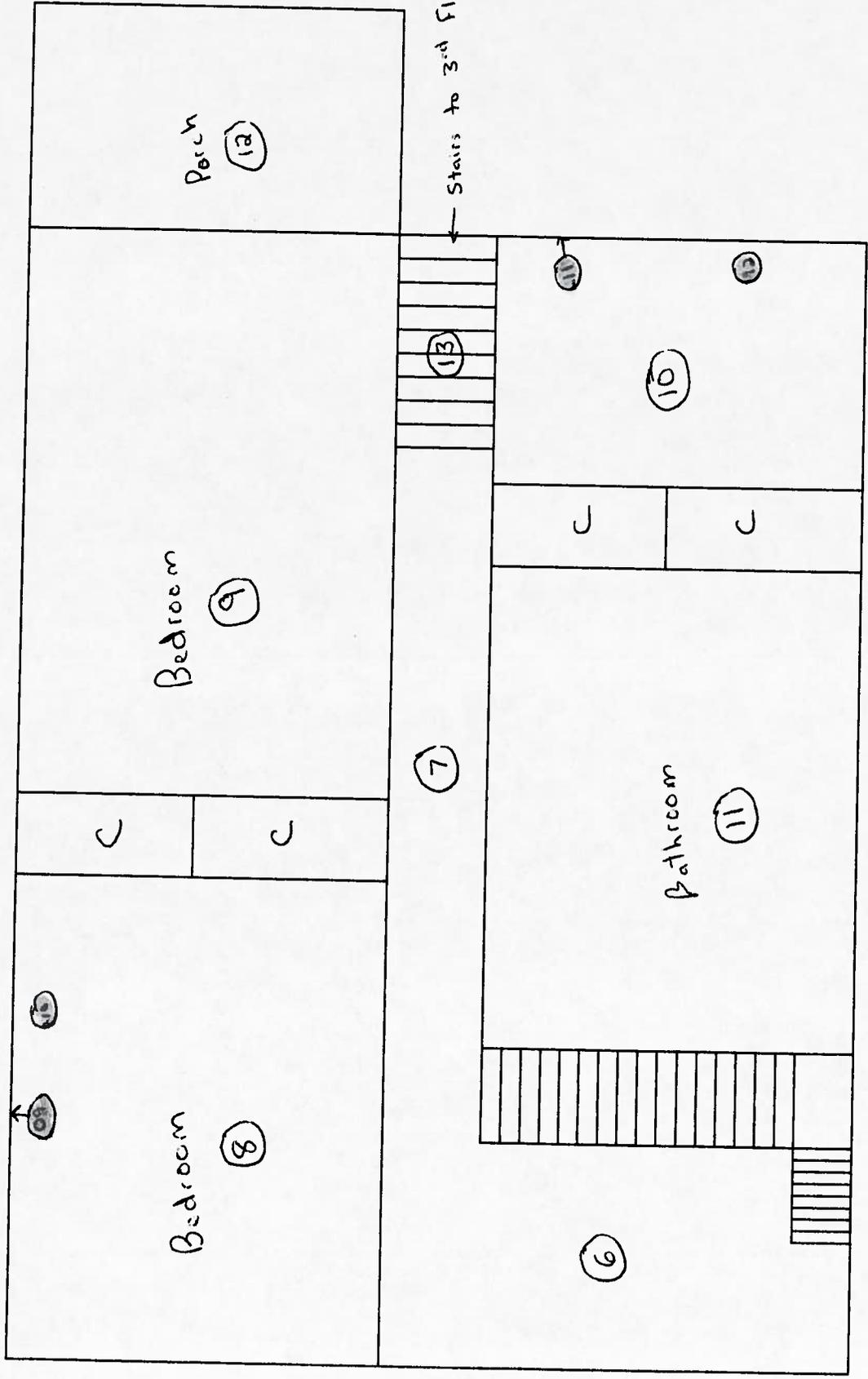
Stairs to
Basement

1st Floor

Room 15 : Basement

89 College Street
Battle Creek, MI 49908

B



C

A

D

2nd Floor

Appendix B

XRF Data

Reading No	Room	Side	Structure	Feature	Substrate	Condition	Color	Results	PbC	Units
1									4.45	cps
2	Cal <0.01	Cal	Cal	Cal	Cal	Cal	Cal	Negative	0	mg / cm ^2
3	Cal 1.04	Cal	Cal	Cal	Cal	Cal	Cal	Positive	1	mg / cm ^2
4	Cal 1.53	Cal	Cal	Cal	Cal	Cal	Cal	Positive	1.6	mg / cm ^2
5	Home Exterior	A	Window	Casing	Wood	Fair	Green	Negative	0	mg / cm ^2
6	Home Exterior	A	Window	Header	Concrete	Fair	White	Positive	2.4	mg / cm ^2
7	Home Exterior	A	Door	Casing	Wood	Fair	Green	Negative	0	mg / cm ^2
8	Home Exterior	A	Door	Header	Concrete	Fair	White	Positive	4.9	mg / cm ^2
9	Home Exterior	A	Picture Window	Sill	Concrete	Fair	White	Positive	7.8	mg / cm ^2
10	Home Exterior	A	Picture Window	Casing	Wood	Fair	Green	Negative	0	mg / cm ^2
11	Home Exterior	A	Picture Window	Header	Concrete	Fair	White	Positive	2.6	mg / cm ^2
12	Home Exterior	A	Picture Window	Header	Concrete	Fair	White	Positive	5.7	mg / cm ^2
13	Front Porch	A	Support Column	Middle	Wood	Fair	Red	Negative	0	mg / cm ^2
14	Front Porch	A	Cap	Middle	Concrete	Chipping/Peeling	White	Positive	15	mg / cm ^2
15	Front Porch	A	Porch	Header	Wood	Poor	Green	Negative	0	mg / cm ^2
16	Front Porch	A	Porch	Soffit	Wood	Good	Red	Negative	0	mg / cm ^2
17	Front Porch	A	Porch	Floor	Concrete	Chipping/Peeling	Gray	Negative	0.03	mg / cm ^2
18	Front Porch	A	Porch	Riser	Concrete	Chipping/Peeling	Red	Negative	0.01	mg / cm ^2
19	Home Exterior	B	Window	Casing	Wood	Chipping/Peeling	Green	Positive	25.4	mg / cm ^2
20	Home Exterior	B	Window	Sill	Concrete	Chipping/Peeling	Red	Positive	13.8	mg / cm ^2
21	Home Exterior	B	Dining Window	Casing	Wood	Chipping/Peeling	Green	Positive	32.4	mg / cm ^2
22	Home Exterior	B	Dining Window	Sill	Concrete	Chipping/Peeling	Red	Positive	16	mg / cm ^2
23	Home Exterior	B	Concrete Siding	Lower	Concrete	Chipping/Peeling	Brown	Positive	1.5	mg / cm ^2
24	Home Exterior	B	Basement Window	Jamb	Wood	Chipping/Peeling	Red	Positive	28.2	mg / cm ^2
25	Home Exterior	C	Dining Window	Casing	Wood	Chipping/Peeling	Green	Positive	35	mg / cm ^2
26	Home Exterior	C	Dining Window	Sill	Concrete	Chipping/Peeling	Red	Positive	2.5	mg / cm ^2
27	Home Exterior	C	Porch	Concrete Cap	Concrete	Chipping/Peeling	Brown	Positive	3.9	mg / cm ^2
28	Home Exterior	C	Porch	Header	Wood	Chipping/Peeling	Brown	Positive	25.5	mg / cm ^2
29	Home Exterior	C	Porch	Ceiling	Wood	Chipping/Peeling	Varnish	Negative	0.09	mg / cm ^2
30	Home Exterior	B	Porch	Door Casing	Wood	Chipping/Peeling	Brown	Positive	26.3	mg / cm ^2
31	Home Exterior	B	Porch	Door Header	Concrete	Chipping/Peeling	Brown	Positive	8.9	mg / cm ^2
32	Home Exterior	C	Concrete Siding	Lower	Concrete	Chipping/Peeling	Brown	Positive	1.5	mg / cm ^2
33	Home Exterior	D	Door	Casing	Wood	Good	Brown	Negative	0	mg / cm ^2
34	Home Exterior	D	Door	Header	Concrete	Fair	Brown	Positive	6.4	mg / cm ^2
