# Lead-Based Paint Inspection & Risk Assessment

528 Virginia Avenue
Ann Arbor, Michigan 48103

Ann Arbor Housing Development Corporation

LBP Inspection & Risk Assessment Date:
March 7, 2023
Report Date: April 13, 2023

ASTI ENVIRONMENTAL


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## Ann Arbor, Michigan 48103

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## March 7, 2023
## Report Date: April 13, 2023

Prepared For:
Ann Arbor Housing Development Corporation
2000 S. Industrial Highway
Ann Arbor, MI 48104
(734) 794-6720

**Report Prepared By:**
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**ASTI Project No. :12703**

Report Prepared by:

Lathan Saperstein
Lead Inspector/Risk Assessor No. P-08947

Report Reviewed by:

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Director-Site Redevelopment Services
Lead Inspector/Risk Assessor No. P-02651

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## Executive Summary

ASTI Environmental (ASTI) conducted a Lead-Based Paint (LBP) Inspection and Risk Assessment of 528 Virginia Avenue, Ann Arbor, Michigan 48103 ("The Subject Property"), on March 7, 2023, on behalf of Ann Arbor Housing Development Corporation . As guidance, ASTI's work used the U.S. Department of Housing and Urban Development (HUD) Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, (2012) and the Michigan Lead Hazard Control Rules. This LBP Inspection and Risk Assessment Report is prepared for the benefit of Ann Arbor Housing Development Corporation and ASTI acknowledges that said parties may rely on the contents, conclusions, and recommendations presented in this report. The services provided by ASTI in completing this inspection and risk assessment have been provided in a manner consistent with the normal standards of the profession. No other warranties, expressed or implied, are made.

*Lead-Based Paint Inspection Results*
ASTI collected 125 measurements of painted surfaces. Of these measurements, 0 were positive for LBP. See Appendix C for all XRF measurements collected.

*Lead-Based Paint Hazard Assessment Results*
During the evaluation, ASTI identified 0 areas with lead-based paint hazards, including deteriorated LBP and LBP on impact, friction or chewable surfaces. See Appendix C for all XRF measurements collected.

*Lead Dust Wipe Sample Test Results*
ASTI personnel collected 25 lead dust wipe samples including 4 media blanks. Each sample was submitted to a NLLAP-certified laboratory. Review of the lead dust wipe sample results revealed that 0 of the samples collected exceeded the State of Michigan clearance levels and HUD and EPA standards (40 CFR Part 745.227). The current State of Michigan and HUD and EPA clearance levels for lead dust wipes are 10 micrograms per square foot (µg/ft²) for floors, 100 µg/ft² for window sills, 100 µg/ft² for window troughs (EPA and HUD are 400 µg/ft²), and 40 µg/ft² for porches.

Refer to Table 1, Lead Dust Wipe Sample Results, for a summary of the lead dust wipe sample results along with a comparison to State of Michigan standards. Refer to Appendix F for a copy of the laboratory data sheets and associated chain-of-custody.

*Soil Sample Results*
Bare soil was observed on the Property during ASTI's risk assessment in the front flower bed. One composite soil sample was collected and analyzed. Review of the test results revealed that the lead concentration in soil does not exceed HUD and EPA standard of 1,200 mg/kg of lead in bare soil. Refer to Table 2 for a complete summary of the lead soil sample results and refer to Appendix F for a copy of the laboratory data sheets and associated chain-of-custody.

*Conclusions and Recommendations*
Based on the results of the LBP inspection and risk assessment, the property currently contains 0 paint-lead hazards, 0 dust-lead hazards, and 0 soil-lead hazards.

**PURPOSE AND SCOPE OF WORK**

This report was prepared to present the results of a Lead-Based Paint (LBP) Inspection and Risk Assessment at 528 Virginia Avenue in Ann Arbor, Michigan 48103 (The Subject Property). Refer to the attached Site Location Map for the approximate site location. As guidance, ASTI's work used the United States Department of Housing and Urban Development (HUD) and the United States Environmental Protection Agency (EPA) statutes, regulations, and guidelines, as well as Michigan Lead Hazard Control Rules. This LBP Inspection and Risk Assessment report is prepared for the benefit of Ann Arbor Housing Development Corporation and ASTI acknowledges that said parties may rely on the contents, conclusions and recommendations presented in this report.

The LBP inspection and risk assessment activities were conducted on March 7, 2023. The LBP inspection and hazard risk assessment activities were completed by John Schuitema, Michigan Lead Risk Assessor No. P-07409, and Lathan Saperstein, Michigan Lead Risk Assessor No. P-08947. Their certifications are provided in Appendix A.

The purpose of the inspection and risk assessment was to identify any existing LBP and/or lead hazards that may exist at the Property. A LBP Inspection is an on-site investigation to determine the existence, nature, severity, and location of LBP hazards and the provision of a report explaining the results of the investigation and options for reducing the LBP hazards. A LBP Hazard Risk Assessment addresses the hazards related to friction, impact, and chewable surfaces that have LBP, potential hazards associated with lead dust inside the building, as well as the potential soil-lead hazards associated with bare soils outside the building. Lead hazards are defined in the EPA and HUD regulations and include the following six items:

1) Lead paint that is in deteriorated (flaking, chipped, peeling, etc.) condition;
2) Lead paint on a friction surface (rubbing doors, sliding windows, etc.) where associated dust levels exceed EPA and HUD lead dust concentration limits;
3) Lead paint on an impact surface (window sills, shelves, etc.) where the impact is caused by another building component;
4) Lead paint on a chewable surface (window sills, shelves, etc.) where there are visible teeth marks;

5) Lead-contaminated dust where levels exceed State of Michigan, EPA and HUD lead dust concentrations limits; and
6) Lead-contaminated soils where levels exceed State of Michigan, EPA and HUD lead concentration limits.

A LBP Hazard Risk Assessment identifies lead hazards by visual evaluation of the painted surfaces and the collection of dust, soil and/or deteriorated paint samples. The sample results are compared to associated lead concentration limits developed by the EPA, HUD, and the State of Michigan.

*Project Limitations*

Through the completion of an LBP Inspection and Risk Assessment, problems or limitations can be encountered including areas or surfaces which cannot be tested due to locked doors, inclement weather, heights, vegetation, etc. Accordingly, some building components may not be tested or sampled, and these materials are assumed to be LBP.

The inside of the garage was locked and not able to be inspected. This space was also not accessible to tenants and was used exclusively by the property owner.

*Names and Labels of Buildings, Rooms and Walls*

Locations of components in rooms or on exterior facades are described as:

*Side A* is the side facing the street.
*Side B* is the side to the left when viewed from the street.
*Side C* is the rear when viewed from the street.
*Side D* is the right side when viewed from the street.

*Regulatory Information*

The scope of work (LBP Inspection and Risk Assessment) completed is conducted in general accordance with federal regulations (24 CFR Part 35 and 40 CFR Part 745) and Michigan Lead Hazard Control Rules, as well as protocols in *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* (2012). Results of the LBP inspection and risk assessment are compared to relevant standards promulgated by HUD, EPA and the State of Michigan.

**PROPERTY DESCRIPTION**

The Subject Property contains a two-story building, circa. 1960, with a garden-level and above grade apartment. Construction materials include gable roof, wood framing, brick façade, metal siding. Interior finishes include wood trim, carpet, and resilient flooring. A Site Features Map is provided. Refer to the attached Site Location Map for the approximate site location. Refer to the Photo Log in Appendix B for photos of the Property.

**SURVEY METHODOLOGY**

*Lead-Based Paint Inspection*

During the evaluation, ASTI collected 125 measurements of painted surfaces using a Viken Pb200i X-Ray Fluorescence (XRF) instrument.

The Viken Pb200i XRF, serial #2080, is equipped with a Cobalt-57 radioisotope. The XRF was resourced in 2021 and is calibrated at the start of each inspection, every four hours during the inspection, and at the conclusion of the inspection. Refer to Appendix C for all the XRF measurements collected.

*Lead-Based Paint Hazard Assessment*

During the evaluation, ASTI identified 0 areas with lead-based paint hazards, including deteriorated LBP and LBP on impact, friction or chewable surfaces. See Appendix C for all XRF measurements collected.

*Lead Dust Assessment*

ASTI personnel collected 25 lead dust wipe samples including 4 media blanks. See Appendix E. for a Building Condition Form. The dust wipe samples were collected as follows:

- Dust wipes were collected from the floors, window sills, and window troughs of each selected dwelling or common area;
- The wipe samples were then placed into a container, labeled with unique sample IDs, and sent to the following NLLAP-accredited laboratory for testing:
    - GPI
      4403 Donker Court SE
      Grand Rapids, Michigan 49512
      Phone: 616.608.0514

Following testing, the samples were compared to current State of Michigan, HUD, and EPA standards for lead dust to determine if any dust-lead hazards are present at the Property.

**RESULTS**

*Lead-Based Paint Inspection Results*

ASTI collected 125 measurements of painted surfaces. Of these measurements, 0 were positive for LBP. See Appendix C for all XRF measurements collected.

*Lead-Based Paint Hazard Assessment Results*

During the evaluation, ASTI identified 0 areas with lead-based paint hazards, including deteriorated LBP and LBP on impact, friction or chewable surfaces. See Appendix C for all XRF measurements collected.

*Lead Dust Wipe Sample Test Results*

ASTI personnel collected 25 lead dust wipe samples including 4 media blanks. Each sample was submitted to a NLLAP-certified laboratory. Review of the lead dust wipe sample results revealed that 0 of the samples collected exceeded the State of Michigan clearance levels and HUD and EPA standards (40 CFR Part 745.227). The current State of Michigan and HUD and EPA clearance levels for lead dust wipes are 10 micrograms per square foot (µg/ft²) for floors, 100 µg/ft² for window sills, 100 µg/ft² for window troughs (EPA and HUD are 400 µg/ft²), and 40 µg/ft² for porches.

Refer to Table 1, Lead Dust Wipe Sample Results, for a summary of the lead dust wipe sample results along with a comparison to State of Michigan standards. Refer to Appendix F for a copy of the laboratory data sheets and associated chain-of-custody.

*Soil Sample Results*

Bare soil was observed on the Property during ASTI's risk assessment in the front flower bed. One composite soil sample was collected and analyzed. Review of the test results revealed that the lead concentration in soil does not exceed HUD and EPA standard of 1,200 mg/kg of lead in bare soil. Refer to Table 2 for a complete summary of the lead soil sample results and refer to Appendix F for a copy of the laboratory data sheets and associated chain-of-custody.

**RESULTS OF THE RISK ASSESSMENT**

1. 0 paint-lead hazards.
2. 0 dust-lead hazards.
3. 0 soil-lead hazards.

**HAZARD CONTROL OPTIONS AND RECOMMENDATIONS**

Based on the results of the LBP hazard risk assessment, the Property currently contains 0 paint-lead hazards, 0 dust-lead hazards, and 0 soil-lead hazards.

## RE-EVALUATION SCHEDULE

Refer to Appendix G HUD's Standard Re-Evaluation Schedules and recommended frequencies for re-evaluation of interim controls.

## DISCLOSURE

A summary of this report must be provided to each new tenant or purchaser of this Property under Federal law (24 CFR Part 35 and 40 CFR Part 745) before they become obligated under a tenant or sales contract. In addition, the complete report must also be provided to purchasers and made available to tenants. Landlords (lessors) and sellers are also required to distribute an educational pamphlet approved by the U.S. Environmental Protection Agency (EPA), entitled "Protect Your Family from Lead in Your Home", and include standard warning language in their leases or sales contracts to ensure that parents have the information they need to protect their children from lead-based paint hazards.

## POISON PREVENTION

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

Telephone Sources:
National Lead Information Center: .....800-424-LEAD
U.S. Department of Housing and Urban Development: .....888-LEADLIST
State of Michigan – Healthy Homes Section: .....866-691-LEAD

Publications:
*"Lead in Your Home: A Parent's Reference Guide" U.S. EPA*
*"Protect Your Family from Lead in Your Home" U.S. EPA*
*"Lead Paint Safety: A Field Guide for Painting, Home Maintenance & Renovation Work" HUD*

Websites:

- Michigan Dept. of Community Health – Healthy Homes Section
www.michigan.gov/leadsafe
- HUD – Office of Healthy Homes and Lead Hazard Control
www.hud.gov/offices/lead
- U.S. Environmental Protection Agency
www.epa.gov/lead

**DEFINITIONS**

The following is a list of definitions of terms used throughout this report.

***Abatement:*** A measure or set of measures designed to permanently eliminate lead-based paint hazards or lead- based paint. Abatement strategies include the removal of lead-based paint, enclosure, encapsulation, replacement of building components coated with lead-based paint, removal of lead-contaminated dust, and removal of lead-contaminated soil or overlaying of soil with a durable covering such as asphalt (grass and sod are considered interim control measures). All of these strategies require preparation; cleanup; waste disposal; post-abatement clearance testing; recordkeeping; and, if applicable, monitoring. (For full EPA definition, see 40 CFR 745.223).

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

***Chewable surface:*** An interior or exterior surface painted with lead-based paint that a young child can mouth or chew. A chewable surface is the same as an "accessible surface" as defined in 42 U.S.C. 4851b(2). Hard metal substrates and other materials that cannot be dented by the bite of a young child are not considered chewable.

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

***Drip-line/foundation area:*** The area within 3 feet out from the building wall and surrounding the perimeter of a building.

***Dust-lead hazard:*** Surface dust in residences that contains an area or mass concentration of lead equal to or in excess of the standard established by the EPA under Title IV of the Toxic Substances Control Act. EPA standards for dust-lead hazards, which are based on wipe samples, are published at 40 CFR 745.65(b); as of March 8, 2021 these are 10 µg/ft$^2$ on floors, 100 µg/ft$^2$ on interior window sills, and 400 µg/ft$^2$ on interior window troughs. Michigan standards are 10 µg/ft$^2$ on floors, 100 µg/ft$^2$ on interior windowsills and window troughs, and 40 µg/ft$^2$ for porches.

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

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

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

***Interim controls:*** A set of measures designed to temporarily reduce human exposure or possible exposure to lead-based paint hazards. Such measures include, but are not limited

to, specialized cleaning, repairs, maintenance, painting, temporary containment, and the establishment and operation of management and resident education programs. Monitoring, conducted by owners, and reevaluations, conducted by professionals, are integral elements of interim control. Interim controls include dust removal; paint film stabilization; treatment of friction and impact surfaces; installation of soil coverings, such as grass or sod; and land use controls. Interim controls that disturb painted surfaces are renovation activities under EPA's Renovation, Repair and Painting Rule.

***Lead-based paint:*** Any paint, varnish, shellac, or other coating that contains lead equal to or greater than 1.0 mg/cm$^2$ as measured by XRF or laboratory analysis, or 0.5 percent by weight (5000 mg/g, 5000 ppm, or 5000 mg/kg) as measured by laboratory analysis. (Local definitions may vary.)

