10/03/13 ACTIVATED CHARCOAL RADON TEST #6091777

Radon Test Result: 16.7 ±0.6 pCi/L

Test Started 09/26/13 at 4:00 pm
Test Ended 09/29/13 at 4:00 pm
Closed house conditions maintained during test.

Location Basement

TCHU YAJH
790 CASE AVE
SAINT PAUL, MN 55106

INTERPRETING YOUR TEST RESULT

The US EPA action level for indoor radon is 4.0 pCi/L. The EPA recommendation for test results in this range (8 to 100 pCi/L) is to conduct a short−term follow−up measurement within the next few weeks. A long−term measurement is NOT recommended because additional exposure at these levels could pose an increased health risk. If, however this is a follow−up (confirming) test, it is recommended that you take remedial action to reduce these radon levels.

You may be able to obtain additional information about radon related subjects by contacting your state radon office at ***"www.health.mn.gov/radonkit"*** or by calling the "Radon Fix−It Line" at 800−644−6999 Monday thru Friday between NOON an 8PM EST.

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READ THIS FIRST

This result has been rounded to one−tenth (0.1) of a pCi/L (picoCurie per liter), the most common method of reporting radon in air.

NEXT...PLEASE...READ

everything under the heading

INTERPRETING YOUR TEST RESULT

Your health risk

The primary health risk from long−term exposure to radon is lung cancer. The risk of developing a lung cancer from radon exposure depends both on how much radon is present and how long you are exposed to radon. The higher the radon level or the longer the time of exposure, even if the levels are relatively low, the greater the risk. Exposures up to 4 pCi/L may present some risk of contracting lung cancer to more sensitive occupants, especially children. Recently the US Congress set as a goal the lowering of radon levels in buildings to equal the levels of outside air.

What is a picoCurie

For those interested in the numbers, a picoCurie is 0.000,000,000,001 (one−trillionth) of a Curie, an international measurement unit of radioactivity. One pCi/L means that in one liter of air there will be 2.2 radioactive disintegrations each minute. For example, at 4 pCi/L there will be approximately 12,672 radioactive disintegrations in one liter of air, during a 24−hour period.

Conducting Follow−up Measurements

USEPA protocol describes two general types of radon measurements: short−term tests conducted from 48 hours up to 90 days, and long−term tests that last from 90 to 365 days. Your first test (initial/screening) should be a short−term `worst−case' screening to see if there is a potential for high exposure to radon. Screening tests should be conducted under closed−building conditions, in the lowest lived−in area in the house, because the highest concentrations of radon will usually be found in a room closest to the underlying soil. Tests made under these conditions are less likely to miss a house with a potential for high concentrations. On the other hand, if the results of worst−case screening tests are very low, there is a high probability that the average annual concentrations in the house are also low.

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Conducting Follow−up Measurements

The higher your initial (screening) tests, the sooner you should conduct follow−up measurements. The EPA states that you should retest the same location that was tested initially. **For additional or follow−up testing,** make sure at least one test is conducted in the **lowest lived−in level** of the home. Also choose regularly used rooms, such as family rooms, dens, playrooms, or bedrooms. A bedroom on the lower level may be a good choice, because people generally spend the most time in their bedrooms (approximately one−third of the year). If there are children, it may be appropriate to test their rooms or other areas where they spend a lot of time, especially at the lower levels. All short−term follow−up tests **must** be conducted under closed−building conditions. If closed−building conditions cannot be maintained, a long−term measurement conducted under normal living conditions could be used to help estimate average annual exposures.

Tests **should not be conducted** in a kitchen or a bathroom because high humidity, exhaust fans, and other factors can adversely affect the test results. Tests **should not be conducted** in storage areas or laundry rooms, because relatively little time is spent there. Although radon in water may be a contributor to the concentration of airborne radon, radon in air should be **confirmed** before a test for radon in water is performed.

It is recommended that before spending any time or money on radon mitigation, one should conduct multiple (three or more) tests to be certain there is a need. A few more tests will most certainly cost considerably less than any mitigation work.

If follow−up measurements have **confirmed** that the average annual level of radon is equal to or greater than 4 pCi/L, the USEPA recommends that the building or home be mitigated for radon. Consider also that a future buyer is likely to demand that the building pass a radon test before purchasing.

Variations in Radon Levels: what can affect your test results and why it may be important to conduct confirmation tests.

When tests are performed in different seasons or under different weather conditions, the initial screening and follow−up tests may vary considerably. Radon levels can vary significantly between seasons, so different values **are to be expected**. Even during normal weather, indoor radon levels may rise and fall by a factor of two on a daily cycle; for example, from 5 pCi/L to 10 pCi/L in 24 hours. During rapidly changing or stormy weather, the levels may change more dramatically. Because continual changes in radon levels are considered the norm, expose the testing device for as long as is practical, while following the manufacturer's recommendations. This, of course, provides a better overall average of the measurement.

If you are comparing tests, or are averaging a series of tests, bear in mind that any radon test returns only the average of the levels present during a **specific period of time** at the **precise location** of the test. Conditions during a different test period or at a different location in the building are **expected to be different.**

Test results can also vary if the radon test instructions were not carefully followed. A laboratory measuring radon in samples taken outside the lab **must rely on the person conducting the test**. For example, the wrong starting or ending date of a test will significantly affect the calculated result. The location of each radon test can also influence the result. For example, a test placed in the blowing air stream of a fan is likely to collect more radon than it would under normal conditions. Also, three tests conducted in one home, but in three different rooms, **would be expected to have at least slightly different test results.**

Test results from a properly used activated charcoal test will more closely reflect the average radon concentrations over the last three to five days of the test period. This happens because the radon collected by the activated charcoal has a radioactive half−life of only four days. This means, for example, over one−half of the radon collected during the first three days of a seven day test `died' before the test ended. Seven day exposures of activated charcoal test devices are suggested because this allows the charcoal to equilibrate with its environment, averaging out the peaks and valleys that normally occur in real−life radon levels. Also the aspect of user convenience is considered, because most find it easier to remember to end a test on the same day of the week it was started.

If you have further questions regarding this test or need advice on follow−up testing, call fax or write to our technical service department listed below. Thank you for choosing the Air Chek test device.

PERFORMING RADON TESTS FOR A REAL ESTATE TRANSACTION

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The radon test kit(s) used for this report is certified by the NEHA−NRPP, Lab ID: 101138, for use in all fifty states. It is also listed or certified for use in all states that have a radon program.

For technical information, call (828) 684−0893. Office hours are Mon−Fri 8:30 to 5:30 EASTERN
You can reach us by Fax at (828) 684−8498 or write to Air Chek, Inc., Box 2000, Naples, NC 28760
Web Site: http://www.radon.com **Email to:** info@radon.com

10/03/13 ACTIVATED CHARCOAL RADON TEST #6091779

Radon Test Result: 15.3 ±0.5 pCi/L

Test Started 09/26/13 at 4:00 pm
Test Ended 09/30/13 at 4:00 pm
Closed house conditions maintained during test.

Location Basement

TCHU YAJH
790 CASE AVE
SAINT PAUL, MN 55106

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Web Site: http://www.radon.com **Email to:** info@radon.com

Neighborhood Energy Connection

Residential Energy Specification

Customer: City of Saint Paul

Auditor: Michael Childs

Address: 790 Case Ave E

Phone: 651-221-4462 x145

Spec ID#	Spec Title	Specification	Location / Notes
104	Replace Furnace with 96% AFUE, Multi-stage, Forced Air Furnace	Remove existing furnace, recycle all metal components and dispose of all other materials in a code legal dump. Install a new ENERGY STAR rated, gas-fired, multi-stage burner, forced air furnace with a minimum AFUE rating of 96% and ECM Motor with 2" rise above floor. Connect to existing duct work and gas line. New furnace to be vented with PVC piping per manufacturer's specifications. New furnace will have minimum limited warranties of 20 years on heat exchangers; 5 years on parts. Include auto setback thermostat controls, vent pipe & new shut-off valve. Rework cold air return if necessary to ensure easy access, good fit & easy replacement of air filter. An exterior return air filter box shall be installed on one side, both sides or bottom of new furnace. Seal all exposed duct joints with duct mastic. Remove all existing cloth duct tape prior to installing mastic.	
304	Replace Water Heater with Power	Replace water heater with a power-vented water heater with an EF of .67. Include pressure & temperature release	