35	Home Exterior	D	Kitchen Window	Casing	Wood	Chipping/Peeling	Green	Positive	34.7	mg / cm ^2
36	Home Exterior	C	Kitchen Window	Sill	Concrete	Chipping/Peeling	Red	Positive	12.9	mg / cm ^2

37	Home Exterior	D	Basement Window	Jamb	Wood	Chipping/Peeling	Red	Positive	1.3	mg / cm ^2
38	Home Exterior	D	Basement Window	Sash	Wood	Chipping/Peeling	Red	Positive	14.6	mg / cm ^2
39	Home Exterior	D	Window	Casing	Wood	Chipping/Peeling	Green	Positive	35.5	mg / cm ^2
40	Home Exterior	D	Bedroom Window	Sill	Concrete	Chipping/Peeling	Red	Positive	12.5	mg / cm ^2
41	Home Exterior	D	Bedroom Fascia	Lower	Wood	Chipping/Peeling	Brown	Positive	12.9	mg / cm ^2
42	Home Exterior	D	Bedroom Soffit	Lower	Wood	Chipping/Peeling	Brown	Positive	11.4	mg / cm ^2
43	Home Exterior	D	Concrete Siding	Lower	Concrete	Chipping/Peeling	Brown	Positive	4	mg / cm ^2
44	Room 01	A	Wall	Middle	Plaster	Fair	Pink	Positive	12.9	mg / cm ^2
45	Room 01	B	Wall	Lower	Plaster	Poor	Pink	Positive	12	mg / cm ^2
46	Room 01	C	Wall	Middle	Plaster	Poor	Pink	Positive	12.6	mg / cm ^2
47	Room 01	D	Wall	Middle	Plaster	Poor	Pink	Positive	10.7	mg / cm ^2
48	Room 01	A	Window	Casing	Wood	Good	Stain	Negative	0.01	mg / cm ^2
49	Room 01	B	Stained Glass Window	Casing	Wood	Good	Stain	Negative	0.06	mg / cm ^2
50	Room 01	B	Stained Glass Window	Sash	Wood	Good	Stain	Negative	0.03	mg / cm ^2
51	Room 01	B	Fireplace	Upper	Wood	Good	Stain	Negative	0.01	mg / cm ^2
52	Room 01	B	Window	Casing	Wood	Good	Stain	Negative	0.04	mg / cm ^2
53	Room 01	B	Window	Sash	Wood	Good	Stain	Negative	0.03	mg / cm ^2
54	Room 01	C	Door	Casing	Wood	Good	Stain	Negative	0.02	mg / cm ^2
55	Room 01	C	Door	Jamb	Wood	Good	Stain	Negative	0.02	mg / cm ^2
56	Room 01	D	Door	Casing	Wood	Good	Stain	Negative	0.01	mg / cm ^2
57	Room 01	D	Door	Jamb	Wood	Good	Stain	Negative	0.02	mg / cm ^2
58	Room 01	D	Door	Jamb	Wood	Good	Stain	Negative	0.03	mg / cm ^2
59	Room 01	A	Baseboard	Door	Wood	Good	Stain	Negative	0.03	mg / cm ^2
60	Room 02	A	Wall	Middle	Wood	Good	Stain	Negative	0.03	mg / cm ^2
61	Room 02	B	Wall	Middle	Plaster	Fair	Pink	Positive	12.4	mg / cm ^2
62	Room 02	C	Wall	Middle	Plaster	Fair	Pink	Positive	7.8	mg / cm ^2
63	Room 02	D	Wall	Middle	Plaster	Fair	Pink	Positive	11.1	mg / cm ^2
64	Room 02	A	Closet	Middle	Plaster	Fair	Pink	Positive	13	mg / cm ^2
65	Room 02	B	Window	Casing	Wood	Good	Stain	Negative	0.01	mg / cm ^2
66	Room 02	B	Window	Casing	Wood	Good	Stain	Negative	0.07	mg / cm ^2
67	Room 02	B	Window	Sash	Wood	Good	Stain	Negative	0.06	mg / cm ^2
68	Room 02	B	Window	Sill	Wood	Good	Stain	Negative	0.11	mg / cm ^2
69	Room 02	C	Window	Casing	Wood	Good	Stain	Negative	0.03	mg / cm ^2
70	Room 02	C	Window	Sill	Wood	Good	Stain	Negative	0.09	mg / cm ^2
71	Room 02	C	Window	Sash	Wood	Good	Stain	Negative	0.02	mg / cm ^2
72	Room 02	D	Door	Casing	Wood	Good	Stain	Negative	0.01	mg / cm ^2
73	Room 03	A	Door	Jamb	Wood	Good	Stain	Negative	0.02	mg / cm ^2
			Wall	Middle	Drywall	Good	White	Negative	0	mg / cm ^2