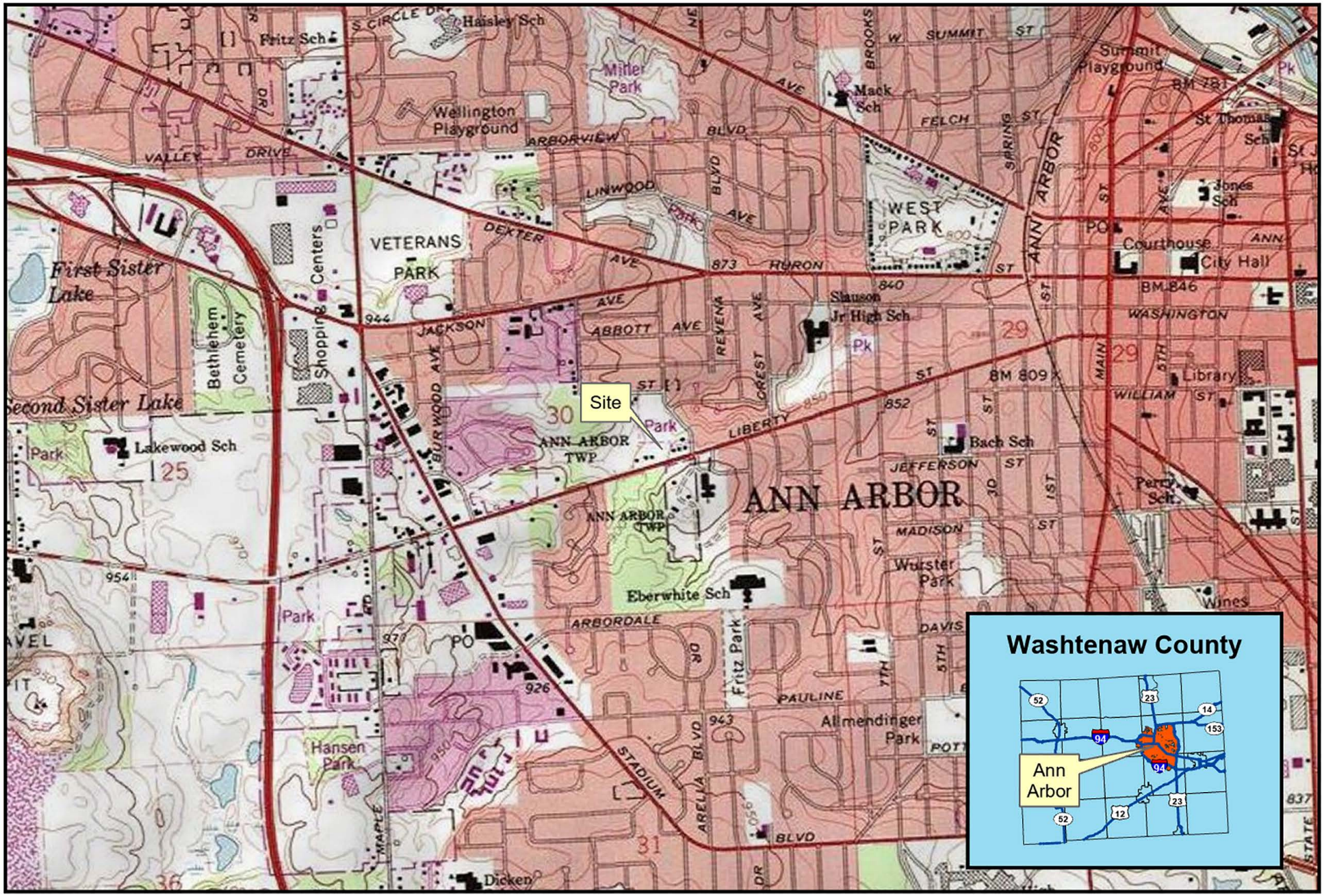
***Lead-based paint hazard:*** A condition in which exposure to lead from lead-contaminated dust, lead- contaminated soil, or deteriorated lead-based paint would have an adverse effect on human health (as established by the EPA at 40 CFR 745.65, under Title IV of the Toxic Substances Control Act). Lead-based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

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

***Play area:*** An area of frequent soil contact by children of under age 6 as indicated by, but not limited to, such factors including the following: the presence of outdoor play equipment (e.g., sandboxes, swing sets, and sliding boards), toys, or other children's possessions, observations of play patterns, or information provided
by parents, residents, care givers, or property owners.

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

**FIGURES**




1474-1484 Liberty, & 528 Virginia Ann Arbor, MI

Created for: Ann Arbor Housing Development Corporation
Created by: RMH, March 24, 2023, ASTI Project 12703

**Figure 1 ~**
**Site Location Map**


Y:\Project Files\Current and Closed\12000-12999\12700-12799\12703 Siller & Liberty, Ann Arbor\1-12703 Phase I ESA\CAD\1-12703.dwg, 3/22/2023 3:17 PM,

GRAPHIC SCALE

0 50 100 200

1 inch = 100 ft.
Paper Size = (8.5x11)

LEGEND

Property Line

Composite Soil Sample Location

N

# 1528 Virginia Ave.

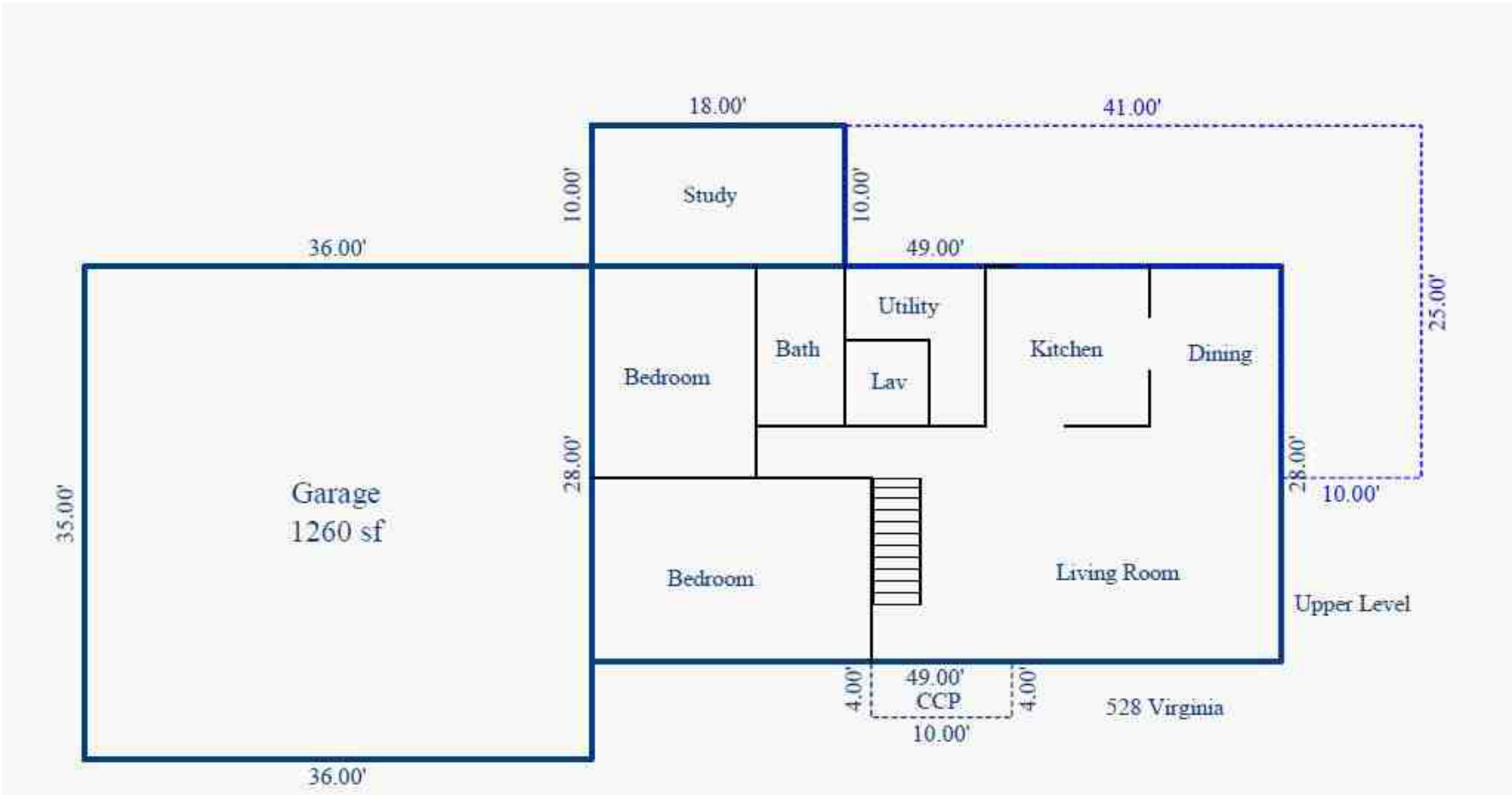
Ann Arbor, MI

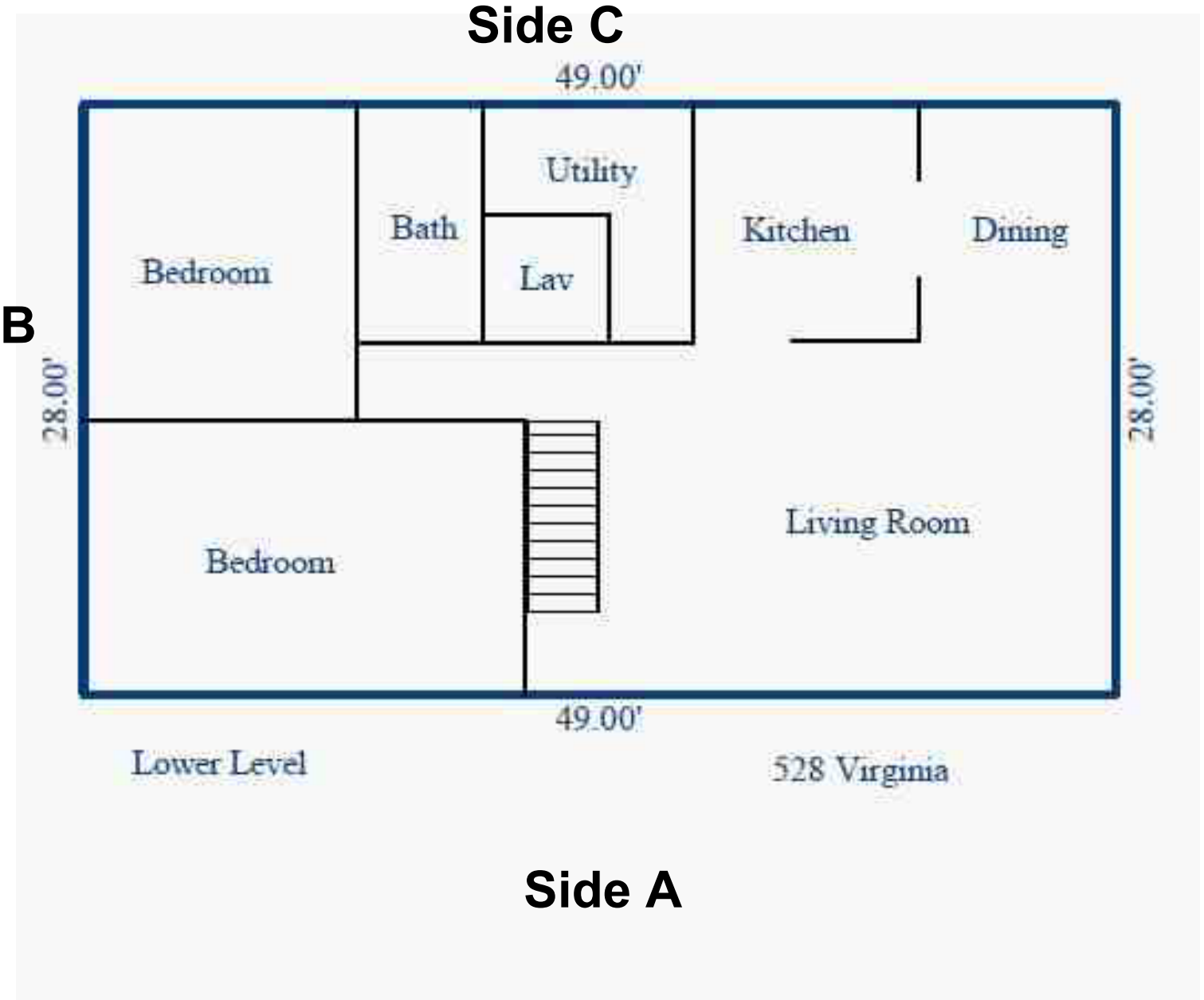
ASTI Environmental

Client: Ann Arbor Housing Development Corporation

ASTI Project 1-12703, JRN, March 22, 2023

Figure 2 -
Site Features Map




LEGEND

Not To Scale

Ann Arbor MI

# 528 Virginia Avenue

Client: Ann Arbor Housing Development Corporation

ASTI Project 12703, LSS, April 3 2023

ASTI Environmental

Figure 3 -
Floor Plans

**Tables**

**Table 1**
**Lead Dust Samples**

528 Virginia Avenue
Ann Arbor, MI 48103

| Sample Number | Unit | Room | Surface | Lead Dust ($\mu g/ft^2$) | Standard* ($\mu g/ft^2$) | Below Standard? |
|---|---|---|---|---|---|---|
| FL-01 | 528-1 | Bedroom 1 | Floor | < RL | 10 | Yes |
| FL-02 | 528-1 | Bedroom 2 | Floor | < RL | 10 | Yes |
| FL-03 | 528-1 | Bedroom 3 | Floor | < RL | 10 | Yes |
| FL-04 | 528-1 | Kitchen | Floor | < RL | 10 | Yes |
| FL-05 | 528-1 | Livingroom | Floor | < RL | 10 | Yes |
| FL-06 | 528-1 | Bathroom | Floor | < RL | 10 | Yes |
| WS-01 | 528-1 | Bedroom 1 | Window Sill | < RL | 100 | Yes |
| WS-02 | 528-1 | Bedroom 2 | Window Sill | < RL | 100 | Yes |
| WS-03 | 528-1 | Bedroom 3 | Window Sill | < RL | 100 | Yes |
| WS-04 | 528-1 | Kitchen | Window Sill | < RL | 100 | Yes |
| WS-05 | 528-1 | Livingroom | Window Sill | < RL | 100 | Yes |
| FL-01 | 528-2 | Bedroom 1 Kids Room | Floor | < RL | 10 | Yes |
| FL-02 | 528-2 | Porch / Play Area | Floor | < RL | 10 | Yes |
| FL-03 | 528-2 | Bedroom 3 | Floor | < RL | 10 | Yes |
| FL-04 | 528-2 | Bathroom 1 | Floor | < RL | 10 | Yes |
| FL-05 | 528-2 | Kitchen | Floor | < RL | 10 | Yes |
| FL-06 | 528-2 | Living Room | Floor | < RL | 10 | Yes |
| WS-01 | 528-2 | Bedroom 1 Kids Room | Window Sill | < RL | 100 | Yes |
| WS-02 | 528-2 | Porch / Play Area | Window Sill | 7.5 | 100 | Yes |
| WS-06 | 528-2 | Living Room | Window Sill | < RL | 100 | Yes |
| WS-05 | 528-2 | Kitchen | Window Sill | < RL | 100 | Yes |
| FL-01 | Office | Field Blank | Blank | <RL | N/A | N/A |
| FL-02 | Office | Field Blank | Blank | <RL | N/A | N/A |
| FL-03 | Office | Field Blank | Blank | <RL | N/A | N/A |
| WS-01 | Office | Field Blank | Blank | <RL | N/A | N/A |

**Bold results indicate exceedance of standards**

**Bold results indicate an exceedance of standards.**

<RL=Less than the reporting limit (5 $\mu g/ft^2$)

N/A=Not Applicable

**Table 2**
**Lead Soil Samples**

528 Virginia Avenue
Ann Arbor, MI 48103

| Sample Number | Location | Lead in Soil Results (mg/Kg) | Standard* (mg/Kg) | Below Standard? |
|---|---|---|---|---|
| SL-528 | Front Flower Bed | 90.71 | 1,200 | Yes |

**Bold results indicate exceedance of standards**

**APPENDICES**

**Appendix A**

**Resumes & Credentials of ASTI Personnel**

ASTI ENVIRONMENTAL

## JOHN F. SCHUITEMA
**Associate II**

**PROFILE**

Certifications
Asbestos Inspector (A51781)
Michigan Lead Inspector/Risk Assessor (P-07409)
ICC Property Maintenance Inspector
ICC Zoning Inspector
40-Hour OSHA HAZWOPER Training
8-Hour OSHA HAZWOPER Refresher

Education
Lead Inspector/Risk Assessor Training
Asbestos Awareness Training
Lead Awareness Training
Asbestos Inspector Training

Experience History
Associate I, ASTI Environmental
Field Technician, ASTI Environmental
Government

Professional Background
Mr. Schuitema has experience in the field with soil sampling, lead dust sampling, asbestos surveys, air monitoring, hazardous materials surveys, and lead inspections. Mr. Schuitema has assisted with Phase II investigations, property condition assessments, mold sampling, indoor air quality assessments, moisture operation and maintenance plans, and performed health and safety related building inspections.