	Vented .67 EF	valve, discharge tube to within 6" of floor and PVC flue to power vent to exterior.	
310	Replace Central Air Conditioning Unit	Install 16 SEER split system central air conditioning unit, following local building code. Using OEM performance information and industry-approved procedures, confirm that the selected equipment satisfies/meets the load requirements at the system design conditions.	
500	Seal Attic Bypasses	Contractor shall seal all attic bypasses. Bypasses shall be defined as any break in the envelope of a house between a heated living space and an unheated area or exterior. Bypass locations include, but are not limited to, the following areas: chimneys, soil stacks, end walls, dropped ceilings, open plumbing walls, beneath knee walls and around duct work, electrical work and attic access points. Bypasses shall be sealed in such a manner that the movement of air through the bypass is essentially stopped. "Essentially stopped" means that air leakage will not be detected by an infrared scan when the house is pressurized to 30 Pascals. Materials to be used for sealing bypasses depend on the size and location of the bypass and meet code requirements. These materials include high quality caulks (20-year life span), polyethylene rod stock, foam, sheetrock, sheet metal, extruded polystyrene and densely packed insulation.	**Eliminate upper bathroom corner cavity or seal well from attic.**
510	Blow Open Attic to R-50	All bypasses shall be sealed before insulating in such a manner that the movement of air through the bypass is essentially stopped. Blow insulation to depth indicated on manufacturer's coverage chart, consistently and evenly to R-	**Includes over slanted ceilings.**

		50. Insulation in the peak attic must be marked with a ruler to measure depth and a sign with the number of bags used and the date of the installation.	
530	Install Air Chutes as needed	When soffit vents are installed or existing, a passage for air movement shall be cleared before insulating. Baffles or chutes shall be installed to maintain the passage of free air. Attic areas below the baffle or chute shall be insulated to R-50 as space allows.	
532	Build Dam, insulate and weather strip attic hatch	Access hatch door to attic shall be insulated to R-44 and insulation dam constructed around opening. Opening shall be weather stripped to provide a tight seal.	
802	Air Seal and Insulate Rim Joist	Seal cracks and holes in rim joist before insulating. Caulk or foam 3 inches of rigid insulation in place. Or, apply two-part foam evenly and consistently according to manufacturer's instructions to insulate to R-10 around basement rim joist.	**Remove existing fiberglass batting.**
912	Insulate crawl space walls	Install poly on the ground. Affix 2” rigid board (Thermax) insulation with minimum R-value of 7 per inch. Alternately, apply two-part foam evenly and consistently according to manufacturer's instructions to insulate to R-10. Follow applicable code requirements.	**Remove existing fiberglass batting.**
1000	Install ENERGY STAR Rated Kitchen Fan	Install an ENERGY STAR rated exhaust fan connected with insulated rigid ductwork into a dampered vent.	
1010	Install ENERGY STAR Rated 2-	Install an ENERGY STAR rated two-speed bathroom fan .8	

	stage Bathroom Fan	sones or less, with a pre-set low-speed of 10-30 CFM and a high-speed boost capability of 70-110 CFM initiated by a wall switch or motion detector. Vent bathroom fan using rigid duct and insulated with fiberglass and vented out with dampered roof vent.	
1200	Replace incandescents with CFLs	Replace incandescent bulbs with ENERGY STAR rated compact fluorescent lights. Install fixtures that meet the lighting needs of the particular area.	
1210	Install ENERGY STAR Rated Washing Machine	Connect new ENERGY STAR rated clothes washer sized appropriately for the household. Use braided steel water supply lines and a smooth rubber drain line connected to a 2 inch drain with trap. Remove existing washer, recycle all metal components and dispose of all other materials in a code legal dump.	
1214	Install ENERGY STAR Rated Refrigerator	Install ENERGY STAR rated refrigerator sized appropriately for the household. Remove existing refrigerator, recycle all metal components and dispose of all other materials in a code legal dump.	
1218	Recessed lights	Remove the two existing recessed lights in the slanted ceilings or replace with air-tight models.	

Home Energy Rating Certificate

790 Case Ave E

St Paul, MN 55104

5 Stars
As Is

Uniform Energy Rating System — **Energy Efficient**

1 Star	1 Star Plus	2 Stars	2 Stars Plus	3 Stars	3 Stars Plus	4 Stars	4 Stars Plus	5 Stars	5 Stars Plus
500-401	400-301	300-251	250-201	200-151	150-101	100-91	90-86	85-71	70 or Less

HERS Index: **84**

General Information

Conditioned Area:	3036 sq. ft.	HouseType:	Single-family detached
Conditioned Volume:	22115 cubic ft.	Foundation:	Conditioned basement
Bedrooms:	4		

Mechanical Systems Features

Heating:	Fuel-fired air distribution, Natural gas, 90.0 AFUE.
Cooling:	Air conditioner, Electric, 9.0 SEER.
Water Heating:	Conventional, Natural gas, 0.62 EF, 40.0 Gal.
Duct Leakage to Outside:	RESNET/HERS default
Ventilation System:	None
Programmable Thermostat:	Heating: No Cooling: No

Building Shell Features

Ceiling Flat:	R-44	Exposed Floor:	R-19
Vaulted Ceiling:	NA	Window Type:	D W Op
Above Grade Walls:	R-19	**Infiltration:**	
Foundation Walls:	R-0.0	Rate:	Htg: 2200 Clg: 2200 CFM50
Slab:	R-0.0 Edge, R-0.0 Under	Method:	Blower door test

Lights and Appliance Features

Percent Interior Lighting:	0.00	Range/Oven Fuel:	Natural gas
Percent Garage Lighting:	0.00	Clothes Dryer Fuel:	Natural gas
Refrigerator (kWh/yr):	691.00	Clothes Dryer EF:	2.67
Dishwasher Energy Factor:	0.46	Ceiling Fan (cfm/Watt):	0.00

The Home Energy Rating Standard Disclosure for this home is available from the rating provider.

REM/Rate - Residential Energy Analysis and Rating Software v12.99

This information does not constitute any warranty of energy cost or savings.

Registry ID:
Rating Number:
Certified Energy Rater: Michael Childs
Rating Date: 12/3/12
Rating Ordered For: City of Saint Paul

Estimated Annual Energy Cost

As Is

Use	MMBtu	Cost	Percent
Heating	151.0	$1402	53%
Cooling	3.6	$107	4%
Hot Water	22.7	$205	8%
Lights/Appliances	33.9	$772	29%
Photovoltaics	-0.0	$-0	-0%
Service Charges		$180	7%
Total		**$2665**	**100%**

This home meets or exceeds the minimum criteria for all of the following:

TITLE
Company
Address
City, State, Zip
Phone #
Fax #

Home Energy Rating Certificate

790 Case Ave E

St Paul, MN 55104

5 Stars Plus
Projected Rating

Uniform Energy Rating System — **Energy Efficient**

1 Star	1 Star Plus	2 Stars	2 Stars Plus	3 Stars	3 Stars Plus	4 Stars	4 Stars Plus	5 Stars	5 Stars Plus
500-401	400-301	300-251	250-201	200-151	150-101	100-91	90-86	85-71	70 or Less

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Conditioned Area:	3036 sq. ft.	HouseType:	Single-family detached
Conditioned Volume:	22115 cubic ft.	Foundation:	Conditioned basement
Bedrooms:	4		

Mechanical Systems Features

Heating:	Fuel-fired air distribution, Natural gas, 96.0 AFUE.
Cooling:	Air conditioner, Electric, 16.0 SEER.
Water Heating:	Conventional, Natural gas, 0.67 EF, 40.0 Gal.
Duct Leakage to Outside:	86.00 CFM.
Ventilation System:	Exhaust Only: 80 cfm, 15.0 watts.
Programmable Thermostat:	Heating: Yes Cooling: Yes

Building Shell Features

Ceiling Flat:	R-50	Exposed Floor:	R-19
Vaulted Ceiling:	NA	Window Type:	NFRC .35 / .34
Above Grade Walls:	R-19	**Infiltration:**	
Foundation Walls:	R-0.0, R-10.0	Rate:	Htg: 1700 Clg: 1700 CFM50
Slab:	R-0.0 Edge, R-0.0 Under	Method:	Blower door test

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Percent Interior Lighting:	80.00	Range/Oven Fuel:	Natural gas
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Estimated Annual Energy Cost
Projected Rating

Use	MMBtu	Cost	Percent
Heating	100.9	$924	46%
Cooling	1.4	$43	2%
Hot Water	21.2	$191	10%
Lights/Appliances	29.8	$662	33%
Photovoltaics	-0.0	$-0	-0%
Service Charges		$180	9%
Total		**$1999**	**100%**

This home meets or exceeds the minimum criteria for all of the following:

TITLE
Company
Address
City, State, Zip
Phone #
Fax #

DEPARTMENT OF SAFETY AND INSPECTIONS
Ricardo X. Cervantes, Director

CITY OF SAINT PAUL
Christopher B. Coleman, Mayor

375 Jackson Street, Suite 220
Saint Paul, Minnesota 55101-1806

Telephone: 651-266-8989
Facsimile: 651-266-9124
Web: www.stpaul.gov/dsi

Code Compliance Report

December 24, 2012

*** * This Report must be Posted on the Job Site * ***

Housing & Redev Authority
25 Fourth St W #1100
St Paul MN 55102-1634

Re: 790 Case Ave
File#: 12 106484 VB2

Dear Property Owner:

The following is the Code Compliance report you requested on November 19, 2012.