74	B	Room 03	Wall	Middle	Drywall	Good	White	Negative	0	mg / cm ^2
75	C	Room 03	Wall	Middle	Plaster	Good	White	Negative	0.29	mg / cm ^2
76	D	Room 03	Wall	Middle	Plaster	Good	White	Negative	0.4	mg / cm ^2
77	D	Room 03	Wall	Middle	Plaster	Good	White	Negative	0.25	mg / cm ^2
78	D	Room 03	Wall	Middle	Plaster	Good	White	Negative	0.5	mg / cm ^2
79	C	Room 03	Wall	Middle	Plaster	Good	White	Negative	0	mg / cm ^2
80	B	Room 03	Door	Casing	Wood	Good	Stain	Negative	0.03	mg / cm ^2
81	B	Room 03	Porch Door	Casing	Wood	Good	Stain	Negative	0.01	mg / cm ^2
82	C	Room 03	Door	Casing	Wood	Good	Stain	Negative	0.01	mg / cm ^2
83	C	Room 03	Door	Casing	Wood	Good	Stain	Negative	0.01	mg / cm ^2
84	D	Room 03	Window	Jamb	Wood	Good	Stain	Negative	0.01	mg / cm ^2
85	D	Room 03	Window	Casing	Wood	Good	Stain	Negative	0.01	mg / cm ^2
86	D	Room 03	Window	Sash	Wood	Good	Stain	Negative	0.15	mg / cm ^2
87	A	Room 04	Wall	Sill	Wood	Good	Stain	Negative	0.06	mg / cm ^2
88	B	Room 04	Wall	Middle	Plaster	Fair	White	Negative	0	mg / cm ^2
89	C	Room 04	Wall	Middle	Plaster	Fair	White	Negative	0	mg / cm ^2
90	D	Room 04	Wall	Middle	Plaster	Fair	White	Negative	0	mg / cm ^2
91	A	Room 04	Door	Middle	Plaster	Fair	White	Positive	5.2	mg / cm ^2
92	A	Room 04	Door	Casing	Wood	Fair	Stain	Negative	0.02	mg / cm ^2
93	B	Room 04	Door	Door	Wood	Fair	Stain	Negative	0	mg / cm ^2
94	B	Room 04	Door	Casing	Wood	Fair	Stain	Negative	0.02	mg / cm ^2
95	A	Room 04	Ceiling	Door	Wood	Fair	Stain	Negative	0.02	mg / cm ^2
96	A	Room 05	Wall	Middle	Drywall	Poor	White	Negative	0	mg / cm ^2
97	A	Room 05	Wall	Middle	Plaster	Fair	Pink	Negative	0.05	mg / cm ^2
98	D	Room 05	Wall	Middle	Plaster	Fair	Pink	Positive	13.2	mg / cm ^2
99	A	Room 05	Ceiling	Middle	Plaster	Fair	Pink	Positive	15.1	mg / cm ^2
100	A	Room 05	Door	Middle	Plaster	Fair	White	Negative	0	mg / cm ^2
101	A	Room 05	Door	Casing	Wood	Fair	Stain	Negative	0	mg / cm ^2
102	D	Room 05	Door	Jamb	Wood	Fair	Red	Negative	0	mg / cm ^2
103	D	Room 05	Door	Column Post	Wood	Fair	Stain	Negative	0.08	mg / cm ^2
104	D	Room 05	Baluster	Middle	Wood	Fair	Stain	Negative	0.01	mg / cm ^2
105	C	Room 05 Closet	Stringer	Middle	Wood	Fair	Stain	Negative	0.04	mg / cm ^2
106	D	Room 05 Closet	Wall	Middle	Plaster	Fair	White	Positive	1.7	mg / cm ^2
107	A	Room 05 Closet	Ceiling	Middle	Wood	Poor	Yellow	Positive	2	mg / cm ^2
108	D	Room 05	Floor	Middle	Wood	Poor	Gray	Negative	0.1	mg / cm ^2
109	D	Room 05	Window	Middle	Wood	Poor	Stain	Negative	0.02	mg / cm ^2
110	A	Room 06	Window	Casing	Wood	Poor	Stain	Negative	0.02	mg / cm ^2
			Wall	Sash	Wood	Fair	Stain	Negative	0.02	mg / cm ^2
				Middle	Plaster	Fair	Pink	Positive	14.3	mg / cm ^2