**Years' Experience:**

5 — ASTI ENVIRONMENTAL
3—Government

## ENVIRONMENTAL DUE DILIGENCE AND SITE INVESTIGATION PROJECTS

Environmental Site Assessments
Completed numerous site assessments for a variety of projects (vacant land, agricultural, residential, commercial, and industrial), to determine the environmental condition of sites for real estate transactions. Projects involved both surface and subsurface evaluations of sites for a variety of hazardous substances.

## ASBESTOS AND LEAD INSPECTION AND RISK ASSESSMENTS

Responsible for asbestos inspections and lead inspections and risk assessments on commercial, multi-family, and single-family properties.

Lead Based Paint Inspections and Risk Assessments, Flint Housing Commission
Inspection of lead hazards throughout Flint's public housing complexes, dust wipe sample collection for laboratory analysis, XRF sampling, and writing the report to the Flint Housing Commission with findings and compliance requirements.

Large Apartment Complex in Flint, Michigan
Conducted asbestos inspections of over 100 residential units. Collected samples of suspect ACM for laboratory analysis. Provided report to the City of Flint with findings and compliance requirements.

## INDOOR AIR QUALITY AND MOLD

Conducted mold assessments and verification sampling on municipal buildings, schools, and private facilities in the State of Michigan. Assessment scopes included mold identification and moisture infiltration, abatement scope design, and post abatement visual inspection and clearance sampling.

Conducted visual and indoor air quality clearance samples for multiple residential homes following ACM removal, prior to demolition, throughout the State of Michigan.

Highrise Apartment Building Detroit, Michigan
Monitored indoor air quality during removal of asbestos containing materials. Provided clearance air sampling upon completion.

Multiple School Buildings Detroit, Michigan
Performed visual inspection, tape lift samples, air sampling, and moisture readings to evaluate potential mold growth. Completed clearance inspection and sampling after remediation and provided the client with a report of methods and findings.

## PROPERTY CONDTION ASSESSMENTS

Completed inspections of commercial, industrial, and residential properties in the State of Michigan. Identified physical deficiencies, material defects, and deferred maintenance. Reported findings, including cost estimates for repairs and replacements deemed necessary.

## STORM WATER INSPECTIONS

Performed inspections of construction sites to determine compliance with state storm water regulations. Reported deficiencies and recommend remedies.

Large Apartment Complex Howell, Michigan
Conducted weekly inspections during construction to ensure compliance with construction storm water regulations. Provided weekly report with findings, deficiencies, and remedy options to the client and County.

## WASTEWATER OPERATIONS

Super Fund Site, St. Joseph, Michigan
Performed monthly maintenance and sampling to insure proper operation and compliance with applicable regulations. Maintained air striper and CatOx system for removal of VOCs from contaminated groundwater.

## AIR MONITORING

Former McLouth Steel Site, Trenton, Michigan
Operated outdoor air monitoring and sampling stations to ensure chemicals of concern and fugitive dust did not leave the property. Performed real time air monitoring during demolition activities.


MDHHS
JOHN SCHUITEMA
LEAD INSPECTOR/RISK ASSESSOR
P-007409
ANNUAL FEE DUE:
03/31/24
TRAINING & EXAM DUE:
03/31/26
LEAD CERTIFICATION AND COMPLIANCE ASSURANCE SECTION

ASTI
ENVIRONMENTAL

## Lathan Saperstein
**Environmental Field Technician**

**PROFILE**

Certifications
Michigan Lead Inspector/Risk Assessor (P-08947)
NRPP Radon Measurement Professional (NRPP# 112408-RMP)
Michigan Asbestos Inspector (A58122)
29 CFR 1910.120 40-Hour OSHA HAZWOPER Training
Indiana Secondary Radon Tester License (RTS 01117)
Indiana Lead Inspector/Risk Assessor (IND001981)
Ohio Radon Tester (RT1776)
Ohio Lead Inspector/Risk Assessor (LA9629)

Education
Wayne State University, B.Sc. Environmental Science
Asbestos Inspector Initial Training
Lead Inspector/Risk Assessor Initial Training
NRPP Multi-Family Measurement Certificate

Experience History
Environmental Field Technician, ASTI Environmental
Research Assistant, Wayne State University, Environmental Radioisotope Laboratory

Professional Background
Lathan Saperstein is a recent addition to ASTI. They have experience in the field performing radon testing, lead based paint inspections, and lead dust sampling. In addition, they have assisted with field sampling of asbestos containing materials and mold testing. At university, they were involved in radio-chronometry research using radon progeny radioisotopes, such as lead-210 / polonium-210 disequilibria, and cosmogenic beryllium-7 fallout.

**Years' Experience:**
1—ASTI ENVIRONMENTAL
2—Academia

## LEAD INSPECTIONS & RISK ASSESSMENTS

Responsible for lead inspections and risk assessments on commercial, multi-family, and single-family properties in Michigan, Ohio, and Indiana.

Multifamily Housing, Detroit, MI
Completed lead risk assessment of rented apartments in compliance with City of Detroit regulations. Utilized dust wipe sampling, soil sampling, XRF technology and visual inspections to identify lead hazards.

Commercial Property, Detroit, MI
Inspected painted surfaces for lead-based paint utilizing XRF technology, conducted wipe sampling to determine of lead dust hazards, and collected water samples to quantify lead in drinking water.

Child Occupied Facilities, Detroit, MI
Completed Lead Hazard Screens of Childcare facilities in accordance with State Regulations. Utilized dust wipe sampling, soil sampling, XRF technology and visual inspections to identify lead hazards based on facility/occupant use patterns.

Clearance Activities, Multifamily Housing, Detroit, MI
Visually inspected completed of Lead Based Paint Abatement activities and utilized dust wipe sampling to verify resident health and safety.

## ASBESTOS INSPECTIONS & PRE-DEMOLITION HAZARDOUS MATERIALS EVALUATIONS

Multiple Bridges, Eaton County, MI
Assisted with inspection and sampling of asbestos containing materials prior to renovation work.

Commercial Buildings, Lenawee County, MI
Evaluated structures for hazardous materials and assisted with inspection and sampling of asbestos containing building materials, prior to building demolition.

Single Family Housing, Genesee County, MI
Evaluated multiple structures for hazardous materials and inspected for and sampled suspect asbestos containing building materials, prior to building demolition.

Multifamily Highrise, Detroit, MI
Inspected for and sampled suspect asbestos containing building materials, prior to building renovation and rehabilitation activities.

## AIR MONITORING

Former McLouth Steel Site, Trenton, Michigan
Assisted with outdoor air monitoring and sampling to ensure chemicals of concern and fugitive dust did not leave the property.

## INDOOR AIR QUALITY AND MOLD

Office Building, Ann Arbor, MI
Conducted IAQ sampling in a large office building to address concerns of generator exhaust intrusion. Monitored indoor conditions in real time for temperature, relative humidity, carbon dioxide and carbon monoxide

Commercial Property, Detroit, MI
Assisted with Mold investigation of an unoccupied property. Performed visual inspection, tape lift sampling, bulk sampling and utilized moisture readings to evaluate affected substrates.

Negative Exposure Assessment, Benton Harbor, MI
Utilized high volume air sampling pumps and Phase Contrast Microscopy (PCM) to verify resident health and safety during ongoing renovation of buildings with asbestos containing drywall.

## RADON TESTING

Responsible for radon testing in Michigan, Ohio, and Indiana.

Apartments, Ferndale, MI
Performed short-term radon testing in accordance with HUD guidelines and the American Association of Radon Scientists and Technologists' (AARST) MAMF-2017 Rev.1-21, Protocol for Conducting Radon and Radon Decay Product Measurements in Multifamily Buildings.

Single Family Housing Development, Pontiac, MI
Performed short-term radon testing of multiple single-family homes in accordance with HUD guidelines and the American Association of Radon Scientists and Technologists' (AARST) MAH-2019, Protocol for Conducting Radon and Radon Decay Product Measurements in Homes.

Commercial Building, Detroit, MI
Performed short-term radon testing in accordance with HUD guidelines and the American Association of Radon Scientists and Technologists' (AARST) MALB-2014 Rev.1-21, Protocol for Conducting Radon and Radon Decay Product Measurements in Schools and Large Buildings.

Multifamily Housing, Flint, MI
Performed short-term radon testing in accordance with AARST MAMF 2017 Rev. 1-21 testing to determine mitigation needs and conducted post-mitigation clearance testing to demonstrate mitigation system efficacy.

MDHHS

LATHAN **SAPERSTEIN**

LEAD INSPECTOR/RISK ASSESSOR

P-008947

ANNUAL FEE DUE:

03/31/24

TRAINING & EXAM DUE:

03/31/24

LEAD CERTIFICATION AND COMPLIANCE ASSURANCE SECTION

**Appendix B**

**Photo Log**

# PHOTO LOG

528 Virginia Avenue, Ann Arbor, Michigan

| | |
|---|---|
|  | **Photo 1.** View Of Side A |
|  | **Photo 2.** View of Side B |
|  | **Photo 3.** View of Side C |

ASTI Project No. 12703
March 7, 2023
Photographed By Lathan Saperstein

ASTI ENVIRONMENTAL

# PHOTO LOG

528 Virginia Avenue, Ann Arbor, Michigan

| | |
|---|---|
|   | **Photo 4.** View of Side D |
|  | **Photo 5.** View of The Garage (Side A) |