Please be advised that this report is accurate and correct as of the date December 24, 2012. All deficiencies identified by the City after this date must also be corrected and all codes and ordinances must be complied with. This report is valid for 365 days from December 24, 2012. This report may be used in lieu of a Truth in Housing Report required in St Paul Legislative Code 189. This building must be properly secured and the property maintained at all times.

In order to sell or reoccupy this property the following deficiencies must be corrected:

BUILDING Inspector: Jim Seeger Phone: 651-266-9046

- Remove mold, mildew and moldy or water damaged materials.
- Install handrails (34 inches - 38 inches above each nosing) and guardrails (36 inch minimum) at all stairways, and return hand rail ends into a newel post or wall per attachment.
- Provide complete storms and screens, in good repair for all door and window openings.
- Prepare and paint interior and exterior as necessary. Observe necessary abatement procedures (EPA, MPCA and St. Paul Legislative Code, Chapter 34 for additional information) if lead base paint is present.
- Air-seal and insulate attic/access door.
- Install Smoke Detectors/Carbon Monoxide Detectors per MN Conservation Code and the MN Dept. of Labor and Industry: Install per code where feasible.
- Provide major clean-up of premises.
- Repair siding, soffit, fascia, trim, etc. as necessary.
- Install rain leaders to direct drainage away from foundation.
- Remove structure from between house and garage.
- Repair all damaged siding and trim.
- A building permit is required to correct the above deficiencies.

ELECTRICAL Inspector: Randy Klossner Phone: 651-266-8989

- Ground the electrical service to the water service with a copper conductor within 5 feet of the entrance point of the water service
- Repair or Replace all broken, missing or loose light fixtures, switches and outlets, covers and plates
- Check all outlets for proper polarity and verify ground on 3-prong outlets
- Install hard-wired, battery backup smoke detector and other smoke detectors as required by the IRC. Also, Install carbon monoxide detector(s) within 10 feet of all bedrooms
- Remove and or/ re-wire all illegal, improper or hazardous wiring in garage.
- Electrical Meter burned (possible lightning strike). Verify wiring throughout house ok before re energizing.
- Based on repair list purchase permit for service and six circuits.
- All added receptacles must be grounded, tamper-resistant and be on an Arc-Fault Circuit Interrupter-protected circuit.
- Any open walls or walls that are opened as part of this project must be wired to the standards of the current NEC.
- All electrical work must be done by a Minnesota-licensed electrical contractor under an electrical permit.

PLUMBING Inspector: Rick Jacobs Phone: 651-266-9054

- Basement - Water Heater - No gas shut off or gas piping incorrect (MFGC 402.1)
- Basement - Water Heater - not fired or in service (MPC 2180)
- Basement - Water Piping - provide water piping to all fixtures and appliances (MPC 1700)
- Basement - Water Piping - repair or replace all corroded, broken or leaking piping (MPC 4715.1720)
- Basement - Gas Piping - dryer gas shutoff; connector or piping incorrect (MFGC 411)
- Basement - Gas Piping - run dryer vent to code (MFGC 614.1 - 614.7)
- Basement - Soil and Waste Piping - improper connections, transitions, fittings or pipe usage (MPC 2420)
- Basement - Laundry Stand Pipe - unvented (MPC 0200 E)
- Basement - Laundry Stand Pipe - waste incorrect (MPC 2300)
- Basement - The Fire Sprinkler System has improper fittings in the basement ceiling and the system needs servicing including but not limited to the backflow preventer.
- Second Floor - Sink - waste incorrect (MPC 2300)
- Third Floor - Tub and Shower - provide stopper (MPC 1240)
- Third Floor - Tub and Shower - replace waste and overflow (MPC 1240)
- All Floors - Remove any unused waste, vent, water, or gas piping back to the main and cap or plug to code.
- Exterior - Piping Vents - vent pipes required (MPC 0200.E.)

PLUMBING Inspector: Rick Jacobs Phone: 651-266-9054

- All the above corrections to waste, vent, water, and gas piping shall be per the Minnesota Plumbing Code Chapter 4715 & Chapter 326, the Minnesota Mechanical Code, the Minnesota Fuel Gas Code, and the Saint Paul Regional Water Code. All plumbing must be done by a plumbing contractor licensed in the State of Minnesota and the City of St. Paul under an approved permit.

HEATING Inspector: Maureen Hanson Phone: 651-266-9043

- Clean and Orsat test furnace burner. Check all controls for proper operation. Check furnace heat exchanger for leak; provide documentation from a licensed contractor that the heating unit is safe
- Support PVC furnace exhaust and combustion air piping according to manufacturer's installation instructions.
- Vent clothes dryer to code
- Plug, cap and/or remove all disconnected gas lines
- Provide a window in the bathrooms with an aggregate glazing area of not less than 3 square feet, one-half of which must be openable or provide exhaust system vented to outside. A mechanical ventilation permit is required if an exhaust system is installed.
- All supply and return ducts for warm air heating system must be clean before final approval for occupancy. Provide access for inspection of inside of ducts or provide documentation from a licensed duct-cleaning contractor that the duct system has been cleaned.
- Repair and/or replace heating registers as necessary
- Provide heat in every habitable room and bathrooms
- Run condensate drain from A/C unit coil and furnace to an approved location.
- Seal and insulate kitchen exhaust duct.
- Mechanical gas and ventilation permits are required for the above work.

ZONING

1. This property is in a(n) RT1 zoning district.
2. This property was inspected as a Single Family Dwelling.

Notes:

- See attachment for permit requirements and appeals procedure.
- Roof, sidewalks, etc. snow covered and could not be inspected. All must meet appropriate codes when completed.

This is a registered vacant building. In order to sell or reoccupy this building, all deficiencies listed on this code compliance report must be corrected in accordance with the Minimum Housing Standards of the St. Paul Legislative Code (Chapter 34) and all required permits must receive final approval within six (6) months of the date of this report. One (1) six-month time extension may be requested by the owner and will be considered if it can be shown that the code compliance work is proceeding and is more than fifty (50) percent complete in accordance with Legislative Code Section 33.03(f).

You may file an appeal to this notice by contacting the City Clerk's Office at 651-266-8688. Any appeal must be made in writing within 10 days of this notice. (You must submit a copy of this notice when you appeal, and pay a filing fee.)

If you have any questions regarding this inspection report, please contact Jim Seeger between 7:30 - 9:00 AM at 651-266-9046 or leave a voice mail message.

Sincerely,

James L. Seeger
Code Compliance Officer
Department of Safety and Inspections
City of Saint Paul
375 Jackson Street, Suite 220
Saint Paul MN 55101
Phone: 651-266-9046
Email: james.seeger@ci.stpaul.mn.us

JLS:ml
Attachments

AllPhase Companies, Incorporated
404-A St. Croix Trail North, Lakeland, MN 55043
Phone: 651-436-2930 Fax: 651-436-3918

September 19, 2014

Cynthia Carlson Heins
Real Estate Manager
Planning and Economic Development
Suite 1100, 25 West 4th Street
Saint Paul, MN 55102

RE: Asbestos Survey
790 Case Avenue, St. Paul, Minnesota
1596-14S-1

Dear Ms. Cynthia Carlson Heins:

AllPhase Companies, Incorporated, (AllPhase) performed an asbestos survey at the above referenced site in connection with a renovation in order to identify Asbestos-Containing Material (ACM), which is a building material that has greater than 1% asbestos. The following report contains the results of the survey performed at the above referenced site.

In summary, 16 samples of building materials were collected and analyzed for asbestos type and amount. Asbestos was not detected above 1 percent in the **16 samples**. These samples only represent building materials that were collected from the referenced building structure.

Refer to the asbestos Laboratory Report and chain of custody for other building materials tested and their locations.