111	Room 06	B	Wall	Middle	Plaster	Fair	Pink	Positive	11.3	mg / cm ^2
112	Room 06	C	Wall	Middle	Plaster	Fair	Pink	Positive	9.2	mg / cm ^2
113	Room 06	D	Wall	Middle	Plaster	Fair	Pink	Positive	11.9	mg / cm ^2
114	Room 06	A	Window	Casing	Wood	Fair	White	Positive	14.1	mg / cm ^2
115	Room 06	A	Window	Sash	Wood	Poor	White	Positive	13.1	mg / cm ^2
116	Room 06	A	Window	Sill	Wood	Poor	White	Positive	15	mg / cm ^2
117	Room 06	B	Door	Casing	Wood	Fair	White	Positive	13.9	mg / cm ^2
118	Room 06	B	Door	Jamb	Wood	Fair	White	Positive	13.5	mg / cm ^2
119	Room 06	D	Railing Cap	Middle	Wood	Fair	White	Positive	16.6	mg / cm ^2
120	Room 06	D	Baluster	Middle	Wood	Fair	White	Positive	16.8	mg / cm ^2
121	Room 06	A	Baseboard	Middle	Wood	Fair	White	Positive	14.8	mg / cm ^2
122	Room 07	B	Wall	Middle	Plaster	Fair	Pink	Positive	12.8	mg / cm ^2
123	Room 07	D	Wall	Middle	Plaster	Fair	Pink	Positive	14.5	mg / cm ^2
124	Room 07	B	Door	Casing	Wood	Fair	White	Positive	15	mg / cm ^2
125	Room 07	D	Door	Jamb	Wood	Fair	White	Positive	13	mg / cm ^2
126	Room 07	D	Door	Door	Wood	Fair	White	Positive	18	mg / cm ^2
127	Room 07	C	Closet Door	Casing	Wood	Fair	White	Positive	15.2	mg / cm ^2
128	Room 07	C	Closet Door	Door	Wood	Fair	White	Positive	15.6	mg / cm ^2
129	Room 07	C	Door	Casing	Wood	Fair	White	Positive	14.1	mg / cm ^2
130	Room 07	C	Door	Door	Wood	Fair	White	Positive	23.7	mg / cm ^2
131	Room 07	D	Closet Door	Casing	Wood	Fair	White	Positive	13.1	mg / cm ^2
132	Room 07	D	Closet Door	Door	Wood	Fair	White	Positive	15.9	mg / cm ^2
133	Room 07	D	Bathroom Door	Casing	Wood	Fair	White	Positive	17.5	mg / cm ^2
134	Room 07	D	Bathroom Door	Jamb	Wood	Fair	White	Positive	12.1	mg / cm ^2
135	Room 07	D	Bathroom Door	Door	Wood	Fair	White	Positive	17.1	mg / cm ^2
136	Room 08	A	Wall	Middle	Plaster	Fair	White	Positive	4.3	mg / cm ^2
137	Room 08	B	Wall	Middle	Plaster	Fair	White	Positive	5.5	mg / cm ^2
138	Room 08	C	Wall	Middle	Plaster	Fair	White	Positive	6	mg / cm ^2
139	Room 08	D	Wall	Middle	Plaster	Fair	White	Positive	5.7	mg / cm ^2
140	Room 08	A	Window	Casing	Wood	Fair	Blue	Positive	14.7	mg / cm ^2
141	Room 08	A	Window	Sash	Wood	Fair	Blue	Positive	19	mg / cm ^2
142	Room 08	A	Window	Sill	Wood	Fair	Blue	Positive	8.1	mg / cm ^2
143	Room 08	A	Window	Well	Wood	Fair	Red	Positive	25.7	mg / cm ^2
144	Room 08	B	Window	Well	Wood	Chipping/Peeling	Red	Negative	0.4	mg / cm ^2
145	Room 08	B	Window	Well	Wood	Chipping/Peeling	Red	Positive	29.5	mg / cm ^2
146	Room 08	B	Window	Casing	Wood	Fair	Blue	Positive	12.6	mg / cm ^2
147	Room 08	B	Window	Sash	Wood	Fair	Blue	Positive	11.3	mg / cm ^2