ASTI Project No. 12703
March 7, 2023
Photographed By Lathan Saperstein

**Appendix C**

**All XRF Readings**

Appendix C
All XRF Readings
12703

528 Virginia Avenue
Ann Arbor, MI
48103

| No. | Time | Type | Value | Units | Apartment | Room | Room Choice | Structure | Member | Substrate | Wall | Condition | Result |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2200 | 12:53:09 PM | Lead Paint | 1.2 | mg/cm2 | | Calibration | | | | | | | |
| 2201 | 12:53:37 PM | Lead Paint | 1.1 | mg/cm2 | | Calibration | | | | | | | |
| 2202 | 12:54:04 PM | Lead Paint | 1 | mg/cm2 | | Calibration | | | | | | | |
| 2203 | 1:06:23 PM | Lead Paint | 0.3 | mg/cm2 | 528-2 | House | Bedroom 1 | Room | Wall | Plaster | A | Intact | Negative |
| 2204 | 1:06:45 PM | Lead Paint | 0.3 | mg/cm2 | 528-2 | House | Bedroom 1 | Room | Wall | Plaster | B | Intact | Negative |
| 2205 | 1:07:04 PM | Lead Paint | 0.3 | mg/cm2 | 528-2 | House | Bedroom 1 | Room | Wall | Plaster | C | Intact | Negative |
| 2206 | 1:07:18 PM | Lead Paint | 0.3 | mg/cm2 | 528-2 | House | Bedroom 1 | Room | Wall | Plaster | D | Intact | Negative |
| 2207 | 1:07:53 PM | Lead Paint | 0.3 | mg/cm2 | 528-2 | House | Bedroom 1 | Room | Ceiling | Plaster | C | Intact | Negative |
| 2208 | 1:08:24 PM | Lead Paint | 0.1 | mg/cm2 | 528-2 | House | Bedroom 1 | Closet | Wall | Plaster | | Intact | Negative |
| 2209 | 1:09:42 PM | Lead Paint | 0.3 | mg/cm2 | 528-2 | House | Bedroom 2 | Closet | Wall | Plaster | | Intact | Negative |
| 2210 | 1:10:09 PM | Lead Paint | 0.3 | mg/cm2 | 528-2 | House | Bedroom 2 | Room | Wall | Plaster | A | Intact | Negative |
| 2211 | 1:10:27 PM | Lead Paint | 0.4 | mg/cm2 | 528-2 | House | Bedroom 2 | Room | Wall | Plaster | B | Intact | Negative |
| 2212 | 1:10:50 PM | Lead Paint | 0.2 | mg/cm2 | 528-2 | House | Bedroom 2 | Room | Wall | Plaster | C | Intact | Negative |
| 2213 | 1:11:13 PM | Lead Paint | 0.3 | mg/cm2 | 528-2 | House | Bedroom 2 | Room | Wall | Plaster | D | Intact | Negative |
| 2214 | 1:11:38 PM | Lead Paint | 0.1 | mg/cm2 | 528-2 | House | Bedroom 2 | Room | Ceiling | Plaster | D | Intact | Negative |
| 2215 | 1:12:41 PM | Lead Paint | 0.3 | mg/cm2 | 528-2 | House | Bedroom 3 | Room | Ceiling | Plaster | D | Intact | Negative |
| 2216 | 1:13:07 PM | Lead Paint | 0.3 | mg/cm2 | 528-2 | House | Bedroom 3 | Room | Wall | Plaster | A | Intact | Negative |
| 2217 | 1:13:22 PM | Lead Paint | 0.2 | mg/cm2 | 528-2 | House | Bedroom 3 | Room | Wall | Plaster | B | Intact | Negative |
| 2218 | 1:13:45 PM | Lead Paint | 0.3 | mg/cm2 | 528-2 | House | Bedroom 3 | Room | Wall | Plaster | C | Intact | Negative |
| 2219 | 1:14:08 PM | Lead Paint | 0 | mg/cm2 | 528-2 | House | Bedroom 3 | Room | Wall | Plaster | D | Intact | Negative |
| 2220 | 1:14:59 PM | Lead Paint | 0.2 | mg/cm2 | 528-2 | House | Enclosed Porch | Room | Wall | Wood | D | Intact | Negative |
| 2221 | 1:15:30 PM | Lead Paint | 0.7 | mg/cm2 | 528-2 | House | Enclosed Porch | Room | Wall | Concrete | B | Intact | Negative |
| 2222 | 1:16:08 PM | Lead Paint | 0.1 | mg/cm2 | 528-2 | House | Enclosed Porch | Room | Wall | Wood | C | Intact | Negative |
| 2223 | 1:16:37 PM | Lead Paint | 0.2 | mg/cm2 | 528-2 | House | Enclosed Porch | Window | Sill | Wood | C | Intact | Negative |
| 2224 | 1:17:13 PM | Lead Paint | 0.1 | mg/cm2 | 528-2 | House | Enclosed Porch | Door | --- | Wood | B | Intact | Negative |
| 2225 | 1:17:42 PM | Lead Paint | 0.1 | mg/cm2 | 528-2 | House | Enclosed Porch | Door | --- | Wood | A | Intact | Negative |
| 2226 | 1:18:04 PM | Lead Paint | 0 | mg/cm2 | 528-2 | House | Enclosed Porch | Door | Casing | Wood | A | Intact | Negative |
| 2227 | 1:18:30 PM | Lead Paint | 0.1 | mg/cm2 | 528-2 | House | Enclosed Porch | Window | Sill | Wood | A | Intact | Negative |
| 2228 | 1:19:14 PM | Lead Paint | 0.1 | mg/cm2 | 528-2 | House | Enclosed Porch | Room | Ceiling | Drywall | A | Intact | Negative |
| 2229 | 1:20:59 PM | Lead Paint | 0.1 | mg/cm2 | 528-2 | House | Bathroom 1 | Room | Wall | Plaster | A | Intact | Negative |
| 2230 | 1:21:19 PM | Lead Paint | 0.3 | mg/cm2 | 528-2 | House | Bathroom 1 | Room | Wall | Plaster | B | Intact | Negative |
| 2231 | 1:21:37 PM | Lead Paint | 0.3 | mg/cm2 | 528-2 | House | Bathroom 1 | Room | Wall | Plaster | C | Intact | Negative |
| 2232 | 1:21:57 PM | Lead Paint | 0.3 | mg/cm2 | 528-2 | House | Bathroom 1 | Room | Wall | Plaster | D | Intact | Negative |
| 2233 | 1:22:20 PM | Lead Paint | 0.2 | mg/cm2 | 528-2 | House | Bathroom 1 | Room | Ceiling | Plaster | D | Intact | Negative |
| 2234 | 1:23:26 PM | Lead Paint | 0 | mg/cm2 | 528-2 | House | Bathroom 1 | Radiator | Baseboard | Metal | D | Intact | Negative |
| 2235 | 1:24:16 PM | Lead Paint | 0.1 | mg/cm2 | 528-2 | House | Bathroom 2 | Room | Ceiling | Plaster | D | Intact | Negative |
| 2236 | 1:24:37 PM | Lead Paint | 0.3 | mg/cm2 | 528-2 | House | Bathroom 2 | Room | Wall | Plaster | A | Intact | Negative |
| 2237 | 1:24:57 PM | Lead Paint | 0.3 | mg/cm2 | 528-2 | House | Bathroom 2 | Room | Wall | Plaster | B | Intact | Negative |
| 2238 | 1:25:17 PM | Lead Paint | 0.3 | mg/cm2 | 528-2 | House | Bathroom 2 | Room | Wall | Plaster | C | Intact | Negative |
| 2239 | 1:25:36 PM | Lead Paint | 0.3 | mg/cm2 | 528-2 | House | Bathroom 2 | Room | Wall | Plaster | D | Intact | Negative |
| 2240 | 1:26:46 PM | Lead Paint | 0.2 | mg/cm2 | 528-2 | House | Laundry room | Room | Wall | Plaster | A | Intact | Negative |
| 2241 | 1:27:11 PM | Lead Paint | 0.1 | mg/cm2 | 528-2 | House | Laundry room | Room | Wall | Plaster | B | Intact | Negative |
| 2242 | 1:27:33 PM | Lead Paint | 0.2 | mg/cm2 | 528-2 | House | Laundry room | Room | Wall | Plaster | C | Intact | Negative |
| 2243 | 1:27:54 PM | Lead Paint | 0.1 | mg/cm2 | 528-2 | House | Laundry room | Room | Wall | Plaster | D | Intact | Negative |
| 2244 | 1:28:35 PM | Lead Paint | 0.2 | mg/cm2 | 528-2 | House | Laundry room | Room | Ceiling | Plaster | D | Intact | Negative |
| 2245 | 1:29:49 PM | Lead Paint | 0.3 | mg/cm2 | 528-2 | House | Living Room / Kitchen | Room | Ceiling | Plaster | D | Intact | Negative |
| 2246 | 1:30:36 PM | Lead Paint | 0.2 | mg/cm2 | 528-2 | House | Living Room / Kitchen | Room | Wall | Plaster | A | Intact | Negative |
| 2247 | 1:31:01 PM | Lead Paint | 0.2 | mg/cm2 | 528-2 | House | Living Room / Kitchen | Room | Wall | Plaster | B | Intact | Negative |
| 2248 | 1:31:24 PM | Lead Paint | 0.3 | mg/cm2 | 528-2 | House | Living Room / Kitchen | Room | Wall | Plaster | C | Intact | Negative |
| 2249 | 1:31:41 PM | Lead Paint | 0.3 | mg/cm2 | 528-2 | House | Living Room / Kitchen | Room | Wall | Plaster | D | Intact | Negative |
| 2250 | 1:33:02 PM | Lead Paint | 0.3 | mg/cm2 | 528-2 | House | Living Room / Kitchen | Closet | Wall | Plaster | | Intact | Negative |
| 2251 | 1:33:34 PM | Lead Paint | 0.1 | mg/cm2 | 528-2 | House | Living Room / Kitchen | Door | --- | Metal | | Intact | Negative |
| 2252 | 1:52:39 PM | Lead Paint | 0.1 | mg/cm2 | 528-1 | House | Bedroom 1 | Room | Wall | Plaster | A | Intact | Negative |
| 2253 | 1:53:09 PM | Lead Paint | 0.3 | mg/cm2 | 528-1 | House | Bedroom 1 | Room | Wall | Plaster | B | Intact | Negative |
| 2254 | 1:53:33 PM | Lead Paint | 0.3 | mg/cm2 | 528-1 | House | Bedroom 1 | Room | Wall | Plaster | C | Intact | Negative |
| 2255 | 1:54:01 PM | Lead Paint | 0.2 | mg/cm2 | 528-1 | House | Bedroom 1 | Room | Wall | Plaster | D | Intact | Negative |
| 2256 | 1:54:27 PM | Lead Paint | 0.1 | mg/cm2 | 528-1 | House | Bedroom 1 | Room | Ceiling | Plaster | D | Intact | Negative |
| 2257 | 1:54:55 PM | Lead Paint | 0.1 | mg/cm2 | 528-1 | House | Bedroom 1 | Room | Baseboard | Wood | D | Intact | Negative |
| 2258 | 1:55:28 PM | Lead Paint | 0.1 | mg/cm2 | 528-1 | House | Bedroom 1 | Radiator | Baseboard | Metal | D | Intact | Negative |
| 2259 | 1:56:02 PM | Lead Paint | 0.3 | mg/cm2 | 528-1 | House | Bedroom 1 | Closet | Wall | Plaster | D | Intact | Negative |
| 2260 | 1:56:21 PM | Lead Paint | 0.1 | mg/cm2 | 528-1 | House | Bedroom 1 | Closet | Casing | Wood | D | Intact | Negative |
| 2261 | 1:56:42 PM | Lead Paint | 0 | mg/cm2 | 528-1 | House | Bedroom 1 | Door | Casing | Wood | D | Intact | Negative |
| 2262 | 1:58:00 PM | Lead Paint | 0 | mg/cm2 | 528-1 | House | Bedroom 2 | Door | Casing | Wood | D | Intact | Negative |
| 2263 | 1:58:27 PM | Lead Paint | 0.2 | mg/cm2 | 528-1 | House | Bedroom 2 | Room | Wall | Plaster | A | Intact | Negative |

Appendix C
All XRF Readings
12703

528 Virginia Avenue
Ann Arbor, MI
48103

| No. | Time | Type | Value | Units | Apartment | Room | Room Choice | Structure | Member | Substrate | Wall | Condition | Result |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2264 | 1:58:55 PM | Lead Paint | 0.4 | mg/cm2 | 528-1 | House | Bedroom 2 | Room | Wall | Plaster | B | Intact | Negative |
| 2265 | 1:59:21 PM | Lead Paint | 0.2 | mg/cm2 | 528-1 | House | Bedroom 2 | Room | Wall | Plaster | C | Intact | Negative |
| 2266 | 1:59:45 PM | Lead Paint | 0.1 | mg/cm2 | 528-1 | House | Bedroom 2 | Room | Wall | Plaster | D | Intact | Negative |
| 2267 | 2:00:04 PM | Lead Paint | 0.2 | mg/cm2 | 528-1 | House | Bedroom 2 | Room | Baseboard | Wood | D | Intact | Negative |
| 2268 | 2:00:33 PM | Lead Paint | 0.2 | mg/cm2 | 528-1 | House | Bedroom 2 | Room | Ceiling | Plaster | D | Intact | Negative |
| 2269 | 2:01:02 PM | Lead Paint | 0.2 | mg/cm2 | 528-1 | House | Bedroom 2 | Closet | Wall | Plaster | D | Intact | Negative |
| 2270 | 2:06:10 PM | Lead Paint | 0.3 | mg/cm2 | 528-1 | House | Bedroom 3 | Closet | Wall | Plaster | D | Intact | Negative |
| 2271 | 2:06:40 PM | Lead Paint | 0.1 | mg/cm2 | 528-1 | House | Bedroom 3 | Door | Casing | Wood | D | Intact | Negative |
| 2272 | 2:07:07 PM | Lead Paint | 0.2 | mg/cm2 | 528-1 | House | Bedroom 3 | Room | Wall | Plaster | A | Intact | Negative |
| 2273 | 2:07:28 PM | Lead Paint | 0.2 | mg/cm2 | 528-1 | House | Bedroom 3 | Room | Wall | Plaster | B | Intact | Negative |
| 2274 | 2:07:48 PM | Lead Paint | 0.2 | mg/cm2 | 528-1 | House | Bedroom 3 | Room | Wall | Plaster | C | Intact | Negative |
| 2275 | 2:08:15 PM | Lead Paint | 0.2 | mg/cm2 | 528-1 | House | Bedroom 3 | Room | Wall | Plaster | D | Intact | Negative |
| 2276 | 2:09:14 PM | Lead Paint | 0.1 | mg/cm2 | 528-1 | House | Bathroom 1 | Door | Casing | Wood | D | Intact | Negative |
| 2277 | 2:09:39 PM | Lead Paint | 0.3 | mg/cm2 | 528-1 | House | Bathroom 1 | Room | Wall | Plaster | A | Intact | Negative |
| 2278 | 2:09:59 PM | Lead Paint | 0.4 | mg/cm2 | 528-1 | House | Bathroom 1 | Room | Wall | Plaster | B | Intact | Negative |
| 2279 | 2:10:17 PM | Lead Paint | 0.3 | mg/cm2 | 528-1 | House | Bathroom 1 | Room | Wall | Plaster | C | Intact | Negative |
| 2280 | 2:10:37 PM | Lead Paint | 0.1 | mg/cm2 | 528-1 | House | Bathroom 1 | Room | Wall | Plaster | D | Intact | Negative |
| 2281 | 2:11:16 PM | Lead Paint | 0.2 | mg/cm2 | 528-1 | House | Bathroom 1 | Room | Ceiling | Plaster | D | Intact | Negative |
| 2282 | 2:12:13 PM | Lead Paint | 0.1 | mg/cm2 | 528-1 | House | Bathroom 2 | Room | Ceiling | Plaster | D | Intact | Negative |
| 2283 | 2:12:36 PM | Lead Paint | 0.3 | mg/cm2 | 528-1 | House | Bathroom 2 | Room | Wall | Plaster | A | Intact | Negative |
| 2284 | 2:12:55 PM | Lead Paint | 0.2 | mg/cm2 | 528-1 | House | Bathroom 2 | Room | Wall | Plaster | B | Intact | Negative |
| 2285 | 2:13:20 PM | Lead Paint | 0.3 | mg/cm2 | 528-1 | House | Bathroom 2 | Room | Wall | Plaster | C | Intact | Negative |
| 2286 | 2:13:38 PM | Lead Paint | 0.2 | mg/cm2 | 528-1 | House | Bathroom 2 | Room | Wall | Plaster | D | Intact | Negative |
| 2287 | 2:14:06 PM | Lead Paint | 0 | mg/cm2 | 528-1 | House | Bathroom 2 | Door | Casing | Wood | D | Intact | Negative |
| 2288 | 2:15:26 PM | Lead Paint | 0 | mg/cm2 | 528-1 | House | Laundry Room | Door | Casing | Wood | D | Intact | Negative |
| 2289 | 2:15:54 PM | Lead Paint | 0.2 | mg/cm2 | 528-1 | House | Laundry Room | Room | Wall | Plaster | A | Intact | Negative |
| 2290 | 2:16:14 PM | Lead Paint | 0.3 | mg/cm2 | 528-1 | House | Laundry Room | Room | Wall | Plaster | B | Intact | Negative |
| 2291 | 2:16:33 PM | Lead Paint | 0.1 | mg/cm2 | 528-1 | House | Laundry Room | Room | Wall | Plaster | C | Intact | Negative |
| 2292 | 2:16:59 PM | Lead Paint | 0.1 | mg/cm2 | 528-1 | House | Laundry Room | Room | Wall | Plaster | D | Intact | Negative |
| 2293 | 2:17:26 PM | Lead Paint | 0.1 | mg/cm2 | 528-1 | House | Laundry Room | Room | Ceiling | Plaster | D | Intact | Negative |
| 2294 | 2:18:40 PM | Lead Paint | 0.1 | mg/cm2 | 528-1 | House | Kitchen | Room | Ceiling | Plaster | D | Intact | Negative |
| 2295 | 2:19:01 PM | Lead Paint | 0 | mg/cm2 | 528-1 | House | Kitchen | Room | Baseboard | Wood | D | Intact | Negative |
| 2296 | 2:19:34 PM | Lead Paint | 0.2 | mg/cm2 | 528-1 | House | Kitchen | Room | Wall | Plaster | A | Intact | Negative |
| 2297 | 2:19:54 PM | Lead Paint | 0.2 | mg/cm2 | 528-1 | House | Kitchen | Room | Wall | Plaster | B | Intact | Negative |
| 2298 | 2:20:15 PM | Lead Paint | 0.2 | mg/cm2 | 528-1 | House | Kitchen | Room | Wall | Plaster | C | Intact | Negative |
| 2299 | 2:20:34 PM | Lead Paint | 0.2 | mg/cm2 | 528-1 | House | Kitchen | Room | Wall | Plaster | D | Intact | Negative |
| 2300 | 2:21:04 PM | Lead Paint | 0 | mg/cm2 | 528-1 | House | Kitchen | Door | Casing | Wood | A | Intact | Negative |
| 2301 | 2:22:16 PM | Lead Paint | 0 | mg/cm2 | 528-1 | House | Living Room/Dining Room | Room | Baseboard | Wood | A | Intact | Negative |
| 2302 | 2:23:01 PM | Lead Paint | 0.2 | mg/cm2 | 528-1 | House | Living Room/Dining Room | Room | Ceiling | Plaster | A | Intact | Negative |
| 2303 | 2:23:40 PM | Lead Paint | 0.3 | mg/cm2 | 528-1 | House | Living Room/Dining Room | Room | Wall | Plaster | A | Intact | Negative |
| 2304 | 2:24:05 PM | Lead Paint | 0.4 | mg/cm2 | 528-1 | House | Living Room/Dining Room | Room | Wall | Plaster | B | Intact | Negative |
| 2305 | 2:24:29 PM | Lead Paint | 0.3 | mg/cm2 | 528-1 | House | Living Room/Dining Room | Room | Wall | Plaster | C | Intact | Negative |
| 2306 | 2:24:50 PM | Lead Paint | 0.2 | mg/cm2 | 528-1 | House | Living Room/Dining Room | Room | Wall | Plaster | D | Intact | Negative |
| 2307 | 2:25:27 PM | Lead Paint | 0.3 | mg/cm2 | 528-1 | House | Living Room/Dining Room | Closet | Wall | Plaster | D | Intact | Negative |
| 2308 | 2:26:11 PM | Lead Paint | 0 | mg/cm2 | 528-1 | House | Living Room/Dining Room | Radiator | Baseboard | Metal | A | Intact | Negative |
| 2309 | 2:26:51 PM | Lead Paint | 0.1 | mg/cm2 | 528-1 | House | Living Room/Dining Room | Staircase | Railing | Metal | B | Intact | Negative |
| 2310 | 2:44:24 PM | Lead Paint | 0.1 | mg/cm2 | 528 | Exterior | Exterior | Room | Wall | Metal | A | Intact | Negative |
| 2311 | 2:44:42 PM | Lead Paint | 0.3 | mg/cm2 | 528 | Exterior | Exterior | Window | Frame | Metal | A | Intact | Negative |
| 2312 | 2:45:16 PM | Lead Paint | 0.3 | mg/cm2 | 528 | Exterior | Exterior | Window | Frame | Metal | B | Intact | Negative |
| 2313 | 2:45:41 PM | Lead Paint | 0.2 | mg/cm2 | 528 | Exterior | Exterior | Room | Wall | Metal | B | Intact | Negative |
| 2314 | 2:46:12 PM | Lead Paint | 0.1 | mg/cm2 | 528 | Exterior | Exterior | Door | --- | Metal | B | Intact | Negative |
| 2315 | 2:46:34 PM | Lead Paint | 0.1 | mg/cm2 | 528 | Exterior | Exterior | Door | Rollup Door | Metal | B | Intact | Negative |
| 2316 | 2:47:13 PM | Lead Paint | 0.1 | mg/cm2 | 528 | Exterior | Exterior | Soffit | --- | Wood | B | Intact | Negative |
| 2317 | 2:47:59 PM | Lead Paint | 0.1 | mg/cm2 | 528 | Exterior | Exterior | Wall | | Wood | C | Intact | Negative |
| 2318 | 2:48:21 PM | Lead Paint | 0 | mg/cm2 | 528 | Exterior | Exterior | Window | Frame | Wood | C | Intact | Negative |
| 2319 | 2:49:16 PM | Lead Paint | 0 | mg/cm2 | 528 | Exterior | Exterior | Door | Rollup Door | Wood | D | Intact | Negative |
| 2320 | 2:49:51 PM | Lead Paint | 0.3 | mg/cm2 | 528 | Exterior | Exterior | Door | --- | Wood | D | Intact | Negative |
| 2321 | 2:50:17 PM | Lead Paint | 0.1 | mg/cm2 | 528 | Exterior | Exterior | Wall | | Wood | D | Intact | Negative |
| 2336 | 3:00:01 PM | Lead Paint | 1.1 | mg/cm2 | | Calibration | | | | | | | |
| 2337 | 3:00:25 PM | Lead Paint | 1.1 | mg/cm2 | | Calibration | | | | | | | |
| 2338 | 3:00:51 PM | Lead Paint | 1.1 | mg/cm2 | | Calibration | | | | | | | |