No Building materials samples collected and analyzed detected the presence of asbestos

Friable ACM, is defined by the Asbestos NESHAP, as any material containing more than one percent (1%) asbestos as determined using the method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1, Polarized Light Microscopy (PLM), that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure. (Sec. 61.141)

Nonfriable ACM is any material containing more than one percent (1%) asbestos as determined using the method specified in Appendix A, Supbart F, 40 CFR Part 763, Section 1, Polarized Light Microscopy (PLM), that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure. EPA also defines two categories of nonfriable ACM, Category I and Category II nonfriable ACM, which are described later in this guidance.

"Regulated Asbestos-Containing Material" (RACM) is (a) friable asbestos material, (b) Category I nonfriable ACM that has become friable, (c) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting or abrading, or (d) Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

This survey is an attempt to identify ACM. However, there is no guarantee that all potential ACM was identified. As a rehabilitation, wall interiors were not assessed. If suspect ACM is discovered during the work and is not listed in this or previous limited surveys, work on that portion of the building should cease, the material wetted and covered, and an asbestos inspector brought to the site to sample and submit to a certified laboratory the sample to determine its asbestos content. Pending analytical results, an abatement crew should remove the ACM before work continues.

INTRODUCTION

The scope of our services was to conduct an asbestos survey, which includes collecting a small portion of the building

materials and submitting the sample to a certified laboratory for analysis by PLM. Analysis only assesses the portion of building material collected and submitted.

A. Collect bulk samples of suspect ACMs for laboratory analysis.
B. Analyze the collected samples for asbestos content.

Minnesota requires surveys to be performed by a Minnesota Certified Inspector.

Samples of suspect ACMs were collected by AllPhase by removing a small portion of the suspect material and then placing the individual samples into separate sealed containers.

DISCLAIMERS

Asbestos surveys do not necessarily succeed in identifying all locations and types of ACM on-site. This is because of the variety of locations and the inconsistency of asbestos occurrence in a given building material. Our survey is based solely upon the building materials that were observed and sampled for analysis. Therefore, if unsampled building materials are encountered during the demolition, they should be assessed on a material-by-material basis. If suspect ACM is observed which has not been listed in our evaluation, it should be collected and evaluated by a certified individual and laboratory, respectively. If there is a potential for that material to be ACM, work should stop until the question of asbestos content and/or abatement is resolved in a manner that protects human health and the environment and abides by regulatory guidelines.

Certain building materials are not considered suspect ACM and are not sampled as part of the survey. These materials include but are not limited to wood, concrete (with exceptions), plastics such as polyethylene, polystyrene and polyvinylchloride, fiberglass, rubber (natural and neoprene—black synthetic), foam insulation, metals and glass.

METHODOLOGY

Building materials were analyzed by a NVLAP-accredited laboratory, #101768-0. Laboratory analysis was conducted in accordance with Environmental Protection Agency (EPA) guidelines. The examination for the presence and identification of asbestos fibers in bulk samples is performed in the laboratory using cross-polarized light microscopy and dispersion-staining, particle-identification techniques. Analysis was performed in accordance with EPA 600/M4-82-020 and EPA 600/R-93/116 where applicable. This methodology determines the presence of asbestos varieties, which include Chrysotile, Amosite, Crocidolite, Anthophyllite, Tremolite and Actinolite.

REMARKS

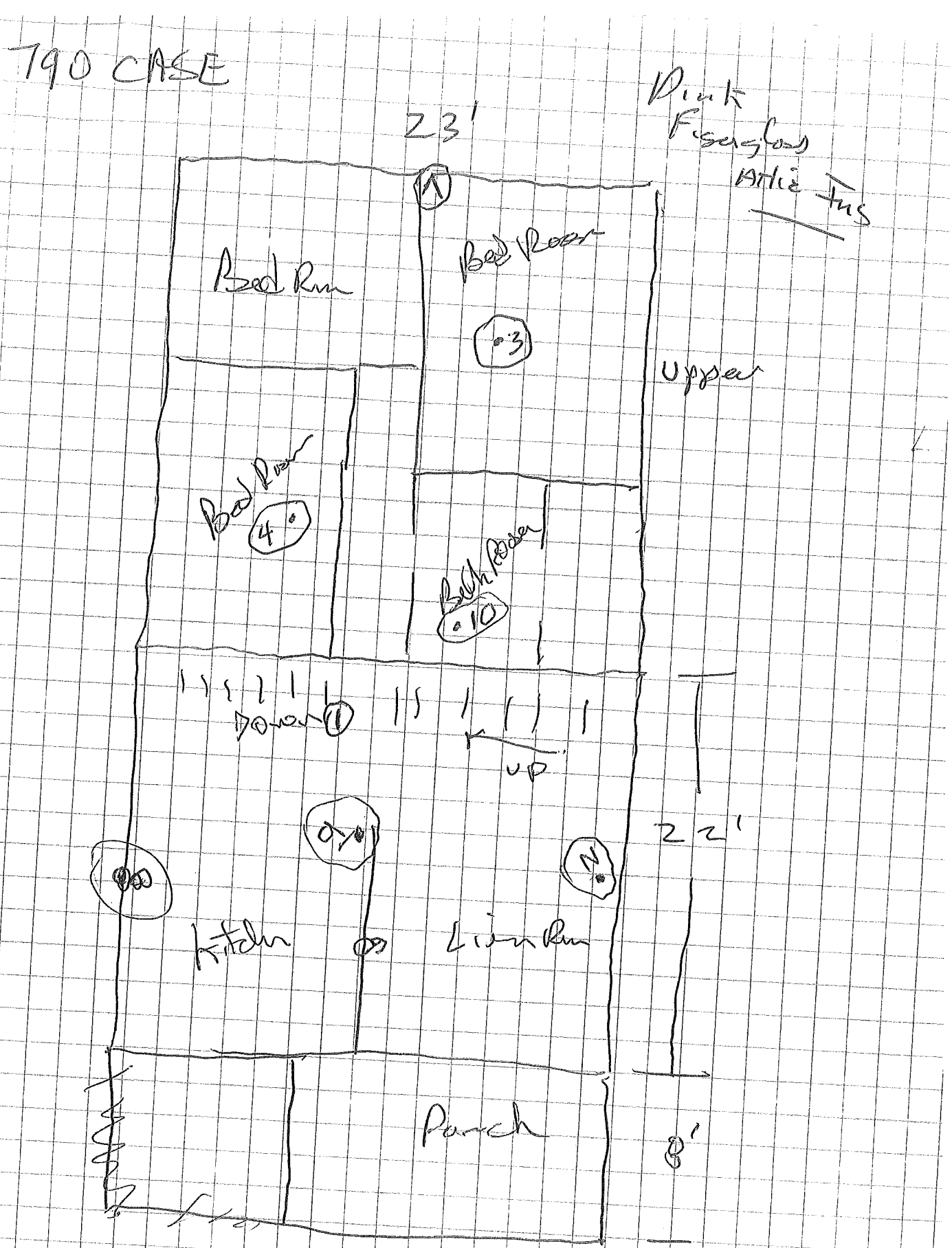
Some of the rules and regulations set by the Environmental Protection Agency (EPA) may apply when the existence of ACMs is confirmed. A complete review of these rules can be found in Part 3 of the Federal Register EPA, 40 CFR Part 61. Summaries of these rules are as follows:

> According to §61.145 of NESHAPS, friable ACMs must be removed from the site prior to demolition. This includes materials that were originally non-friable but have become friable—that is, Category I & II material—due to damage or deterioration—for example, floor tile that has significant chipping or cracking. The necessity for the removal of Category I and II material is evaluated on a site-by-site basis.
>
> Disturbing ACM may require that the Minnesota Pollution Control Agency and/or the Minnesota Department of Health be notified prior to activities with asbestos.

The environmental services performed by AllPhase's survey crew and analyst for this project have been conducted in a manner consistent with the degree of care and technical skill exercised by environmental professionals currently

practicing in this area under similar budget and time constraints. Recommendations contained in this report represent our professional judgment at the time the project was performed. No other warranty is intended or implied.