148	Room 08	C	Door	Casing	Wood	Fair	Blue	Positive	15.1	mg / cm ^2
149	Room 08	C	Door	Jamb	Wood	Fair	Blue	Positive	15.1	mg / cm ^2
150	Room 08	D	Door	Casing	Wood	Fair	Blue	Positive	15.9	mg / cm ^2
151	Room 08	D	Door	Door	Wood	Fair	Blue	Positive	13.4	mg / cm ^2
152	Room 08	A	Baseboard	Middle	Wood	Fair	Blue	Positive	14.2	mg / cm ^2
153	Room 09	A	Wall	Middle	Plaster	Poor	Beige	Positive	5.2	mg / cm ^2
154	Room 09	B	Wall	Middle	Plaster	Poor	Beige	Positive	8	mg / cm ^2
155	Room 09	C	Wall	Upper	Plaster	Poor	Beige	Positive	5.1	mg / cm ^2
156	Room 09	D	Wall	Middle	Plaster	Poor	Beige	Positive	8.8	mg / cm ^2
157	Room 09	A	Door	Casing	Wood	Fair	White	Positive	18	mg / cm ^2
158	Room 09	A	Door	Jamb	Wood	Fair	White	Positive	20.8	mg / cm ^2
159	Room 09	A	Door	Door	Wood	Fair	White	Positive	15.2	mg / cm ^2
160	Room 09	B	Window	Casing	Wood	Fair	White	Positive	15.2	mg / cm ^2
161	Room 09	B	Window	Sash	Wood	Fair	White	Positive	21.1	mg / cm ^2
162	Room 09	B	Window	Sill	Wood	Fair	White	Positive	21.6	mg / cm ^2
163	Room 09	C	Door	Casing	Wood	Fair	White	Positive	14.9	mg / cm ^2
164	Room 09	C	Door	Door	Wood	Fair	White	Positive	21.1	mg / cm ^2
165	Room 09	D	Door	Casing	Wood	Fair	White	Positive	15.5	mg / cm ^2
166	Room 09	D	Door	Door	Wood	Fair	White	Positive	17.9	mg / cm ^2
167	Room 09	A	Baseboard	Middle	Wood	Fair	White	Positive	18.9	mg / cm ^2
168	Room 10	A	Wall	Middle	Wood	Fair	Beige	Negative	0.12	mg / cm ^2
169	Room 10	B	Wall	Middle	Plaster	Fair	Beige	Negative	0.19	mg / cm ^2
170	Room 10	C	Wall	Middle	Plaster	Fair	Beige	Negative	0.02	mg / cm ^2
171	Room 10	D	Wall	Middle	Plaster	Fair	Beige	Negative	0.06	mg / cm ^2
172	Room 10	A	Door	Casing	Wood	Poor	Blue	Positive	16.4	mg / cm ^2
173	Room 10	B	Door	Casing	Wood	Poor	Blue	Positive	18.7	mg / cm ^2
174	Room 10	B	Door	Door	Wood	Poor	Blue	Positive	16	mg / cm ^2
175	Room 10	C	Window	Casing	Wood	Poor	Blue	Positive	16.6	mg / cm ^2
176	Room 10	C	Window	Sash	Wood	Poor	Blue	Positive	15	mg / cm ^2
177	Room 10	C	Window	Sill	Wood	Poor	Blue	Positive	3.6	mg / cm ^2
178	Room 10	C	Window	Well	Wood	Poor	Red	Positive	28.3	mg / cm ^2
179	Room 10	D	Window	Casing	Wood	Poor	Blue	Positive	17.4	mg / cm ^2
180	Room 10	D	Window	Sash	Wood	Poor	Blue	Positive	15.7	mg / cm ^2
181	Room 10	D	Window	Sill	Wood	Poor	Blue	Positive	2.1	mg / cm ^2
182	Room 10	A	Baseboard	Middle	Wood	Poor	Blue	Positive	17.8	mg / cm ^2
183	Room 11	A	Wall	Middle	Drywall	Fair	White	Negative	0	mg / cm ^2
184	Room 11	B	Wall	Middle	Drywall	Fair	White	Negative	0	mg / cm ^2

185	Room 11	Wall	Middle	Drywall	Fair	White	Negative	0	mg / cm ^2
186	Room 11	Wall	Middle	Plaster	Fair	White	Positive	8.1	mg / cm ^2
187	Room 11	Door	Casing	Wood	Poor	White	Positive	20	mg / cm ^2
188	Room 11	Door	Door	Wood	Poor	White	Positive	14.8	mg / cm ^2
189	Room 11	Window	Casing	Wood	Poor	White	Positive	15.3	mg / cm ^2
190	Room 11	Window	Sill	Wood	Poor	White	Positive	10.2	mg / cm ^2
191	Room 11	Window	Sash	Wood	Poor	White	Negative	0	mg / cm ^2
192	Room 11	Tub	Middle	Metal	Poor	White	Positive	2.3	mg / cm ^2
193	Room 12	Window	Casing	Wood	Poor	Brown	Positive	29.1	mg / cm ^2
194	Room 12	Window	Sash	Wood	Poor	Brown	Positive	10.5	mg / cm ^2
195	Room 12	Window	Sill	Concrete	Poor	Brown	Positive	11.7	mg / cm ^2
196	Room 12	Door	Casing	Wood	Poor	Brown	Positive	26.6	mg / cm ^2
197	Room 12	Door	Jamb	Wood	Poor	Brown	Positive	24	mg / cm ^2
198	Room 12	Door	Door	Wood	Poor	Brown	Negative	0.08	mg / cm ^2
199	Room 12	Window	Sash	Wood	Poor	Brown	Positive	2.5	mg / cm ^2
200	Room 12	Window	Sash	Wood	Poor	Brown	Positive	1.4	mg / cm ^2
201	Room 12	Window	Sash	Wood	Poor	Brown	Positive	1.8	mg / cm ^2
202	Room 12	Window	Sash	Wood	Poor	Brown	Positive	2.5	mg / cm ^2
203	Room 12	Ceiling	Middle	Wood	Poor	Brown	Negative	0.08	mg / cm ^2
204	Room 12	Ceiling	Middle	Wood	Poor	Brown	Negative	0.1	mg / cm ^2
205	Room 12	Wall	Lower	Wood	Poor	Brown	Positive	1.9	mg / cm ^2
206	Room 12	Wall	Middle	Wood	Poor	Brown	Negative	0.13	mg / cm ^2
207	Room 12	Floor	Middle	Wood	Chipping/Peeling	Gray	Positive	10.9	mg / cm ^2
208	Home Exterior	Window	Casing	Wood	Chipping/Peeling	Green	Positive	33.4	mg / cm ^2
209	Home Exterior	Window	Sill	Concrete	Chipping/Peeling	Brown	Positive	13.7	mg / cm ^2
210	Home Exterior	Soffit	Middle	Wood	Chipping/Peeling	Brown	Positive	33.8	mg / cm ^2
211	Home Exterior	Fascia	Middle	Wood	Chipping/Peeling	Brown	Positive	36.6	mg / cm ^2
212	Home Exterior	Fascia	Middle	Wood	Chipping/Peeling	Brown	Positive	35.2	mg / cm ^2
213	Home Exterior	Soffit	Middle	Wood	Chipping/Peeling	Brown	Positive	31.6	mg / cm ^2
214	Room 12 Exterior	Window	Sash	Wood	Chipping/Peeling	Brown	Positive	6.9	mg / cm ^2
215	Room 12 Exterior	Window	Sash	Wood	Chipping/Peeling	Brown	Positive	9.5	mg / cm ^2
216	Room 12 Exterior	Window	Sill	Wood	Chipping/Peeling	Brown	Positive	14.3	mg / cm ^2
217	Room 13	Wall	Middle	Plaster	Chipping/Peeling	Blue	Negative	0.07	mg / cm ^2
218	Room 13	Wall	Middle	Plaster	Chipping/Peeling	Blue	Negative	0.05	mg / cm ^2
219	Room 13	Wall	Middle	Plaster	Chipping/Peeling	Blue	Negative	0.37	mg / cm ^2
220	Room 13	Window	Casing	Wood	Fair	Beige	Positive	3	mg / cm ^2
221	Room 13	Window	Sill	Wood	Fair	Beige	Positive	6.2	mg / cm ^2