**Appendix D**

**Building Condition Forms**

# ASTI Environmental

## Building Condition Form

**Property Address:** 528 Virginia Avenue

**Name of Property Owner** Ann Arbor Housing Development Corp

**Name of Assessor:** Lathan Saperstein

**License Number:** P-08947 **Date of Assessment:** 3/7/2023

| Condition | Yes | No |
|---|---|---|
| Roof missing parts of surfaces (tiles, boards, shakes, etc.) | | X |
| Roof has holes or large cracks | | X |
| Gutters or downspouts broken | | X |
| Chimney masonry cracked, bricks loose or missing, obviously out of plumb | | X |
| Exterior or interior walls have obvious large cracks or holes, requiring more than routine pointing (if masonary) or painting | | X |
| Exterior siding has missing boards or shingles | | X |
| Water stains on interior walls or ceilings | | X |
| Walls or ceilings deteriorated | | X |
| Moren than "very small" amount of paint in room 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* | 0 | 12 |

*The "very small" amount is the de minimis amount under the HUD Lead Safe Housing Rule (24 CFR 35. 1350(d)), or the amount of paint that is not "paint in poor condition" under the EPA lead training and certification ("402") rule (40 CFR 745.223).

**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, (1) not all conditions listed above are equally important/significant, and (2) specific conditions and extenuating circumstances should be considered before determining the final condition of the dwelling and the appropriateness of a lead hazard screen.

**Notes:**

**Disclaimer: The evaluation herein is the assessment of a licensed Lead-based Paint Inspector/Risk Assessor only; it does not represent the expertise of an architect or a structural engineer. The user of this report cannot not rely upon this evaluation as definitive with respect to structural integrity, or the condition of hidden areas/materials such as crawl spaces and insulation.

**Appendix E**

**Risk Assessment Questionnaire**

ASTI ENVIRONMENTAL

*Investigation • Remediation*
*Compliance • Restoration*

10448 Citation Drive, Suite 100
Brighton, Michigan 48116

Ph: 810.225.2800
Fax: 810.225.3800

www.asti-env.com

## LBP Risk Assessment Questionnaire

**Building Address:** 528 Virginia, 1474 W. Liberty, 1484 W. Liberty

For all questions below, please respond with specific unit or apartment numbers for which this applies:

1. Units cited with housing or building code violations within the past year

Non.

2. Units that the owner/management believes are in poor condition

Non

3. Units with 2 or more children between the ages of 6 months and 6 years (please list total number of children between these ages for all units with children)

528 Virginia #2 1- 4 year old child

4. Units that serve as day care facilities

Non

5. Units prepared for re-occupancy within the past 3 months

2 Units

6. Units known to currently house children with elevated blood lead level

Non

Return to damir@asti-env.com upon completion. For questions contact David Amir at 810-599-9376

**Appendix F**

**Lead Laboratory Test Results**

# ANALYTICAL LABORATORY REPORT

Wednesday, April 5, 2023 

**CUSTOMER:** ASTI Environmental
10448 Citation Dr.
Brighton, MI 48116

**DATE RECEIVED:** Friday, March 10, 2023
**PO/PROJECT #:** 12703
**SUBMITTAL #:** 2023-03-10-008.1 REVISED

## LAB NUMBER: AD29514

**Sampled By:** Lathan Saperstein
**Job Location:** 528-1
**Sample Identification:** FL-01 : BEDROOM 1

**Date Sampled:** 03/07/2023
**Sample Description:** Dust Wipe

**Preparation Method:** EPA 3050B-M-W (Acid Digestion for Surface Wipe Samples)
**Analysis Method:** EPA 6010D-M (ICP-AES Method for Determination of Metals)
**Date Analyzed:** Wednesday, March 15, 2023

***Sample Area:** 1.0 sq ft

| ELEMENT | ANALYTE CONCENTRATION | ANALYTE REPORTING LIMIT (RL) | *AREA CONCENTRATION | *CALCULATED REPORTING LIMIT (RL) |
|---|---|---|---|---|
| **Lead** | - < RL | 2.5 ug | **- < RL** | 2.5 ug/ft² |

*Based on sampling information supplied by the client.

## LAB NUMBER: AD29515

**Sampled By:** Lathan Saperstein
**Job Location:** 528-1
**Sample Identification:** FL-02 : BEDROOM 2

**Date Sampled:** 03/07/2023
**Sample Description:** Dust Wipe

**Preparation Method:** EPA 3050B-M-W (Acid Digestion for Surface Wipe Samples)
**Analysis Method:** EPA 6010D-M (ICP-AES Method for Determination of Metals)
**Date Analyzed:** Wednesday, March 15, 2023

***Sample Area:** 1.0 sq ft

| ELEMENT | ANALYTE CONCENTRATION | ANALYTE REPORTING LIMIT (RL) | *AREA CONCENTRATION | *CALCULATED REPORTING LIMIT (RL) |
|---|---|---|---|---|
| **Lead** | - < RL | 2.5 ug | **- < RL** | 2.5 ug/ft² |

*Based on sampling information supplied by the client.

## LAB NUMBER: AD29516

**Sampled By:** Lathan Saperstein
**Job Location:** 528-1
**Sample Identification:** FL-03 : BEDROOM 3

**Date Sampled:** 03/07/2023
**Sample Description:** Dust Wipe

**Preparation Method:** EPA 3050B-M-W (Acid Digestion for Surface Wipe Samples)
**Analysis Method:** EPA 6010D-M (ICP-AES Method for Determination of Metals)
**Date Analyzed:** Wednesday, March 15, 2023

***Sample Area:** 1.0 sq ft

| ELEMENT | ANALYTE CONCENTRATION | ANALYTE REPORTING LIMIT (RL) | *AREA CONCENTRATION | *CALCULATED REPORTING LIMIT (RL) |
|---|---|---|---|---|
| **Lead** | - < RL | 2.5 ug | **- < RL** | 2.5 ug/ft² |

*Based on sampling information supplied by the client.

## ANALYTICAL LABORATORY REPORT



**CUSTOMER:** ASTI Environmental
10448 Citation Dr.
Brighton, MI 48116

**DATE RECEIVED:** Friday, March 10, 2023
**PO/PROJECT #:** 12703
**SUBMITTAL #:** 2023-03-10-008.1 REVISED

### LAB NUMBER: AD29517

**Sampled By:** Lathan Saperstein
**Job Location:** 528-1
**Sample Identification:** FL-04 : KITCHEN

**Date Sampled:** 03/07/2023
**Sample Description:** Dust Wipe

**Preparation Method:** EPA 3050B-M-W (Acid Digestion for Surface Wipe Samples)
**Analysis Method:** EPA 6010D-M (ICP-AES Method for Determination of Metals)
**Date Analyzed:** Wednesday, March 15, 2023

***Sample Area:** 1.0 sq ft

| ELEMENT | ANALYTE CONCENTRATION | ANALYTE REPORTING LIMIT (RL) | *AREA CONCENTRATION | *CALCULATED REPORTING LIMIT (RL) |
|---|---|---|---|---|
| **Lead** | - < RL | 2.5 ug | - **< RL** | 2.5 ug/ft² |

*Based on sampling information supplied by the client.

### LAB NUMBER: AD29518

**Sampled By:** Lathan Saperstein
**Job Location:** 528-1
**Sample Identification:** FL-05 : LIVINGROOM

**Date Sampled:** 03/07/2023
**Sample Description:** Dust Wipe

**Preparation Method:** EPA 3050B-M-W (Acid Digestion for Surface Wipe Samples)
**Analysis Method:** EPA 6010D-M (ICP-AES Method for Determination of Metals)
**Date Analyzed:** Wednesday, March 15, 2023

***Sample Area:** 1.0 sq ft

| ELEMENT | ANALYTE CONCENTRATION | ANALYTE REPORTING LIMIT (RL) | *AREA CONCENTRATION | *CALCULATED REPORTING LIMIT (RL) |
|---|---|---|---|---|
| **Lead** | - < RL | 2.5 ug | - **< RL** | 2.5 ug/ft² |

*Based on sampling information supplied by the client.

### LAB NUMBER: AD29519

**Sampled By:** Lathan Saperstein
**Job Location:** 528-1
**Sample Identification:** FL-06 : BATHROOM

**Date Sampled:** 03/07/2023
**Sample Description:** Dust Wipe

**Preparation Method:** EPA 3050B-M-W (Acid Digestion for Surface Wipe Samples)
**Analysis Method:** EPA 6010D-M (ICP-AES Method for Determination of Metals)
**Date Analyzed:** Wednesday, March 15, 2023

***Sample Area:** 1.0 sq ft

| ELEMENT | ANALYTE CONCENTRATION | ANALYTE REPORTING LIMIT (RL) | *AREA CONCENTRATION | *CALCULATED REPORTING LIMIT (RL) |
|---|---|---|---|---|
| **Lead** | - < RL | 2.5 ug | - **< RL** | 2.5 ug/ft² |

*Based on sampling information supplied by the client.

## ANALYTICAL LABORATORY REPORT



**CUSTOMER:** ASTI Environmental
10448 Citation Dr.
Brighton, MI 48116

**DATE RECEIVED:** Friday, March 10, 2023
**PO/PROJECT #:** 12703
**SUBMITTAL #:** 2023-03-10-008.1 REVISED

### LAB NUMBER: AD29520

**Sampled By:** Lathan Saperstein
**Job Location:** 528-1
**Sample Identification:** WS-01 : BEDROOM 1

**Date Sampled:** 03/07/2023
**Sample Description:** Dust Wipe

**Preparation Method:** EPA 3050B-M-W (Acid Digestion for Surface Wipe Samples)
**Analysis Method:** EPA 6010D-M (ICP-AES Method for Determination of Metals)
**Date Analyzed:** Monday, March 20, 2023

***Sample Area:** 0.944 sq ft

| ELEMENT | ANALYTE CONCENTRATION | ANALYTE REPORTING LIMIT (RL) | *AREA CONCENTRATION | *CALCULATED REPORTING LIMIT (RL) |
|---|---|---|---|---|
| **Lead** | - < RL | 2.5 ug | - **< RL** | 2.6 ug/ft² |

*Based on sampling information supplied by the client.

### LAB NUMBER: AD29521

**Sampled By:** Lathan Saperstein
**Job Location:** 528-1
**Sample Identification:** WS-02 : BEDROOM 2

**Date Sampled:** 03/07/2023
**Sample Description:** Dust Wipe

**Preparation Method:** EPA 3050B-M-W (Acid Digestion for Surface Wipe Samples)
**Analysis Method:** EPA 6010D-M (ICP-AES Method for Determination of Metals)
**Date Analyzed:** Monday, March 20, 2023

***Sample Area:** 0.375 sq ft

| ELEMENT | ANALYTE CONCENTRATION | ANALYTE REPORTING LIMIT (RL) | *AREA CONCENTRATION | *CALCULATED REPORTING LIMIT (RL) |
|---|---|---|---|---|
| **Lead** | - < RL | 2.5 ug | - **< RL** | 6.7 ug/ft² |

*Based on sampling information supplied by the client.

### LAB NUMBER: AD29522

**Sampled By:** Lathan Saperstein
**Job Location:** 528-1
**Sample Identification:** WS-03 : BEDROOM 3

**Date Sampled:** 03/07/2023
**Sample Description:** Dust Wipe

**Preparation Method:** EPA 3050B-M-W (Acid Digestion for Surface Wipe Samples)
**Analysis Method:** EPA 6010D-M (ICP-AES Method for Determination of Metals)
**Date Analyzed:** Monday, March 20, 2023

***Sample Area:** 0.75 sq ft

| ELEMENT | ANALYTE CONCENTRATION | ANALYTE REPORTING LIMIT (RL) | *AREA CONCENTRATION | *CALCULATED REPORTING LIMIT (RL) |
|---|---|---|---|---|
| **Lead** | - < RL | 2.5 ug | - **< RL** | 3.3 ug/ft² |

*Based on sampling information supplied by the client.

## ANALYTICAL LABORATORY REPORT



**CUSTOMER:** ASTI Environmental
10448 Citation Dr.
Brighton, MI 48116

**DATE RECEIVED:** Friday, March 10, 2023
**PO/PROJECT #:** 12703
**SUBMITTAL #:** 2023-03-10-008.1 REVISED

### LAB NUMBER: AD29523

**Sampled By:** Lathan Saperstein
**Job Location:** 528-1
**Sample Identification:** WS-04 : KITCHEN

**Date Sampled:** 03/07/2023
**Sample Description:** Dust Wipe

**Preparation Method:** EPA 3050B-M-W (Acid Digestion for Surface Wipe Samples)
**Analysis Method:** EPA 6010D-M (ICP-AES Method for Determination of Metals)
**Date Analyzed:** Monday, March 20, 2023

***Sample Area:** 0.281 sq ft

| ELEMENT | ANALYTE CONCENTRATION | ANALYTE REPORTING LIMIT (RL) | *AREA CONCENTRATION | *CALCULATED REPORTING LIMIT (RL) |
|---|---|---|---|---|
| **Lead** | - < RL | 2.5 ug | - **< RL** | 8.9 ug/ft² |

*Based on sampling information supplied by the client.