Rennie Smith, P.G.
Asbestos Inspector (#AI3119)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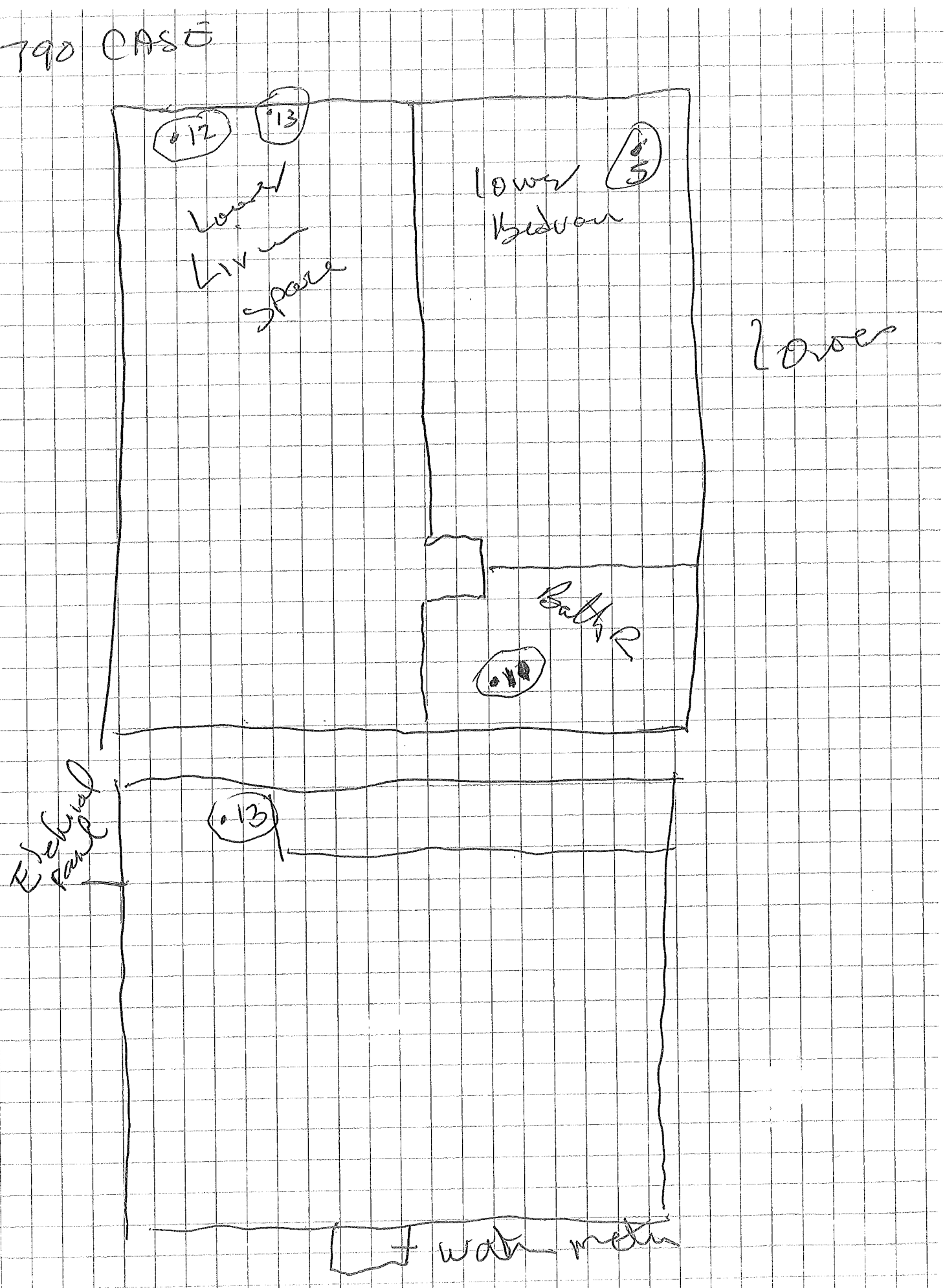
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EMLab P&K
A TestAmerica Company

Report for:

Rennie Smith
AllPhase Companies, INC
404A St Croix Trail N
Lakeland, MN 55043

Regarding: Project: 790 Case
EML ID: 1262079

Approved by:

Alana Valenzuela

Approved Signatory
Alana Valenzuela

Dates of Analysis:
Asbestos PLM: 09-19-2014

Service SOPs: Asbestos PLM (EPA Methods 600/R-93/116 & 600/M4-82-020, SOP EM-AS-S-1267)

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the items tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

EMLab P&K
3000 Lincoln Drive East, Suite A, Marlton, NJ 08053
(866) 871-1984 Fax (856) 489-4085 www.emlab.com

Client: AllPhase Companies, INC
C/O: Rennie Smith
Re: 790 Case

Date of Sampling: 09-12-2014
Date of Receipt: 09-16-2014
Date of Report: 09-19-2014

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Total Samples Submitted:	14
Total Samples Analysed:	14
Total Samples with Layer Asbestos Content > 1%:	0

Location: 1, Kitchen Ceiling Spray Lab ID-Version‡: 5742850-1

Sample Layers	Asbestos Content
White Ceiling Texture	ND
Sample Composite Homogeneity:	Good

Location: 2, Living Rm Ceiling Spray Lab ID-Version‡: 5742851-1

Sample Layers	Asbestos Content
White Ceiling Texture	ND
Sample Composite Homogeneity:	Good

Location: 3, Upper Bed Rm Ceiling Spray SW Lab ID-Version‡: 5742852-1

Sample Layers	Asbestos Content
White Ceiling Texture	ND
Sample Composite Homogeneity:	Good

Location: 4, Upper Bed Rm Ceiling Spray W Lab ID-Version‡: 5742853-1

Sample Layers	Asbestos Content
White Ceiling Texture	ND
Sample Composite Homogeneity:	Good

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

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3000 Lincoln Drive East, Suite A, Marlton, NJ 08053
(866) 871-1984 Fax (856) 489-4085 www.emlab.com

Client: AllPhase Companies, INC
C/O: Rennie Smith
Re: 790 Case

Date of Sampling: 09-12-2014
Date of Receipt: 09-16-2014
Date of Report: 09-19-2014

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 5, Lower Bed Rm Ceiling Spray Lab ID-Version‡: 5742854-1

Sample Layers	Asbestos Content
White Ceiling Texture	ND
Sample Composite Homogeneity:	Good

Location: 6, Sheet Rock Living Rm Lab ID-Version‡: 5742855-1

Sample Layers	Asbestos Content
Blue Paint / White Compound	ND
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 7, Sheet Rock Bed Rm Lab ID-Version‡: 5742856-1

Sample Layers	Asbestos Content
White Paint / White Compound	ND
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 8, SheFlrg Kitchenet Rock Kitchen Lab ID-Version‡: 5742857-1

Sample Layers	Asbestos Content
White Drywall with Brown Paper / Red Paint	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

EMLab P&K
3000 Lincoln Drive East, Suite A, Marlton, NJ 08053
(866) 871-1984 Fax (856) 489-4085 www.emlab.com

Client: AllPhase Companies, INC
C/O: Rennie Smith
Re: 790 Case

Date of Sampling: 09-12-2014
Date of Receipt: 09-16-2014
Date of Report: 09-19-2014

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 9, Flrg Kitchen Lab ID-Version‡: 5742858-1

Sample Layers	Asbestos Content
Beige Sheet Flooring with Fibrous Backing	ND
Composite Non-Asbestos Content:	35% Cellulose 2% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 10, Flrg Upper bathrm Lab ID-Version‡: 5742859-1

Sample Layers	Asbestos Content
White Sheet Flooring with Fibrous Backing	ND
Composite Non-Asbestos Content:	35% Cellulose < 1% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 11, Flrg Lower bathrm Lab ID-Version‡: 5742860-1

Sample Layers	Asbestos Content
Beige Sheet Flooring	ND
Sample Composite Homogeneity:	Moderate

Location: 12, Lower Back Door Flg Lab ID-Version‡: 5742861-1

Sample Layers	Asbestos Content
Beige Sheet Flooring with Fibrous Backing	ND
Composite Non-Asbestos Content:	65% Cellulose
Sample Composite Homogeneity:	Moderate

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the mininum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than I indicates a sample with amended data. The revision number is reflected by the value of "x".