222	Room 13	D	Door	Wood	Fair	Beige	Positive	6.7	mg / cm ^2
223	Room 13	A	Stairs	Wood	Poor	Gray	Positive	5.9	mg / cm ^2
224	Room 13	A	Stairs	Wood	Poor	Gray	Positive	6.7	mg / cm ^2
225	Room 14	B	Wall	Plaster	Poor	White	Positive	9	mg / cm ^2
226	Room 14	D	Wall	Plaster	Poor	White	Positive	9.9	mg / cm ^2
227	Room 14	D	Stairs	Wood	Poor	Gray	Positive	7.3	mg / cm ^2
228	Room 14	D	Stairs	Wood	Poor	Gray	Positive	8.7	mg / cm ^2
229	Room 14	D	Wall	Brick	Poor	White	Negative	0.15	mg / cm ^2
230	Room 15	A	Wall	Concrete	Poor	White	Negative	0	mg / cm ^2
231	Room 15	B	Wall	Concrete	Poor	White	Negative	0.01	mg / cm ^2
232	Room 15	C	Wall	Concrete	Poor	White	Negative	0	mg / cm ^2
233	Room 15	D	Wall	Concrete	Poor	White	Negative	0	mg / cm ^2
234	Room 15	B	Wall	Brick	Poor	Green/Blue	Negative	0.02	mg / cm ^2

Appendix C

Lab Analysis



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

Lead Dust Wipe Analysis Report

Report Number: 10-12-00619

Client: Analytical Testing & Const. Svc
 14625 Doster Road
 Plainwell, MI 49080

Received Date: 12/06/2010
 Analyzed Date: 12/07/2010
 Reported Date: 12/09/2010

Project/Test Address: 6267
 Collection Date: 12/03/2010

Client Number:
 23-1295

Laboratory Results

Fax Number:
 269-664-6406

Lab Sample Number	Client Sample Number	Collection Location	Surface	Total Pb (ug)	Wipe Area (ft ²)	Concentration (ug/ft ²)	Narrative ID
10-12-00619-001	626701	RM 1 SIDE A	SL	142	0.576	250	L01
10-12-00619-002	626702	RM 1 SIDE A	FL	62.1	1.00	62	
10-12-00619-003	626703	RM 2 SIDE B	WW	399000	0.333	1200000	
10-12-00619-004	626704	RM 2 SIDE B	FL	317	1.00	320	
10-12-00619-005	626705	RM 3 SIDE D	SL	4560	0.413	11000	
10-12-00619-006	626706	RM 3 SIDE D	FL	146	1.00	150	
10-12-00619-007	626707	RM 4 SIDE D	WW	4910	0.295	17000	
10-12-00619-008	626708	RM 4 SIDE D	FL	12.8	1.00	13	
10-12-00619-009	626709	RM 8 SIDE B	SL	5780	0.354	16000	
10-12-00619-010	626710	RM 8 SIDE B	FL	120	1.00	120	
10-12-00619-011	626711	RM 10 SIDE C	WW	10300	0.295	35000	
10-12-00619-012	626712	RM 10 SIDE C	FL	49.2	1.00	49	

Sample Narratives:

L01: Upon receipt it was noticed that the sample container was cracked or open. The sample was transferred to another container for analysis; however, some contamination or loss of sample was possible, affecting final results.

Environmental Hazards Services, L.L.C

Client Number: 23-1295

Report Number: 10-12-00619

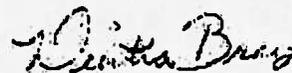
Project/Test Address: 6267

Lab Sample Number	Client Sample Number	Collection Location	Surface	Total Pb (ug)	Wipe Area (ft ²)	Concentration (ug/ft ²)	Narrative ID
-------------------	----------------------	---------------------	---------	---------------	------------------------------	-------------------------------------	--------------

Method: EPA SW846 7420

Accreditation #:

Reviewed By Authorized Signatory:



DeeDee Bray

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. The Reporting Limit (RL) is 10.0 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 Service, L.L.C. California Certification #2319 NY ELAP #11714.