### LAB NUMBER: AD29524

**Sampled By:** Lathan Saperstein
**Job Location:** 528-1
**Sample Identification:** WS-05 : LIVINGROOM

**Date Sampled:** 03/07/2023
**Sample Description:** Dust Wipe

**Preparation Method:** EPA 3050B-M-W (Acid Digestion for Surface Wipe Samples)
**Analysis Method:** EPA 6010D-M (ICP-AES Method for Determination of Metals)
**Date Analyzed:** Monday, March 20, 2023

***Sample Area:** 0.316 sq ft

| ELEMENT | ANALYTE CONCENTRATION | ANALYTE REPORTING LIMIT (RL) | *AREA CONCENTRATION | *CALCULATED REPORTING LIMIT (RL) |
|---|---|---|---|---|
| **Lead** | - < RL | 2.5 ug | - **< RL** | 7.9 ug/ft² |

*Based on sampling information supplied by the client.

Revised Report: This revised report replaces 2023-03-10-008 dated 3/21/23. At the clients request a report was generated for each chain of custody.

## ANALYTICAL LABORATORY REPORT



**CUSTOMER:** ASTI Environmental
10448 Citation Dr.
Brighton, MI 48116

**DATE RECEIVED:** Friday, March 10, 2023
**PO/PROJECT #:** 12703
**SUBMITTAL #:** 2023-03-10-008.1 REVISED

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

**Tests Reviewed By:** David Johnson, Project Manager

Reporting Limit (RL): The lowest concentration of analyte in a sample that can be reported with a defined, reproducible level of certainty. This value is based on the lowest standard used for instrument calibration and must be at least twice the MDL.

GPI Laboratories, Inc. has obtained accreditation under the following programs:

- **National Lead Laboratory Accreditation Program (NLLAP)**
  **A2LA:** American Association for Laboratory Accreditation (Certificate 5033.01) (www.a2la.org)
- **OH:** Ohio Department of Health Lead Poisoning Prevention Program, Approval #E10013 ( www.odh.ohio.gov)
- **National Environmental Laboratory Accreditation Program (NELAP)**
  **NY:** State of New York Department of Health, Laboratory ID#11609 (Serial # 64722-64726) (518-485-5570)
  **LA:** State of Louisiana Department of Environmental Quality, Laboratory ID#180321 (Certificate 05036) ( www.deq.louisiana.gov)
  **OK:** Oklahoma Department of Environmental Quality, Laboratory ID#9993 (Certificate 2020-074) ( www.deq.state.ok.us)

Testing which is performed by GPI Laboratories, Inc. according to test methods, or for elements which are not included in the table below fall outside of the current scope of laboratory accreditation. Customers are encouraged to verify the current accreditation status with the individual accreditation programs by calling or visiting the appropriate website for the applicable program.

### SCOPE OF ACCREDITATION

**Air and Emissions**

| Element/Test | Method | Accreditation(s) |
|---|---|---|
| Suspended Particulates: PM10 / TSP | 40 CFR 50 Appendix J / 40 CFR 50 Appendix B | NY, LA |
| Lead in Airborne Dust | 40 CFR 50 Appendix G | A2LA, LA |
| Lead in Airborne Dust | NIOSH 7300 | A2LA, OH, NY, LA |
| Metals in Airborne Dust | NIOSH 7300 | A2LA |

**Solid Chemical Materials**

| Element/Test | Method | Accreditation(s) |
|---|---|---|
| TCLP | EPA 1311(Sample Preparation Method) | NY, LA, OK |
| Lead in Soil | EPA 3050B/ EPA 6010D | A2LA, OH, NY, LA, OK |
| Lead in Paint | EPA 3050B/ EPA 6010D | A2LA, OH, NY, LA |
| Lead in Paint | ASTM D 3335-85A/ EPA 6010D | NY |
| Lead in Dust Wipes | EPA 3050B/ EPA 6010D | A2LA, OH, NY, LA |
| Ignitability | EPA 1010A | NY |
| pH | EPA 9045D | NY |

| | Non-Potable Water / Analysis by ICP | | Solid Chemical Materials | |
|---|---|---|---|---|
| Element/Test | Method | Accreditation(s) | Method | Accreditation(s) |
| Arsenic | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Barium | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Cadmium | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Chromium | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Copper | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Lead | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Mercury | EPA 245.1 Rev.3/ EPA 7470A | NY, LA, OK | EPA 7471B | NY, LA, OK |
| Nickel | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Selenium | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Silver | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Zinc | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Cobalt | ---- | ---- | EPA 6010D | NY, LA, OK |
| Manganese | ---- | ---- | EPA 6010D | NY, LA, OK |
| Acid Digestion | EPA 3010A | NY, LA | EPA 3050B | NY, LA |

# CHAIN OF CUSTODY FORM

GPI

Send To:
**GPI Laboratories, Inc.**
4403 Donker Court, Grand Rapids MI 49512-4054
(616) 940-3112 | GRLabInfo@gpinet.com | www.gpinet.com

| FOR LAB USE ONLY | | | |
|---|---|---|---|
| Properly Contained | YES | NO | N/A |
| Adequate Quantity | YES | NO | N/A |
| Received on Ice | YES | NO | N/A |
| Temp: C/F (Therm #13/ ) | pH: | N/A | |

| | | | |
|---|---|---|---|
| Company: ASTI Environmental | Address: 10448 Citation Dr, Brighton, MI 48116 | Company Contact: Lathan Saperstein / Dave Amir | P.O./Proj #: 12703 |
| | | Telephone: (810) 599-6701 / (810) 225-2800 | Location: 528-1 |
| | | E-Mail: Lsaperstein@asti-env.com / DAmir@Asti-env.com | |

| Matrix | TCLP (Waste) | Metals Content | Other Tests | Turnaround Time |
|---|---|---|---|---|
| ☐ Paint Chips ☑ Wipe | ☐ Lead | ☑ Lead | ☐ pH (Corrosivity) | ☐ Same Day* |
| ☐ Soil ☐ Filter | ☐ RCRA (8) Metals | ☐ Lead, Cad., Chrome. | ☐ Ignitability | ☐ Rush* |
| ☐ Abrasive ☐ _____ | ☐ 5 _____ | ☐ RCRA (8) Metals | ☐ VOC (Method 24, etc) | ☑ Standard |
| ☐ Wastewater | | ☐ _____ | ☐ _____ | ☐ _____ |

Comments:

GPI Labs accepts Visa, MasterCard, and American Express. *Accelerated Turnaround is not available for every test. Please call for information.

| Laboratory ID | Sample Number | Date/Time Sampled | Sample Identification / Location: | Special Instructions: | Wipes: Area wiped (sq.ft.) | Air Sampling Filters: Minutes | Flow Rate | UNITS |
|---|---|---|---|---|---|---|---|---|
| A029514 | FL-01 | 03/07/23 | BEDROOM 1 | | 1 | | | |
| A029515 | FL-02 | 03/07/23 | BEDROOM 2 | | 1 | | | |
| A029516 | FL-03 | 03/07/23 | BEDROOM 3 | | 1 | | | |
| A029517 | FL-04 | 03/07/23 | KITCHEN | | 1 | | | |
| A029519 | FL-05 | 03/07/23 | LIVING ROOM | | 1 | | | |
| A029518 | FL-06 | 03/07/23 | BATHROOM 2 | | 1 | | | |
| — | | | | | | | | |
| A029520 | WS-01 | 03/07/23 | BEDROOM 1 | 4.25*32 | 0.944 | | | |
| A029521 | WS-02 | 03/07/23 | BEDROOM 2 | 4.5*12 | 0.375 | | | |
| A029522 | WS-03 | 03/07/23 | BEDROOM 3 | 6.75*16 | 0.75 | | | |
| A029523 | WS-04 | 03/07/23 | KITCHEN | 6*6.75 | .281 | | | |
| A029524 | WS-05 | 03/07/23 | LIVING ROOM | 6.75*6.75 | 0.316 | | | |
| — | | | | | | | | |
| | | | | | | | | |

Wipes: ☐ TSP ☐ PM10 ☐ 37 mm Cassette

Sampled By (Please print): Lathan Saperstein Date Submitted: 03/07/2023 Signature: _____

Received by: _____ Date/Time: _____ Relinquished Date/Time: _____

Received by: _____ Date/Time: _____ Relinquished Date/Time: _____

Page 1 of 1

Method of Shipment: _____

Received for Laboratory by: Dave Date/Time: 3-09-23 12:30 Submittal #: 2023-0310-008 10/16/18Fom#: 53-14

JG 3/13/23

# ANALYTICAL LABORATORY REPORT

Wednesday, April 5, 2023 

**CUSTOMER:** ASTI Environmental
10448 Citation Dr.
Brighton, MI 48116

**DATE RECEIVED:** Friday, March 10, 2023
**PO/PROJECT #:** 12703
**SUBMITTAL #:** 2023-03-10-050.1 REVISED

## LAB NUMBER: AD29525

**Sampled By:** Lathan Saperstein
**Job Location:** 528-2
**Sample Identification:** FL-01 : BEDROOM 1 KIDS ROOM

**Date Sampled:** 03/07/2023
**Sample Description:** Dust Wipe

**Preparation Method:** EPA 3050B-M-W (Acid Digestion for Surface Wipe Samples)
**Analysis Method:** EPA 6010D-M (ICP-AES Method for Determination of Metals)
**Date Analyzed:** Monday, March 20, 2023

***Sample Area:** 1.0 sq ft

| ELEMENT | ANALYTE CONCENTRATION | ANALYTE REPORTING LIMIT (RL) | *AREA CONCENTRATION | *CALCULATED REPORTING LIMIT (RL) |
|---|---|---|---|---|
| **Lead** | - < RL | 2.5 ug | **- < RL** | 2.5 ug/ft² |

*Based on sampling information supplied by the client.

## LAB NUMBER: AD29526

**Sampled By:** Lathan Saperstein
**Job Location:** 528-2
**Sample Identification:** FL-02 : PORH / PLAY AREA

**Date Sampled:** 03/07/2023
**Sample Description:** Dust Wipe

**Preparation Method:** EPA 3050B-M-W (Acid Digestion for Surface Wipe Samples)
**Analysis Method:** EPA 6010D-M (ICP-AES Method for Determination of Metals)
**Date Analyzed:** Monday, March 20, 2023

***Sample Area:** 1.0 sq ft

| ELEMENT | ANALYTE CONCENTRATION | ANALYTE REPORTING LIMIT (RL) | *AREA CONCENTRATION | *CALCULATED REPORTING LIMIT (RL) |
|---|---|---|---|---|
| **Lead** | - < RL | 2.5 ug | **- < RL** | 2.5 ug/ft² |

*Based on sampling information supplied by the client.

## LAB NUMBER: AD29527

**Sampled By:** Lathan Saperstein
**Job Location:** 528-2
**Sample Identification:** FL-03 : BEDROOM 3

**Date Sampled:** 03/07/2023
**Sample Description:** Dust Wipe

**Preparation Method:** EPA 3050B-M-W (Acid Digestion for Surface Wipe Samples)
**Analysis Method:** EPA 6010D-M (ICP-AES Method for Determination of Metals)
**Date Analyzed:** Monday, March 20, 2023

***Sample Area:** 1.0 sq ft

| ELEMENT | ANALYTE CONCENTRATION | ANALYTE REPORTING LIMIT (RL) | *AREA CONCENTRATION | *CALCULATED REPORTING LIMIT (RL) |
|---|---|---|---|---|
| **Lead** | - < RL | 2.5 ug | **- < RL** | 2.5 ug/ft² |

*Based on sampling information supplied by the client.

## ANALYTICAL LABORATORY REPORT



**CUSTOMER:** ASTI Environmental
10448 Citation Dr.
Brighton, MI 48116

**DATE RECEIVED:** Friday, March 10, 2023
**PO/PROJECT #:** 12703
**SUBMITTAL #:** 2023-03-10-050.1 REVISED

### LAB NUMBER: AD29528

**Sampled By:** Lathan Saperstein
**Job Location:** 528-2
**Sample Identification:** FL-04 : BATHROOM 1

**Date Sampled:** 03/07/2023
**Sample Description:** Dust Wipe

**Preparation Method:** EPA 3050B-M-W (Acid Digestion for Surface Wipe Samples)
**Analysis Method:** EPA 6010D-M (ICP-AES Method for Determination of Metals)
**Date Analyzed:** Monday, March 20, 2023

***Sample Area:** 1.0 sq ft

| ELEMENT | ANALYTE CONCENTRATION | ANALYTE REPORTING LIMIT (RL) | *AREA CONCENTRATION | *CALCULATED REPORTING LIMIT (RL) |
|---|---|---|---|---|
| **Lead** | - < RL | 2.5 ug | **- < RL** | 2.5 ug/ft² |

*Based on sampling information supplied by the client.

### LAB NUMBER: AD29529

**Sampled By:** Lathan Saperstein
**Job Location:** 528-2
**Sample Identification:** FL-05 : KITCHEN

**Date Sampled:** 03/07/2023
**Sample Description:** Dust Wipe

**Preparation Method:** EPA 3050B-M-W (Acid Digestion for Surface Wipe Samples)
**Analysis Method:** EPA 6010D-M (ICP-AES Method for Determination of Metals)
**Date Analyzed:** Monday, March 20, 2023

***Sample Area:** 1.0 sq ft

| ELEMENT | ANALYTE CONCENTRATION | ANALYTE REPORTING LIMIT (RL) | *AREA CONCENTRATION | *CALCULATED REPORTING LIMIT (RL) |
|---|---|---|---|---|
| **Lead** | - < RL | 2.5 ug | **- < RL** | 2.5 ug/ft² |

*Based on sampling information supplied by the client.

### LAB NUMBER: AD29530

**Sampled By:** Lathan Saperstein
**Job Location:** 528-2
**Sample Identification:** FL-06 : LIVING ROOM

**Date Sampled:** 03/07/2023
**Sample Description:** Dust Wipe

**Preparation Method:** EPA 3050B-M-W (Acid Digestion for Surface Wipe Samples)
**Analysis Method:** EPA 6010D-M (ICP-AES Method for Determination of Metals)
**Date Analyzed:** Monday, March 20, 2023

***Sample Area:** 1.0 sq ft

| ELEMENT | ANALYTE CONCENTRATION | ANALYTE REPORTING LIMIT (RL) | *AREA CONCENTRATION | *CALCULATED REPORTING LIMIT (RL) |
|---|---|---|---|---|
| **Lead** | - < RL | 2.5 ug | **- < RL** | 2.5 ug/ft² |

*Based on sampling information supplied by the client.

## ANALYTICAL LABORATORY REPORT



**CUSTOMER:** ASTI Environmental
10448 Citation Dr.
Brighton, MI 48116

**DATE RECEIVED:** Friday, March 10, 2023
**PO/PROJECT #:** 12703
**SUBMITTAL #:** 2023-03-10-050.1 REVISED

### LAB NUMBER: AD29531

**Sampled By:** Lathan Saperstein
**Job Location:** 528-2
**Sample Identification:** WS-01 : BEDROOM 1 KIDS ROOM
**Date Sampled:** 03/07/2023
**Sample Description:** Dust Wipe

**Preparation Method:** EPA 3050B-M-W (Acid Digestion for Surface Wipe Samples)
**Analysis Method:** EPA 6010D-M (ICP-AES Method for Determination of Metals)
**Date Analyzed:** Monday, March 20, 2023

***Sample Area:** 0.411 sq ft

| ELEMENT | ANALYTE CONCENTRATION | ANALYTE REPORTING LIMIT (RL) | *AREA CONCENTRATION | *CALCULATED REPORTING LIMIT (RL) |
|---|---|---|---|---|
| **Lead** | - < RL | 2.5 ug | **- < RL** | 6.1 ug/ft² |

*Based on sampling information supplied by the client.