EMLab P&K
3000 Lincoln Drive East, Suite A, Marlton, NJ 08053
(866) 871-1984 Fax (856) 489-4085 www.emlab.com

Client: AllPhase Companies, INC
C/O: Rennie Smith
Re: 790 Case

Date of Sampling: 09-12-2014
Date of Receipt: 09-16-2014
Date of Report: 09-19-2014

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 13, Bsmt Ceiling Tile

Lab ID-Version‡: 5742862-1

Sample Layers	Asbestos Content
Light Brown Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	50% Cellulose 25% Mineral Wool
Sample Composite Homogeneity:	Moderate

Location: 14, Sheet Rock Lower Backdoor

Lab ID-Version‡: 5742863-1

Sample Layers	Asbestos Content
White Compound	ND
Sample Composite Homogeneity:	Moderate

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

CHAIN OF CUSTODY
www.EMLabPK.com

EMLab P&K
A TestAmerica Company

Cherry Hill, NJ: 1936 Olney Avenue, Cherry Hill, NJ 08003 * (866) 871-1984
Phoenix, AZ: 1501 West Knudsen drive, Phoenix, AZ 85027 * (800) 651-4802
San Bruno, CA: 1150 Bayhill Drive, #100, San Bruno, CA 94066 * (866) 888-6653

001262079

Weather	Fog	Rain	Snow	Wind	Clear
None	☐	☐	☐	☐	
Light	☐	☐	☐	☐	
Moderate	☐	☐	☐	☐	
Heavy	☐	☐	☐	☐	

CONTACT INFORMATION

Company: AllPhase Companies, Inc.
Address: 404-A St. Croix Trl N., Lakeland, MN 55043
Contact: Kennie Smith
Special Instructions:
Phone: 651-436-2930

PROJECT INFORMATION

Project ID: 790 Case
Project Description:
Project Zip Code:
Sampling Date & Time: 9-12-14
PO Number: 790 Case

TURN AROUND TIME CODES (TAT)

- STD – Standard (DEFAULT)
- ND – Next Business Day
- SD – Same Business Day Rush
- WH – Weekend / Holiday

Rushes received after 2pm or on weekends will be considered received the next business day. Please alert us in advance of weekend analysis needs.

REQUESTED (Use check)

Non-Culturable: Spore Trap; Tape, Swab, Bulk
Culturable: BioCassette™, Andersen, SAS, Swab, Water, Bulk, Dust, Soil, Contact Plates
Other Requests

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume / Area (if applicable)	Notes	Fungi – Spore Trap Analysis	Spore Trap Analysis – Other particles	Direct Microscopic Exam (Qualitative)	Quantitative Spore Count Direct Exam	1-Media Surface Fungi (Genus ID + Asp. spp.)	2-Media Surface Fungi (Genus ID + Asp. spp.)	3-Media Surface Fungi (Genus ID + Asp. spp.)	Culturable Air Fungi (Genus ID + Asp. spp.)	Gram Stain & Counts (Culturable Air & Surface Bacteria)	Legionella culture	Total Coliform, E. coli (Presence/Absence)	Membrane Filtration (specify organism):	MPN Bacteria (specify organism):	QuantiTray – Sewage Screen	Asbestos Analysis – PCM Airborne Fiber Count (NIOSH 7400)	Asbestos Analysis – PLM (EPA method 600/R-93-116)	PCR (specify test):	Specify Service
1	Kitchen Ceiling Spg	B	Std			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
2	Living Rm " "					☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
3	Upper Bed Rm " " SW					☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
4	" " " " " W					☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
5	Lower " " " "					☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
6	Sheet Rock Living Rm					☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
7	" " Bed Rm					☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
8	" " Kitchen					☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
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SAMPLE TYPE CODES

BC – BioCassette™	ST – Spore Trap: Zefon, Allergenco, Burkard ...	T – Tape	D – Dust
A1S – Andersen		SW – Swab	SO – Soil
SAS – Surface Air Sampler	P – Potable Water	B – Bulk	
CP – Contact Plate	NP – Non-Potable Water	O – Other:	

RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
Renn	9-12-14		10:15 9/16/14

By submitting this Chain of Custody, you agree to be bound by the terms and conditions set forth at http://www.emlab.com/s/main/serviceterms.html

Pg 1 of 2

CHAIN OF CUSTODY

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Cherry Hill, NJ: 1336 Olney Avenue, Cherry Hill, NJ 08003 * (866) 871-1984
Phoenix, AZ: 1501 West Knudsen drive, Phoenix, AZ 85027 * (800) 651-4802
San Bruno, CA: 1150 Bayhill Drive, #100, San Bruno, CA 94066 * (866) 688-6853

Weather	Fog	Rain	Snow	Wind	Clear
None	☐	☐	☐	☐	
Light	☐	☐	☐	☐	
Moderate	☐	☐	☐	☐	
Heavy	☐	☐	☐	☐	

001262079

CONTACT INFORMATION

Company:	All Phase Companies, Inc.	Address: 4034 # 52 Circle Trl N, Lakeland, MN 55043	
Contact:	Kenrin Smith	Special Instructions:	
Phone:	651-436-2930		

PROJECT INFORMATION

Project ID:	790 CASE	Sampling Date & Time:	9-12-14
Project Description:			
Project Zip Code:			
PO Number:	790 CASE		

TURN AROUND TIME CODES (TAT)

STD – Standard (DEFAULT)
ND – Next Business Day
SD – Same Business Day Rush
WH – Weekend / Holiday

Rush requests received after 2 PM will be considered received the next business day. Please call to confirm all rush requests. Rush surcharges may apply.

REQUESTED ANALYSIS

Non-Culturable: Spore Trap; Tape Swab Bulk

Culturable: BioCassette™, Andersen Water, Bulk, Dust, Soil, ...

Sample ID	Description	Sample Type (table)	TAT (table)	Total Volume / Area (as applicable)	Notes / Hours of Operation
12	Lower Back Door Rg	B	Std		
13	Bsmt Ceiling	1	1		
14	Sheet rock long Back door	1	1		

Fungi – Spore Trap Analysis	Spore Trap Analysis – Other particles	Direct Microscopic Exam (Qualitative)	Quantitative Spore Count Direct Exam	1-Media Surface Fungi (Genus ID + Asp. spp.)	2-Media Surface Fungi (Genus ID + Asp. spp.)	3-Media Surface Fungi (Genus ID + Asp. spp.)	Culturable Air Fungi (Genus ID + Asp. spp.)	Gram Stain & Counts (Culturable Air & Surface Bacteria)	Legionella culture	Total Coliform, E. coli (Presence/Absence)	Membrane Filtration (specify organism):	MPN Bacteria (specify organism):	Quanti-Tray – Sewage Screen	Asbestos Analysis – PCM Airborne Fiber Count (NIOSH 7400)	Asbestos Analysis – PLM (EPA method 600/R-93-116)	PCR (specify test):	Specify Service
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
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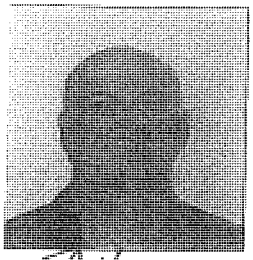
SAMPLE TYPE CODES

BC – BioCassette™	ST – Spore Trap: Zefon, Allergenco, Burkard ...	T – Tape	D – Dust
AtS – Andersen		SW – Swab	SO – Soil
SAS – Surface Air Sampler	P – Potable Water	B – Bulk	
CP – Contact Plate	NP – Non-Potable Water	O – Other:	

RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
			1075
			9/16/14



MDH ASBESTOS INSPECTOR

Certified by:
State of Minnesota
Department of Health
Expires: 07/07/2015

Rennie N Smith
397 169th Ave
Somerset, WI 54025

Director, Env. Health Div.

No. AI3119 Issued: 07/08/2014

Midwest
Environmental
Consulting, L.L.C.

October 28, 2014

Rennie Smith
All Phase Companies, Inc.
404A St. Croix Trail North
Lakeland MN 55043

RE: HUD Lead-Based Paint Inspection and Risk Assessment at the Single Family Residential Property, 790 Case Avenue, St. Paul, Minnesota (All Phase Phone: 651-436-2930)

Dear Rennie Smith:

At your request, Midwest Environmental Consulting, L.L.C. (MEC) performed a HUD lead-based paint inspection and risk assessment of the single family residential located at 790 Case Avenue, St. Paul, Minnesota on October 21, 2014.

Andrew Myers, Environmental Project Manager with MEC and licensed lead risk assessor (MN LR #578) with MEC performed all field work associated with this project. MEC credentials can be found in Appendix A.

The purpose of this project was to determine whether lead-based paint or other lead hazards are present on the interior or exterior surfaces of the residential property. This report contains the results of the HUD lead-based paint inspection and risk assessment.

The inspection was conducted following the Housing and Urban Development (HUD) *"Guidelines for the Evaluation and Control of Lead-Based Paint in Housing,"* (2012 revision). The sampling criteria used are those outlined in the HUD Standards 24 CFR Part 35 et al, "*Requirements for Notification Evaluation and Education of Lead-Based Paint Hazards in Federally Owned Residential Property and Housing Receiving Federal Assistance.*" Also included, is an evaluation for lead dust hazards and bare soil hazards as part of the risk assessment.