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



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

Lead in Soil Analysis Report

Report Number: 10-12-00619

Client: Analytical Testing & Conslt. Svc
14625 Doster Road
Plainwell, MI 49080

Received Date: 12/06/2010
Analyzed Date: 12/08/2010
Reported Date: 12/09/2010

Project/Test Address: 6267
Collection Date: 12/03/2010

Client Number:
23-1295

Laboratory Results

Fax Number:
269-664-6406

Lab Sample Number	Client Sample Number	Collection Location	Concentration ppm (ug/g)	Narrative ID
10-12-00619-013	626713		4100	

Method: EPA SW846 7420

Reviewed By Authorized Signatory:

DeeDee Bray

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. 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. California Certification #2319 NY ELAP #11714.

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

12 wipes | 100

10-12-00619

CHAIN OF CUSTODY RECORD

ANALYTICAL TESTING & CONSULTING SERVICES, INC. 14625 DOSTER ROAD PLAINWELL, MI 49069 PH: 269-664-6474

PROJECT INFORMATION ANALYSIS REQUIRED

Name: Analytical Testing & Consulting Services, Inc. Project Name/Location: 89 ~~State~~ College B1
Address: 14625 Doster Rd. Project No.: 6267
City: Plainwell Project Contact:
State: MI 49060 Date Sampled: 12/3/10
Phone No: 269/664-6474 Fax No.: 269/664-6406

Sampled by: Doug H. Gabe Samples Preserved: Yes No
Received Cold: Yes No

COMMENTS/
WIPE AREA (sq ft)

Sample #	Description	Time On	Time Off	Tube Time	Start Flow	Stop Flow	Avg. Flow	COMMENTS/ WIPE AREA (sq ft)
626701	Rear side of window sill							4 1/2 x 14 1/2 15F
626702	Rear side of window sill							4" x 12" 15F
626703	Rear side of window well							4 1/2 x 14" 15F
626704	Rear side of floor							4 1/2 x 16" 15F
626705	Rear side of window sill							4 1/2 x 12" 15F
626706	Rear side of floor							4 1/2 x 16" 15F
626707	Rear side of window well							4 1/2 x 12" 15F
626708	Rear side of floor							4 1/2 x 16" 15F
626709	Rear side of window sill							4 1/2 x 12" 15F
626710	Rear side of floor							4 1/2 x 16" 15F
626711	Rear side of window well							4 1/2 x 10" 15F
626712	Rear side of floor							4 1/2 x 16" 15F

* Do wipe samples submitted meet ASTM E1792 requirements? Yes No

Sampler Relinquished by: [Signature] Date: 12/3/10 Time: 1:00 PM
Accepted by: [Signature] Date: [] Time: []

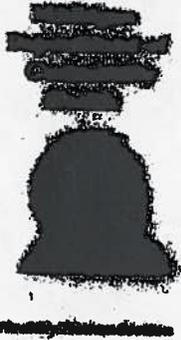
Special Instructions:

Extra Sample Recd; Soil - 6267-13

Rec'd: DS Butt, 12/6/10

PS

Appendix D
Qualifications



Douglas Haase

Lead Inspector/Risk Assessor

Cert number **P-00383**

Annual fee due by March 31 2011

Appropriate refresher training and exam must be taken to renew this certification before March 31, 2011

Certificate Number: 08-22-0068

ETC Training Services Group

38900 Huron River Drive
Romulus, Michigan 48174-1159
(734) 955-6600

PRESENTS

Douglas Haase

14625 Doster Rd
Plainwell, MI 49080

ss# ***-**-0984

with certification for having successfully completed the 1 day course
which meets the requirements for

Lead Risk Assessor Refresher Training Course

in accordance with the requirements of 40 CFR 745.225, (d)(2),
HUD Guidelines for Lead Inspectors, LEAD
POISONING PREVENTION CODE 845.28

Course Dates: March 7, 2008
6 months - 3rd Party Exam Eligibility Testing Valid Through: September 7, 2008
(3 years) Training Valid Through: March 7, 2011



Trainer

Tracy Westbrook
ETC President

Certificate Number: 08-32-0066

ETC Training Services Group.

38900 Huron River Drive
Romulus, MI 48174-1159
(734) 955-6600

PRESENTS

Douglas Haase

14625 Doster Rd
Plainwell, MI 48980

888.444.4434

with certification for having successfully completed the 1 day course
which meets the requirements for

Lead Inspector Refresher Training Course
in accordance with the requirements of 40 CFR 745.225. (d)(1)
HUD Guidelines for Lead Inspectors; LEAD
POISONING PREVENTION CODE 845.28

Course Dates: March 6, 2008

6 months - 3rd Party Exam Eligibility Testing Valid Through: September 6, 2008
(3 years) Training Valid Through: March 6, 2011



Trainer

Jacely Westcott
ETC President

AIHALaboratory Accreditation
Programs, LLC**AIHA Laboratory Accreditation Programs, LLC***acknowledges that***Environmental Hazards Services, LLC**

7469 White Pine Road, Richmond, VA 23237

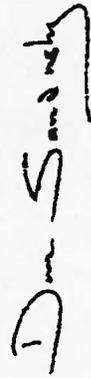
Laboratory ID: 100420

has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC thereby conforming to the ISO/IEC 17025:2005 international standard, *General Requirements for the Competence of Testing and Calibration Laboratories*. The above named laboratory, along with all premises from which key activities are performed, as listed above, have been accredited by AIHA-LAP, LLC in the following:

LABORATORY ACCREDITATION PROGRAMS

- INDUSTRIAL HYGIENE Accreditation Expires: 05/01/2012
- ENVIRONMENTAL LEAD Accreditation Expires: 05/01/2012
- ENVIRONMENTAL MICROBIOLOGY Accreditation Expires: 05/01/2012
- FOOD Accreditation Expires:

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached Scope of Accreditation. Continued accreditation is contingent upon successful on-going compliance with AIHA-LAP, LLC requirements. This certificate is not valid without the attached Scope of Accreditation. Please review the AIHA-LAP, LLC website (www.aihaaccreditinglabs.org) for the most current scope of accreditation.