### LAB NUMBER: AD29532

**Sampled By:** Lathan Saperstein
**Job Location:** 528-2
**Sample Identification:** WS-02 : PORCH / PLAY AREA
**Date Sampled:** 03/07/2023
**Sample Description:** Dust Wipe

**Preparation Method:** EPA 3050B-M-W (Acid Digestion for Surface Wipe Samples)
**Analysis Method:** EPA 6010D-M (ICP-AES Method for Determination of Metals)
**Date Analyzed:** Monday, March 20, 2023

***Sample Area:** 0.840 sq ft

| ELEMENT | ANALYTE CONCENTRATION | ANALYTE REPORTING LIMIT (RL) | *AREA CONCENTRATION | *CALCULATED REPORTING LIMIT (RL) |
|---|---|---|---|---|
| **Lead** | 6.3 ug | 2.5 ug | **7.5 ug/ft²** | 3.0 ug/ft² |

*Based on sampling information supplied by the client.

### LAB NUMBER: AD29533

**Sampled By:** Lathan Saperstein
**Job Location:** 528-2
**Sample Identification:** WS-06 : LIVING ROOM
**Date Sampled:** 03/07/2023
**Sample Description:** Dust Wipe

**Preparation Method:** EPA 3050B-M-W (Acid Digestion for Surface Wipe Samples)
**Analysis Method:** EPA 6010D-M (ICP-AES Method for Determination of Metals)
**Date Analyzed:** Monday, March 20, 2023

***Sample Area:** 0.248 sq ft

| ELEMENT | ANALYTE CONCENTRATION | ANALYTE REPORTING LIMIT (RL) | *AREA CONCENTRATION | *CALCULATED REPORTING LIMIT (RL) |
|---|---|---|---|---|
| **Lead** | - < RL | 2.5 ug | **- < RL** | 10 ug/ft² |

*Based on sampling information supplied by the client.

## ANALYTICAL LABORATORY REPORT



**CUSTOMER:** ASTI Environmental
10448 Citation Dr.
Brighton, MI 48116

**DATE RECEIVED:** Friday, March 10, 2023
**PO/PROJECT #:** 12703
**SUBMITTAL #:** 2023-03-10-050.1 REVISED

**LAB NUMBER: AD29534**

**Sampled By:** Lathan Saperstein
**Job Location:** 528-2
**Sample Identification:** WS-05 : KITCHEN

**Date Sampled:** 03/07/2023
**Sample Description:** Dust Wipe

**Preparation Method:** EPA 3050B-M-W (Acid Digestion for Surface Wipe Samples)
**Analysis Method:** EPA 6010D-M (ICP-AES Method for Determination of Metals)
**Date Analyzed:** Monday, March 20, 2023

***Sample Area:** 0.248 sq ft

| ELEMENT | ANALYTE CONCENTRATION | ANALYTE REPORTING LIMIT (RL) | *AREA CONCENTRATION | *CALCULATED REPORTING LIMIT (RL) |
|---|---|---|---|---|
| **Lead** | - < RL | 2.5 ug | **- < RL** | 10 ug/ft² |

*Based on sampling information supplied by the client.

Revised Report: This revised report replaces 2023-03-10-008 dated 3/21/23. At the clients request a report was generated for each chain of custody.

## ANALYTICAL LABORATORY REPORT



**CUSTOMER:** ASTI Environmental
10448 Citation Dr.
Brighton, MI 48116

**DATE RECEIVED:** Friday, March 10, 2023
**PO/PROJECT #:** 12703
**SUBMITTAL #:** 2023-03-10-050.1 REVISED

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

**Tests Reviewed By:** David Johnson, Project Manager

Reporting Limit (RL): The lowest concentration of analyte in a sample that can be reported with a defined, reproducible level of certainty. This value is based on the lowest standard used for instrument calibration and must be at least twice the MDL.

GPI Laboratories, Inc. has obtained accreditation under the following programs:

- **National Lead Laboratory Accreditation Program (NLLAP)**
  **A2LA:** American Association for Laboratory Accreditation (Certificate 5033.01) (www.a2la.org)
- **OH:** Ohio Department of Health Lead Poisoning Prevention Program, Approval #E10013 ( www.odh.ohio.gov)
- **National Environmental Laboratory Accreditation Program (NELAP)**
  **NY:** State of New York Department of Health, Laboratory ID#11609 (Serial # 64722-64726) (518-485-5570)
  **LA:** State of Louisiana Department of Environmental Quality, Laboratory ID#180321 (Certificate 05036) ( www.deq.louisiana.gov)
  **OK:** Oklahoma Department of Environmental Quality, Laboratory ID#9993 (Certificate 2020-074) ( www.deq.state.ok.us)

Testing which is performed by GPI Laboratories, Inc. according to test methods, or for elements which are not included in the table below fall outside of the current scope of laboratory accreditation. Customers are encouraged to verify the current accreditation status with the individual accreditation programs by calling or visiting the appropriate website for the applicable program.

### SCOPE OF ACCREDITATION

**Air and Emissions**

| Element/Test | Method | Accreditation(s) |
|---|---|---|
| Suspended Particulates: PM10 / TSP | 40 CFR 50 Appendix J / 40 CFR 50 Appendix B | NY, LA |
| Lead in Airborne Dust | 40 CFR 50 Appendix G | A2LA, LA |
| Lead in Airborne Dust | NIOSH 7300 | A2LA, OH, NY, LA |
| Metals in Airborne Dust | NIOSH 7300 | A2LA |

**Solid Chemical Materials**

| Element/Test | Method | Accreditation(s) |
|---|---|---|
| TCLP | EPA 1311(Sample Preparation Method) | NY, LA, OK |
| Lead in Soil | EPA 3050B/ EPA 6010D | A2LA, OH, NY, LA, OK |
| Lead in Paint | EPA 3050B/ EPA 6010D | A2LA, OH, NY, LA |
| Lead in Paint | ASTM D 3335-85A/ EPA 6010D | NY |
| Lead in Dust Wipes | EPA 3050B/ EPA 6010D | A2LA, OH, NY, LA |
| Ignitability | EPA 1010A | NY |
| pH | EPA 9045D | NY |

| | Non-Potable Water / Analysis by ICP | | Solid Chemical Materials | |
|---|---|---|---|---|
| Element/Test | Method | Accreditation(s) | Method | Accreditation(s) |
| Arsenic | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Barium | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Cadmium | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Chromium | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Copper | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Lead | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Mercury | EPA 245.1 Rev.3/ EPA 7470A | NY, LA, OK | EPA 7471B | NY, LA, OK |
| Nickel | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Selenium | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Silver | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Zinc | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Cobalt | ---- | ---- | EPA 6010D | NY, LA, OK |
| Manganese | ---- | ---- | EPA 6010D | NY, LA, OK |
| Acid Digestion | EPA 3010A | NY, LA | EPA 3050B | NY, LA |

# CHAIN OF CUSTODY FORM

GPI

Send To:
**GPI Laboratories, Inc.**
4403 Donker Court, Grand Rapids MI 49512-4054
(616) 940-3112 | GRLabInfo@gpinet.com | www.gpinet.com

| FOR LAB USE ONLY | | | |
|---|---|---|---|
| Properly Contained | YES | NO | N/A |
| Adequate Quantity | YES | NO | N/A |
| Received on Ice | YES | NO | N/A |
| Temp: C/F (Therm #13/ ) | pH: N/A | | |

| | | | |
|---|---|---|---|
| Company: ASTI Environmental | Address: 10448 Citation Dr, Brighton, MI 48116 | Company Contact: Lathan Saperstein / Dave Amir | P.O./Proj #: 12703 |
| | | Telephone: (810) 599-6701 / (810) 225-2800 | Location: 528-2 |
| | | E-Mail: Lsaperstein@asti-env.com / DAmir@Asti-env.com | |

| Matrix | TCLP (Waste) | Metals Content | Other Tests | Turnaround Time |
|---|---|---|---|---|
| ☐ Paint Chips ☑ Wipe | ☐ Lead | ☑ Lead | ☐ pH (Corrosivity) | ☐ Same Day* |
| ☐ Soil ☐ Filter | ☐ RCRA (8) Metals | ☐ Lead, Cad., Chrome. | ☐ Ignitability | ☐ Rush* |
| ☐ Abrasive ☐ _____ | ☐ 5 _____ | ☐ RCRA (8) Metals | ☐ VOC (Method 24, etc) | ☑ Standard |
| ☐ Wastewater | | ☐ _____ | ☐ _____ | ☐ _____ |

Comments: B.R. 3 Items to Pack

GPI Labs accepts Visa, MasterCard, and American Express. *Accelerated Turnaround is not available for every test. Please call for information.

| Laboratory ID | Sample Number | Date/Time Sampled | Sample Identification / Location: | Special Instructions: | Wipes: Area wiped (sq.ft.) | Air Sampling Filters (☐ TSP ☐ PM10 ☐ 37 mm Cassette): Minutes | Flow Rate | UNITS |
|---|---|---|---|---|---|---|---|---|
| A029525 | FL-01 | 03/07/23 | BEDROOM 1 - Kids Room | | 1 | | | |
| A029526 | FL-02 | 03/07/23 | PORCH / PLAY AREA | | 1 | | | |
| A029527 | FL-03 | 03/07/23 | BEDROOM 3 | | 1 | | | |
| A029529 | FL-04 | 03/07/23 | BATHROOM 1 | | 1 | | | |
| A029529 | FL-05 | 03/07/23 | KITCHEN | | 1 | | | |
| A029530 | FL-06 | 03/07/23 | LIVING ROOM | | 1 | | | |
| — | | | | | | | | |
| A029531 | WS-01 | 03/07/23 | BEDROOM 1 - Kids Room | 2.75*21.5 | .411 | | | |
| A029532 | WS-02 | 03/07/23 | PORCH/PLAY AREA | 5.5*22 | .840 | | | |
| A029533 | WS-06 | 03/07/23 | LIVING ROOM | 2.75*13 | .248 | | | |
| A029534 | WS-05 | 03/07/23 | KITCHEN | 2.75*13 | .248 | | | |
| — | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Sampled By (Please print): Lathan Saperstein Date Submitted: 03/07/2023 Signature: _____

Received by: _____ Date/Time: _____ Relinquished Date/Time: _____

Received by: _____ Date/Time: _____ Relinquished Date/Time: _____

Page 1 of 1

Method of Shipment: _____

Received for Laboratory by: Dave Amir Date/Time: 3-09-23 1230 Submittal #: ~~2023-03-10-008~~ AM 3-10-23 2023-03-10-050

10/16/18Form#: 53-14

VTG 3/13/23

ACCURATE ANALYTICAL TESTING LLC

30105 Beverly Road
Romulus, MI 48174
Ph: 734-629-8161; Fax: 734-629-8431

# Certificate of Analysis: Lead In Soil by EPA SW-846 7420 and 3050B Method*

**Client :** ASTI Environmental
10448 Citation Dr. Suite 100
Brighton, MI 48116
**Attn :** David Amir **Email :** damir@asti-env.com
**Phone :** 616-540-7464 **Fax :** 410 729-4344

**Client Project :** 12703

**Project Location :** 528 VIRGINIA

**AAT Project :** 896341
**Sampling Date :** 03/22/2023
**Date Received :** 03/24/2023
**Date Analyzed :** 03/28/2023
**Date Reported :** 03/28/2023

| Lab Sample ID | Client Code | Sample Description | Results Lead µg/g (PPM) | Calculated RL µg/g * |
|---|---|---|---|---|
| 8291867 | SL-528 | 528 FLOWER BED | 90.71 | 10.16 |

Analyst Signature

Alexis Pheeney

*RL= Reporting Limit * For true values assume (2) significant figures. The method and batch QC are acceptable unless otherwise stated. Current EPA/HUD Interim Standard for soil samples are: 400 PPM (parts per million) for play area's, 1200 PPM for building Perimters and 1000 PPM for California Building Perimeters. AAT internal sop S204. The laboratory operates in accord with ISO 17025 guidelines and holds limited scopes of accreditation under AIHA-LAP and NY State DOH ELAP programs. These results are submitted pursuant to AAT LLC current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. Analytical results relate to the samples as received by the lab. AAT will not assume any liability or responsibility for the manner in which the results are used or interpreted. Reproduction of this document other than in its entirety is not permitted. AAT does not blank correct reported values. Sample data apply only to items analyzed. Samples are stored for 15 days following report date. *= Validated modified method

AIHA LAP- Lab ID #100986, NY State DOH ELAP -Lab ID #11864, State of Ohio- Lab ID # 10042

ACCURATE ANALYTICAL TESTING LLC

**30105 Beverly Road**
**Romulus, MI 48174**
**Ph: 734-629-8161; Fax: 734-629-8431**

**To :** ASTI Environmental
10448 Citation Dr. Suite 100
Brighton, MI 48116

**Attn :** David Amir
**Email :** damir@asti-env.com
**Phone :** 616-540-7464

**Project Location :** 528 VIRGINIA

**AAT Project :** 896341
**Client Project :** 12703
**Date Reported :** 03/28/2023

| Sample | Client Code | Analysis Requested | Completed | Analyst |
|---|---|---|---|---|
| 8291867 | SL-528 | Lead Soil | 03/28/2023 | Alexis Pheeney |

**Reviewed By** Elyse Bidle
Quality Assurance Coordinator

ACCURATE ANALYTICAL TESTING LLC

30105 BEVERLY RD.
ROMULUS MI 48174
(734) 699-LABS (5227)
FAX: (734) 699-8407
Website: www.accurate-test.com
Email: customersupport@accurate-test.biz

AIHA LAP, LLC ACCREDITED LABORATORY

SUBMITTING COMPANY
ASTI Environmental
10448 Citation Dr.
Suite 100
BRIGHTON, MI 48116

CONTACT INFORMATION
Lathan Saperstein / Dave Amir
Office: (800) 395-2784
Fax: 810.225.3800
Cell: 810.599.6701
Email: lsaperstein@asti-env.com / Damir@asti-env.com

PO #

| | | | |
|---|---|---|---|
| PROJECT NUMBER | 12703 | SAMPLING DATE: | 3/22/23 |
| PROJECT ADDRESS | 528 Virginia | | |
| SAMPLE START TIME | | SAMPLE END TIME | |
| RISK ASSESSOR | Lathan Saperstein P-08947 | | |

REQUESTED ANALYSIS: LEAD
SINGLE WIPE DUST ( )
COMPOSITE SOIL ( ✓ )
PAINT CHIP | % By Wt ( ) | mg/cm² ( )

TURNAROUND TIME (please check one)
SAME DAY ( ) 24 Hour ( )
48 Hour ( ) 72 hours ( ✓ )
If no TAT is indicated, default is 72 hours

| LAB ID # | CLIENT SAMPLE ID | DESCRIPTION | WS, WT, F | WIPE AREA (e.g. 12 in X 12 in) |
|---|---|---|---|---|
| 891807 | SL-528 | 528 Flower Bed | | X |
| | | | | X |
| | | | | X |
| | | | | X |
| | | | | X |
| | | | | X |
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| | | | | X |
| | | | | X |

CLIENT COMMENTS
SAMPLES SHIPPED

NY STATE SAMPLES ( ) (check here)

SAMPLE CONDITION
SEALS INTACT Y N
CONTAINERS LABELED Y N
RECVD & ACCEPTED Y N

LAB REMARKS
1703

LAB PROJECT NUMBER 891807-11

| SAMPLES RELINQUISHED BY | SAMPLES RECEIVED BY | DATE | TIME | |
|---|---|---|---|---|
| | | | AM | PM |
| 3/23 | | MAR 24 2023 | AM | PM |

By submitting samples to AAT, the client agrees to AAT's terms and conditions.
AAT is not responsible for shipping delays

# ANALYTICAL LABORATORY REPORT

Wednesday, April 5, 2023 

**CUSTOMER:** ASTI Environmental
10448 Citation Dr.
Brighton, MI 48116

**DATE RECEIVED:** Friday, March 10, 2023
**PO/PROJECT #:** 12703
**SUBMITTAL #:** 2023-03-10-056.1 REVISED

## LAB NUMBER: AD29579

**Sampled By:** Lathan Saperstein
**Job Location:** OFFICE
**Sample Identification:** FL-01 : MAIN

**Date Sampled:** 03/07/2023
**Sample Description:** Dust Wipe

**Preparation Method:** EPA 3050B-M-W (Acid Digestion for Surface Wipe Samples)
**Analysis Method:** EPA 6010D-M (ICP-AES Method for Determination of Metals)
**Date Analyzed:** Monday, March 20, 2023

***Sample Area:** 1.0 sq ft

| ELEMENT | ANALYTE CONCENTRATION | ANALYTE REPORTING LIMIT (RL) | *AREA CONCENTRATION | *CALCULATED REPORTING LIMIT (RL) |
|---|---|---|---|---|
| **Lead** | - < RL | 2.5 ug | **- < RL** | 2.5 ug/ft² |

*Based on sampling information supplied by the client.