According to HUD protocol, if the first 5 of a building component are identified as positive for lead-based paint, the remaining like components are assumed to be lead-based paint containing. (More than 5 window systems were tested as a part of this evaluation).

SITE DESCRIPTION

The single family residential property located at 790 Case Avenue, St. Paul, Minnesota is a multi-story wood framed structure built on a concrete foundation/basement constructed in approximately the mid 1900's. Previous renovations have occurred in the property with unknown construction dates. The interior walls & ceilings are primarily drywall. The basement level has severe microbial growth contamination. The windows are primarily wood crank out style windows. The exterior has vinyl siding with metal soffits & fascia. There is a detached wood framed and vinyl sided garage at the rear of the property with alley access. No bare soil was observed around the foundation of the house.

The property is currently vacant.

RESULTS OF PAINT INSPECTION

MEC used a paint inspection sampling strategy as described in the HUD *Guidelines* (2012 revision). The results of portable X-Ray Fluorescence (XRF) spectrum analysis of representative building components in each functional area or room are shown in Appendix B. Results are organized and shown in actual sequence of analysis. All tests were made using a Niton® XLp 303A X-Ray Fluorescence Spectrum Analyzers (Serial # 26848).

XRF analytical results in Appendix B, in the column labeled "Results" represent lead concentrations per square centimeter of painted surface (mg/cm^2).

HUD regulations 24 CFR Part 35 et al, the HUD *Guidelines* and the Minnesota Department of Health (MDH) define the paint action level as lead concentrations at or above the level of 1.0 mg/cm^2 when measured with a portable XRF instrument (0.5% by weight when measured by laboratory methods).

The lead-based paint risk assessment protocol described in the HUD *Guidelines* and the EPA regulations rely on evaluation of surface coatings meeting the definition of poor, planned renovations, presence of dust and soil above current EPA and Minnesota Department of Health (MDH) Standards.

Tests are performed on each test combination. A test combination consists of unique combinations of substrate, color, building component, and location.
XRF results are classified as positive or negative. A positive classification indicates that lead is present on the testing combination at or above the HUD standards. It's important to note that the limited inspection of surfaces tested only applies to those surfaces areas tested and does not meet the requirements of a full HUD lead-based paint inspection and those surface areas not tested would be assumed to contain lead-based paint.

Appendix B includes a record of XRF calibration checks. Those checks were performed on thin films supplied by the XRF manufacturer; they contain known concentrations of lead. The graphs in that appendix show the variation of quality control with time. The assays in the table of raw data (Appendix B) that are labeled "Calibrate" indicate that they are for quality control. Additional quality control data and information are available to you upon request.

Side A: North, faces Case Avenue
Side B: East, faces residential properties
Side C: South, faces garage & alley
Side D: West, faces residential

Specific building components determined to have a lead concentration above the action level of (1.0 mg/cm^2) are listed below:

LOCATION	COMPONENT
None	None

Also included in Appendix B of this report is a rating of the condition of paint on components (column titled "Condition"). Comments on the condition include:

Intact: good condition; **Fair:** less than 2 square feet of damage to large interior surface, i.e., wall, less than 10 square feet of damage to large exterior surface, i.e., outside walls, or less than 10% damage to small surface areas, i.e., baseboards, trim, etc.; **Poor:** more than 2 square feet of damage on large interior surfaces, more than 10 square feet of damage to large exterior surface areas, or more than 10% damage to small surface areas.

RESULTS OF LEAD RISK ASSESSMENT

The risk assessment portion of this investigation involved two major phases: collecting information about the property through use of a visual inspection of the dwelling; and reviewing paint test data, and visual assessment notes in order to determine the type, location, and number of samples needed to further identify lead hazards at the property. These samples may consist of paint, dust, soil, and water.

- The date of construction of the residence is approximately the md1900's.
- The property is currently set up as a single family structure.
- Interior walls & ceilings are primarily drywall.
- Window systems are primarily wood crank out style windows.
- The basement level has severe microbial contamination.
- Previous renovations have occurred at the property.

- The exterior siding is vinyl.
- The exterior has metal soffits, fascia & trim.
- The property is currently vacant.
- Bare soil was not observed around the foundation.

Visual Inspection

MEC conducted an inspection of painted and varnished surfaces on the interior and exterior of the residence. Emphasis was placed on chewable surfaces within 5 feet of the ground or floor.

The results of the visual inspection indicate that the interior and the exterior of the structure are mainly in intact condition in the upper levels and in poor condition in the basement level.

Please note, however, the condition report within the XRF table for painted or varnished surfaces found to be fair or poor, that were below the 1.0 mg/cm^2 action level.

Environmental Sampling Plan

Based on the location of lead-based paint, deteriorated lead-based paint, and information gathered during the visual inspection, MEC formulated the following environmental sampling plan to identify other lead hazards on this property. Water samples were not collected as they were not part of the scope of work for this project. Bare soil was not observed and no bare soil samples were collected.

Samples were collected and delivered to EMSL Laboratory (ELLAP 163162), Minneapolis, Minnesota, where they were prepared and analyzed using current appropriate protocols for lead. Laboratory results for environmental samples may be found in Appendix C.

Analytical results are reported below for each sample and compared to standard action levels that have been identified for this project.

SAMPLE # DATE	LOCATION	RESULT	PROJECT ACTION LEVEL
502/1014A-W1 10/21/14	Porch, Side A, entry, floor	<10 $\mu g/ft^2$	40 $\mu g/ft^2$
502/1014A-W2 10/21/14	Kitchen, Side B, entry, floor	<10 $\mu g/ft^2$	40 $\mu g/ft^2$

502/1014A-W3 10/21/14	Kitchen, Side B, entry, window stool	<40 µg/ft^2	250 µg/ft^2
502/1014A-W4 10/21/14	Bedroom 3, Side C, window stool	<40 µg/ft^2	250 µg/ft^2
502/1014A-W5 10/21/14	Bedroom 3, Side C, floor	<10 µg/ft^2	40 µg/ft^2
502/1014A-W6 10/21/14	Family Room, Side C, floor	<10 µg/ft^2	40 µg/ft^2
502/1014A-W7 10/21/14	Family Room, Side B, window stool	<40 µg/ft^2	250 µg/ft^2
502/1014A-W8 10/21/14	Basement, floor, middle	<10 µg/ft^2	40 µg/ft^2
502/1014A-W9 10/21/14	Blind Field Blank	<10 µg/ft^2	----------

* Unit Abbreviations: µg/ft^2 = micrograms per square foot

Dust wipe samples were collected from the residence, however, water and sodium rhodizonate swabs were not collected as part of this project. Bare soil was not observed around the foundation and no bare soil samples were collected.

RECOMMENDATIONS

Lead-based paint or lead hazards were not found during the inspection and risk assessment of the property. Microbial contamination was observed in the property.

According to HUD protocol, if the first 5 of a building component are identified as positive for lead-based paint, the remaining like components are assumed to be lead-based paint containing.

Lead Dust:
Dust was not identified as a lead hazard on window and floor surfaces tested on the day of the site evaluation.

Bare Soil:
Bare soil was not observed around the foundation and no bare soil samples were collected. If renovation activities cause bare soil to be present, the bare soil should be assumed to be above the action level and should be remediated by covering with seed, sod, rocks, mulch or other materials.

DISCUSSION

The mere presence of lead-coated surfaces does not create a lead hazard. Maintenance of lead containing coatings will prevent lead from becoming a hazard. Lead-based paint above the action level of 1.0 mg/cm^2 were not found on surfaces tested.

Because exterior surfaces are to be remediated, covering the ground and providing adequate protection to soil is very important. Bare soil was not observed or tested on the day of the site visit. If renovation activities cause bare soil to be present, it must be assumed to be above the action levels unless further testing indicates otherwise. Any bare soil should be covered with seed, sod, rocks, mulch or other materials.

Dust wipe samples collected found lead dust levels below the action levels on floor and window surfaces tested as defined by MDH, HUD and EPA in the sampling locations tested.

The preceding lead reduction recommendations include different ways to treat each lead hazard that was identified by the risk assessment/inspection. The most effective treatments are considered abatement and require little or no ongoing maintenance to preserve a lead safe environment. The less effective treatments are called interim controls and these treatments require an increased amount of ongoing maintenance to preserve a lead safe environment.

If no lead dust, soil, or lead-based paint is found, then no monitoring is required.

If no hazards are found, but lead-based paint is found, then reevaluation should occur every three years, and an owner's visual survey should occur annually.