Dave Sanditsky, CIH
Chairperson, Analytical Accreditation Board

Date Issued: 04/01/2010

Appendix E

Manufacturer's Performance Characteristic Sheets

Performance Characteristic Sheet

EFFECTIVE DATE: September 24, 2004

EDITION NO.: 1

MANUFACTURER AND MODEL:

Make: Niton LLC

Tested Model: XLP 300

Source: ¹⁰⁹Cd

Note: This PCS is also applicable to the equivalent model variations indicated below, for the Lead-in-Paint K+L variable reading time mode, in the XLI and XLP series:

XLI 300A, XLI 301A, XLI 302A and XLI 303A.
 XLP 300A, XLP 301A, XLP 302A and XLP 303A.
 XLI 700A, XLI 701A, XLI 702A and XLI 703A.
 XLP 700A, XLP 701A, XLP 702A, and XLP 703A.

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

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

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

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm² (inclusive)

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

SUBSTRATE CORRECTION:

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

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

INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE 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 from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

OPERATING PARAMETERS:

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

SUBSTRATE CORRECTION VALUE COMPUTATION:

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

EVALUATING THE QUALITY OF XRF TESTING:

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

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

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

Compute the Retest Tolerance Limit by the following steps:

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

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

Square the average for each testing combination.

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

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

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

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

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

Compute the average of all ten original XRF results.

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

Find the absolute difference of the two averages.

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

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

TESTING TIMES:

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

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

CLASSIFICATION RESULTS:

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

DOCUMENTATION:

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

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

Appendix F

Standard Reevaluation Schedules

Table 6.1 Standard Reevaluation Schedules

Schedule	Evaluation Results	Action Taken	Reevaluation Frequency and Duration	Visual Survey (by owner or owner's representative)
1	Combination risk assessment/inspection finds no leaded dust or soil and no lead-based paint	None	None	None
2	No lead-based paint hazards found during risk assessment conducted before hazard control or at clearance (hazards include dust and soil)	None	3 Years	Annually and whenever information indicates a possible problem
3	The average of leaded dust levels on all floors, interior window sills, or window troughs sampled exceeds the applicable standard, but by less than a factor of 10	<p>A. Interim controls and/or hazard abatement (or mixture of the two), including, but not necessarily limited to, dust removal. This schedule does not include window replacement</p> <p>B. Treatments specified in section A plus replacement of all windows with lead hazards</p> <p>C. Abatement of all lead-based paint using encapsulation or enclosure</p> <p>D. Removal of all lead-based paint</p>	1 Year, 2 Years	Same as Schedule 2, except for encapsulants. The first visual survey of encapsulants should be done one month after clearance; the second should be done 6 months later and annually thereafter
4	The average of leaded dust levels on all floors, interior window sills, or window troughs sampled exceeds the applicable standard by a factor of 10 or more.	<p>A. Interim controls and/or hazard abatement (or mixture of the two), including, but not necessarily limited to dust removal. This schedule does not include window replacement.</p> <p>B. Treatments specified in section A plus replacement of all windows with lead hazards</p> <p>C. Abatement of all lead-based paint using encapsulation and enclosure.</p> <p>D. Removal of all lead-based paint</p>	<p>None</p> <p>6 Months, 1 Year, 2 Years</p> <p>6 Months, 2 Years</p> <p>None</p> <p>None</p>	<p>Same as Schedule 3 above.</p> <p>None</p> <p>Same as Schedule 3</p> <p>Same as Schedule 3</p> <p>Same as Schedule 3</p> <p>None</p>

Table 6.1 Standard Reevaluation Schedules (continued)

Schedule	Evaluation Results	Action Taken	Reevaluation Frequency and Duration	Visual Survey (by owner or owner's representative)
5	No leaded dust or leaded soil hazards identified, but lead-based paint or lead-based paint hazards are found	<p>A Interim controls or mixture of interim controls and abatement (not including window replacement)</p> <p>B Mixture of interim controls and abatement, including window replacement</p> <p>C Abatement of all lead-based paint hazards, but not all lead-based paint</p> <p>D Abatement of all lead-based paint using encapsulation or enclosure.</p> <p>E Removal of all lead-based paint</p>	<p>2 Years</p> <p>3 Years</p> <p>4 Years</p> <p>None</p> <p>None</p> <p>None</p>	<p>Same as Schedule 3</p> <p>Same as Schedule 3</p> <p>Same as Schedule 3</p> <p>Same as Schedule 3</p> <p>None</p> <p>None</p>
6	Bare leaded soil exceeds standard, but less than 5,000 µg/g	Interim controls	None	Three months to check new ground cover, then annually to identify new bare spots
7	Bare leaded soil greater than or equal to 5,000 µg/g	Abatement (paving or removal)	None	None for removal, annually to identify new bare spots or deterioration of paving.

See notes to table 6.1 on following page.