## LAB NUMBER: AD29580

**Sampled By:** Lathan Saperstein
**Job Location:** OFFICE
**Sample Identification:** FL-02 : BATHROOM

**Date Sampled:** 03/07/2023
**Sample Description:** Dust Wipe

**Preparation Method:** EPA 3050B-M-W (Acid Digestion for Surface Wipe Samples)
**Analysis Method:** EPA 6010D-M (ICP-AES Method for Determination of Metals)
**Date Analyzed:** Monday, March 20, 2023

***Sample Area:** 1.0 sq ft

| ELEMENT | ANALYTE CONCENTRATION | ANALYTE REPORTING LIMIT (RL) | *AREA CONCENTRATION | *CALCULATED REPORTING LIMIT (RL) |
|---|---|---|---|---|
| **Lead** | - < RL | 2.5 ug | **- < RL** | 2.5 ug/ft² |

*Based on sampling information supplied by the client.

## LAB NUMBER: AD29581

**Sampled By:** Lathan Saperstein
**Job Location:** OFFICE
**Sample Identification:** FL-03 : ENTRY

**Date Sampled:** 03/07/2023
**Sample Description:** Dust Wipe

**Preparation Method:** EPA 3050B-M-W (Acid Digestion for Surface Wipe Samples)
**Analysis Method:** EPA 6010D-M (ICP-AES Method for Determination of Metals)
**Date Analyzed:** Monday, March 20, 2023

***Sample Area:** 1.0 sq ft

| ELEMENT | ANALYTE CONCENTRATION | ANALYTE REPORTING LIMIT (RL) | *AREA CONCENTRATION | *CALCULATED REPORTING LIMIT (RL) |
|---|---|---|---|---|
| **Lead** | - < RL | 2.5 ug | **- < RL** | 2.5 ug/ft² |

*Based on sampling information supplied by the client.

## ANALYTICAL LABORATORY REPORT



**CUSTOMER:** ASTI Environmental
10448 Citation Dr.
Brighton, MI 48116

**DATE RECEIVED:** Friday, March 10, 2023
**PO/PROJECT #:** 12703
**SUBMITTAL #:** 2023-03-10-056.1 REVISED

**LAB NUMBER: AD29582**

**Sampled By:** Lathan Saperstein
**Job Location:** OFFICE
**Sample Identification:** WS-01 : MAIN

**Date Sampled:** 03/07/2023
**Sample Description:** Dust Wipe

**Preparation Method:** EPA 3050B-M-W (Acid Digestion for Surface Wipe Samples)
**Analysis Method:** EPA 6010D-M (ICP-AES Method for Determination of Metals)
**Date Analyzed:** Monday, March 20, 2023

***Sample Area:** 0.5 sq ft

| ELEMENT | ANALYTE CONCENTRATION | ANALYTE REPORTING LIMIT (RL) | *AREA CONCENTRATION | *CALCULATED REPORTING LIMIT (RL) |
|---|---|---|---|---|
| **Lead** | - < RL | 2.5 ug | - **< RL** | 5.0 ug/ft² |

*Based on sampling information supplied by the client.

Revised report: This revised report replaces 2023-03-10-008 dated 3/21/23. At the clients request a report was generated for each chain of custody.

GPI Laboratories, Inc. has obtained accreditation under the programs detailed on the final page of the laboratory report. The accreditations pertain only to the testing performed for the elements, and in accordance with the test methods, listed in the scope of accreditation table. Testing which is performed by GPI Laboratories, Inc. according to other test methods, or for elements which are not included in the table fall outside of the current

## ANALYTICAL LABORATORY REPORT



**CUSTOMER:** ASTI Environmental
10448 Citation Dr.
Brighton, MI 48116

**DATE RECEIVED:** Friday, March 10, 2023
**PO/PROJECT #:** 12703
**SUBMITTAL #:** 2023-03-10-056.1 REVISED

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

David Johnson

Digitally signed by David Johnson
Date: 2023.04.05 08:42:00 -04'00'

**Tests Reviewed By:** David Johnson, Project Manager

Reporting Limit (RL): The lowest concentration of analyte in a sample that can be reported with a defined, reproducible level of certainty. This value is based on the lowest standard used for instrument calibration and must be at least twice the MDL.

GPI Laboratories, Inc. has obtained accreditation under the following programs:

- **National Lead Laboratory Accreditation Program (NLLAP)**
  **A2LA:** American Association for Laboratory Accreditation (Certificate 5033.01) (www.a2la.org)
- **OH:** Ohio Department of Health Lead Poisoning Prevention Program, Approval #E10013 ( www.odh.ohio.gov)
- **National Environmental Laboratory Accreditation Program (NELAP)**
  **NY:** State of New York Department of Health, Laboratory ID#11609 (Serial # 64722-64726) (518-485-5570)
  **LA:** State of Louisiana Department of Environmental Quality, Laboratory ID#180321 (Certificate 05036) ( www.deq.louisiana.gov)
  **OK:** Oklahoma Department of Environmental Quality, Laboratory ID#9993 (Certificate 2020-074) ( www.deq.state.ok.us)

Testing which is performed by GPI Laboratories, Inc. according to test methods, or for elements which are not included in the table below fall outside of the current scope of laboratory accreditation. Customers are encouraged to verify the current accreditation status with the individual accreditation programs by calling or visiting the appropriate website for the applicable program.

### SCOPE OF ACCREDITATION

**Air and Emissions**

| Element/Test | Method | Accreditation(s) |
|---|---|---|
| Suspended Particulates: PM10 / TSP | 40 CFR 50 Appendix J / 40 CFR 50 Appendix B | NY, LA |
| Lead in Airborne Dust | 40 CFR 50 Appendix G | A2LA, LA |
| Lead in Airborne Dust | NIOSH 7300 | A2LA, OH, NY, LA |
| Metals in Airborne Dust | NIOSH 7300 | A2LA |

**Solid Chemical Materials**

| Element/Test | Method | Accreditation(s) |
|---|---|---|
| TCLP | EPA 1311(Sample Preparation Method) | NY, LA, OK |
| Lead in Soil | EPA 3050B/ EPA 6010D | A2LA, OH, NY, LA, OK |
| Lead in Paint | EPA 3050B/ EPA 6010D | A2LA, OH, NY, LA |
| Lead in Paint | ASTM D 3335-85A/ EPA 6010D | NY |
| Lead in Dust Wipes | EPA 3050B/ EPA 6010D | A2LA, OH, NY, LA |
| Ignitability | EPA 1010A | NY |
| pH | EPA 9045D | NY |

| | Non-Potable Water / Analysis by ICP | | Solid Chemical Materials | |
|---|---|---|---|---|
| Element/Test | Method | Accreditation(s) | Method | Accreditation(s) |
| Arsenic | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Barium | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Cadmium | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Chromium | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Copper | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Lead | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Mercury | EPA 245.1 Rev.3/ EPA 7470A | NY, LA, OK | EPA 7471B | NY, LA, OK |
| Nickel | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Selenium | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Silver | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Zinc | EPA 6010D/ EPA 200.7 Rev 4.4 | NY, LA, OK | EPA 6010D | NY, LA, OK |
| Cobalt | ---- | ---- | EPA 6010D | NY, LA, OK |
| Manganese | ---- | ---- | EPA 6010D | NY, LA, OK |
| Acid Digestion | EPA 3010A | NY, LA | EPA 3050B | NY, LA |

# CHAIN OF CUSTODY FORM

GPI

Send To:
**GPI Laboratories, Inc.**
4403 Donker Court, Grand Rapids MI 49512-4054
(616) 940-3112 | GRLabInfo@gpinet.com | www.gpinet.com

**FOR LAB USE ONLY**

| | | | |
|---|---|---|---|
| Properly Contained | (YES) | NO | N/A |
| Adequate Quantity | YES | NO | (N/A) |
| Received on Ice | YES | NO | (N/A) |
| Temp: C/F (Therm #13/ ) | pH: N/A | | |

| | | | |
|---|---|---|---|
| Company: ASTI Environmental | Address: 10448 Citation Dr, Brighton, MI 48116 | Company Contact: Lathan Saperstein / Dave Amir | P.O./Proj #: 12703 |
| | | Telephone: (810) 599-6701 / (810) 225-2800 | Location: OFFICE |
| | | E-Mail: Lsaperstein@asti-env.com / DAmir@Asti-env.com | |

| Matrix | TCLP (Waste) | Metals Content | Other Tests | Turnaround Time |
|---|---|---|---|---|
| ☐ Paint Chips ☑ Wipe | ☐ Lead | ☑ Lead | ☐ pH (Corrosivity) | ☐ Same Day* |
| ☐ Soil ☐ Filter | ☐ RCRA (8) Metals | ☐ Lead, Cad., Chrome. | ☐ Ignitability | ☐ Rush* |
| ☐ Abrasive ☐ _____ | ☐ 5 _____ | ☐ RCRA (8) Metals | ☐ VOC (Method 24, etc) | ☑ Standard |
| ☐ Wastewater | | ☐ _____ | ☐ _____ | ☐ _____ |

Comments: Field Blanks

GPI Labs accepts Visa, MasterCard, and American Express. *Accelerated Turnaround is not available for every test. Please call for information.

| Laboratory ID | Sample Number | Date/Time Sampled | Sample Identification / Location: | Special Instructions: | Wipes: Area wiped (sq.ft.) | Air Sampling Filters: Minutes | Flow Rate | UNITS |
|---|---|---|---|---|---|---|---|---|
| A029579 | FL-01 | 03/07/23 | MAIN | | 1 | | | |
| A029580 | FL-02 | 03/07/23 | BATHROOM | | 1 | | | |
| A029581 | FL-03 | 03/07/23 | ENTRY | | 1 | | | |
| A029582 | WS-0[redacted] | 03/07/23 | MAIN | 6*12 | .5 | | | |
| — | | | | | | | | |
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| | | | | | | | | |

Air Sampling Filters: ☐ TSP ☐ PM10 ☐ 37 mm Cassette

Sampled By (Please print): Lathan Saperstein Date Submitted: 03/07/2023 Signature: [signature]

Received by: _____ Date/Time: _____ Relinquished Date/Time: _____

Received by: _____ Date/Time: _____ Relinquished Date/Time: _____

Page 1 of 1

Method of Shipment: _____

Received for Laboratory by: Dad Glen Date/Time: 3-09-23 12:30 Submittal #: 2023-03-10-05b Dw 4-05-23

10/16/18Form#: 53-14

VG 3/12/23

**Appendix G**

**HUD Standard Reevaluation Schedule**

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. | 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. | 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. |
| | | B. Treatments specified in section A plus replacement of all windows with lead hazards. | 1 Year. | |
| | | C. Abatement of all lead-based paint using encapsulation or enclosure. | None. | Same as Schedule 3 above. |
| | | D. Removal of all lead-based paint. | None. | None. |
| 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. | 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. | 6 Months, 1 Year, 2 Years. | Same as Schedule 3. |
| | | B. Treatments specified in section A plus replacement of all windows with lead hazards. | 6 Months, 2 Years. | Same as Schedule 3. |
| | | C. Abatement of all lead-based paint using encapsulation and enclosure. | None. | Same as Schedule 3. |
| | | D. Removal of all lead-based paint. | None. | None. |

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. | A. Interim controls or mixture of interim controls and a batement (not including window replacement). | 2 Years. | Same as Schedule 3. |
| | | B. Mixture of interim controls and abatement, including window replacement. | 3 Years. | Same as Schedule 3. |
| | | C. Abatement of all lead-based paint *hazards*, but not all lead-based paint. | 4 Years. | Same as Schedule 3. |
| | | D. Abatement of all lead-based paint using encapsulation or enclosure. | None. | Same as Schedule 3. |
| | | E. Removal of all lead-based paint. | None. | None. |
| 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.

Notes to Table

1. When more than one schedule applies to a dwelling, use the one with the most stringent reevaluation schedule. Do not use the results of a reevaluation for Schedule 2.

2. A lead-based paint hazard includes, but is not limited to, deteriorated lead-based paint and leaded dust and soil above applicable standards. See the Glossary for a more complete definition.

3. The frequency of reevaluations and the interval between reevaluations depends on the findings at each reevaluation and the action taken. For example, a dwelling unit or common area falling under Schedule 3.A would be reevaluated 1 year after clearance. If no lead-based paint hazards are detected at that time, the unit or area would be reevaluated again 2 years after the first reevaluation. If no hazards are found in the second reevaluation, no further reevaluation is necessary, but annual visual monitoring should continue.

   If, on the other hand, the unit or common area fails a reevaluation, a new reevaluation schedule should be determined based on the results of the reevaluation and the action taken. For instance, if the re-evaluation finds deteriorated lead-based paint but no lead-contaminated dust, and the action taken is paint stabilization, Schedule 5.A would apply, which indicates that the next reevaluation should be in 2 years. If, however, the owner of this same property decides to abate all lead-based paint hazards instead of doing only paint stabilization, the property would move to Schedule 5.C, which calls for reevaluation 4 years from the date of clearance after the hazard abatement.

   Following another scenario, suppose a reevaluation of this same dwelling unit or common area finds that the average dust lead levels on sampled window troughs exceeds the applicable standard by a factor of 10 or more, but no other lead-based paint hazards. The owner conducts dust removal. In this case the next reevaluation would be 6 months after clearance followed by another a year later, followed by yet another 2 years later, as indicated by Schedule 4.A.

4. The initial evaluation results determine which reevaluation schedule should be applied. An initial evaluation can be a risk assessment, a risk assessment/ inspection combination, or, if the owner has opted to bypass the initial evaluation and proceed directly to controlling suspected hazards, a combination risk assessment/clearance examination. This type of clearance must be conducted by a certified risk assessor, who should determine if all hazards were in fact controlled. The results of the initial clearance dust tests, soil sampling and visual examination should be used to determine the appropriate schedule. If repeated cleaning was necessary to achieve clearance, use the results of the dust tests *before* repeated cleaning was performed for schedule determination.

5. If a unit fails two consecutive reevaluations, the reevaluation interval should be reduced by half and the number of reevaluations should be doubled. If deteriorated lead-based paint hazards continue to occur, then the offending components/surfaces should be abated. If dwellings with dust hazards but no paint-related hazards repeatedly fail reevaluations, the exterior source should be identified (if identification efforts fail, regular dust removal efforts are needed).

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