If lead dust, soil, or lead-based paint hazards are found to be present, choosing the option with removal of all lead-based paint will result in no monitoring requirements. If abatement options are chosen that include enclosure, then no re-evaluation is required, but the owner should conduct visual surveys every year to ensure the enclosure has not failed. If the interim control options (stabilize and paint) are chosen, then re-evaluation should occur after the first year and then every two years after that. Visual surveys by the owner should occur annually.

If lead dust levels are found to be more than ten times the standard levels, then reevaluation after interim control measures should occur six months after the hazard reduction.

In general, all painted surfaces should be monitored. A negative result does not necessarily indicate that no lead is present in that surface, but rather indicates that any lead present in that surface does not rise above the 1.0 mg/cm^2 threshold in the areas

tested. Therefore, all painted surfaces should be maintained in accordance with the Minnesota Department of Health standards.

ROUGH ESTIMATED COSTS:

- Work site preparation for interior, approximately $75.00 to $250.00 per room.
- Window replacement, approximately $150.00 and up, depending on style.
- Exterior preparation approximately $35.00 to $75.00 per component (i.e., windows, doors), removal or enclosure.
- Work area cleaning: $0.15 to $0.35 per square foot.
- Paint stabilization: $0.20 to $0.65 per square foot.
- Removal: Paint - chemical stripper: $0.65 to $1.50 square foot.
- Soil Remediation:
  a. Clean-up of visible exterior paint chips: $0.90 to $1.35 square foot.
  b. Seed and tack grass: $0.45 to $0.75 square foot.
  c. Sod: $1.25 to $3.30 square foot.
  d. Regrade at foundation and sod: $3.00 to $5.00 square foot.
  e. Mulch - 4": $0.50 to $0.90 square foot.
  f. Concrete: $4.50 to $8.00 square foot.
  g. Replace soil: $42.00 to $65.00 cubic yard.

If work is going to be performed on these surfaces, individuals and/or contractors should be informed of the results of testing. At a minimum, the person(s) performing the work should follow the requirements of the Occupational Safety and Health Administration (OSHA) Standard 29 CFR 1926.62, Lead in the Construction Industry.

Please maintain a copy of the lead inspection/risk assessment report for your records and provide a copy of the report to any contractors that may be involved in any future renovations or remodeling projects.

A copy of this lead inspection/risk assessment summary must be provided to purchasers or lessees (tenants) of this property under Federal Law (24 CFR Part 35 and 40 CFR part 745) before they become obligated under a lease or sales contract.

The complete report must also be provided to new purchasers and it must be made available to new tenants. Landlords (lessors) and sellers are also required to distribute an educational pamphlet approved by the U.S. Environmental Protection Agency 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.

It has been our pleasure to provide this service to you and your organization. Please contact me if you have questions relating to any aspect of this work.

Respectfully submitted,

Andrew Myers
Environmental Services Project Manager

APPENDIX A

INSPECTOR CREDENTIALS

MINNESOTA DEPARTMENT OF HEALTH

has authorized

MIDWEST ENVIRONMENTAL CONSULTING, LLC
125 RAILROAD AVE SW
MORA, MINNESOTA 55051

In accordance with Minnesota Statutes, section 144.9505 and Minnesota Rules, part 4761.2200, to practice in the State of Minnesota as a

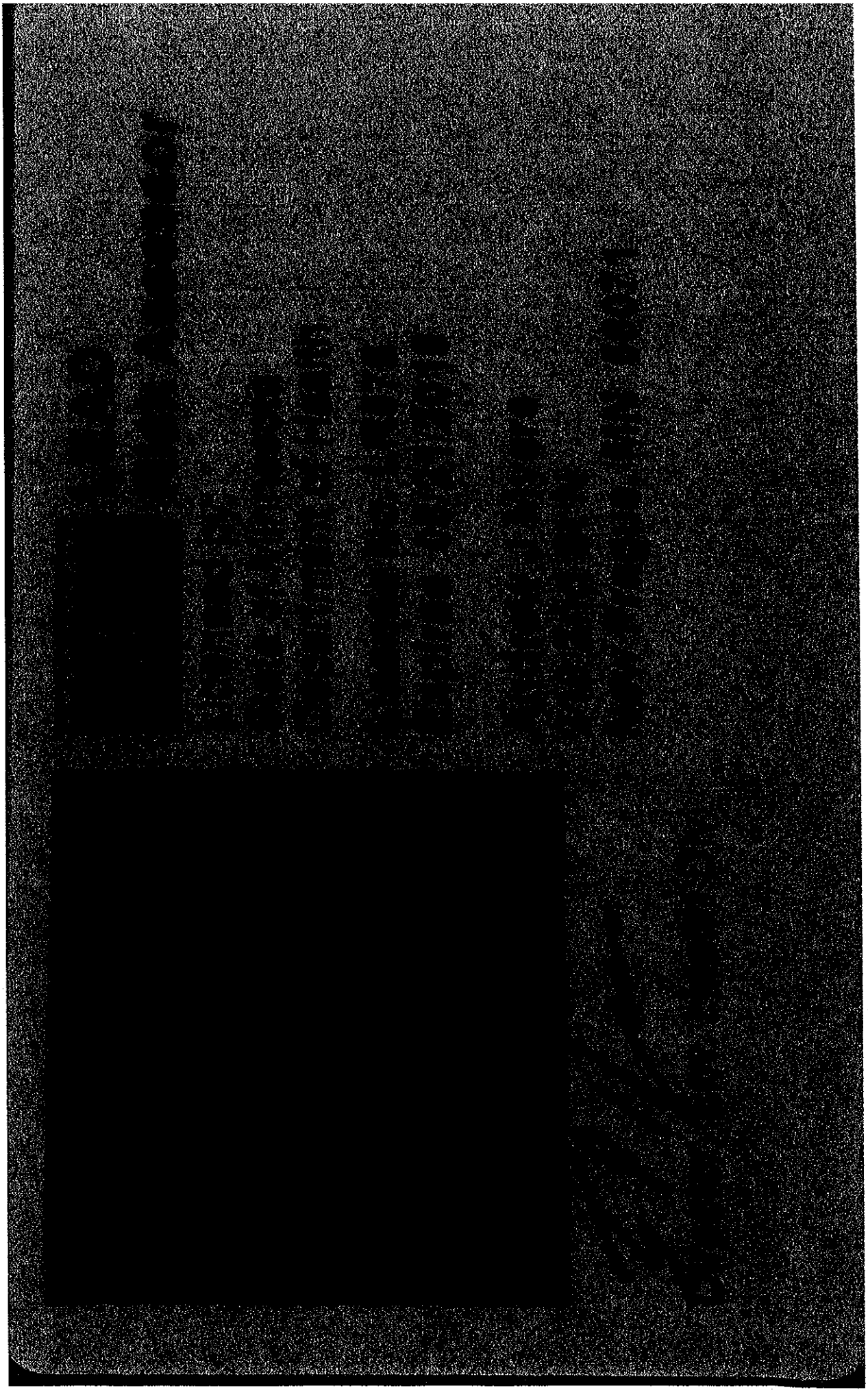
CERTIFIED LEAD FIRM

LICENSE NO: LF551
EXPIRES: 04/07/2015

THIS CERTIFICATE IS NONTRANSFERABLE

MINNESOTA MDH DEPARTMENT OF HEALTH

Thomas P. Hogan, Director
Environmental Health Division



Andrew Myers

has completed the Minnesota-Approved Lead Training course entitled:

Lead Risk Assessor Refresher Training

August 21, 2014

given by

Midwest Environmental Consulting, L.L.C.

125 Railroad Avenue SW, Mora MN 55051

Phone: 763-691-0111/320-679-4054

SUCCESSFULLY PASSED THE EXAMINATION ON August 21, 2014, IN COON RAPIDS, MINNESOTA

IDENTIFICATION NUMBER: MEC/LRAR 1080
Expiration Date: August 21, 2015
MDH Permit Number: RAR-006

Course Director

Approved by the State of Minnesota under *Minnesota Rules,* parts 4761.2000 to 4761.2700

I-0031

Lead Inspector Independent Examination

121 East Seventh Place, Suite 220 • St. Paul • Minnesota 55101 • (651) 215-0700

This certifies that

Andrew Myers

has successfully passed the required independent examination for:

Lead Inspector

March 22, 2001
Morris, Minnesota

This certificate is nontransferable.

Jan K. Malcom
Commissioner

Patricia A. Bloomgren, Director
Division of Environmental Health

MINNESOTA
MDH
DEPARTMENT OF HEALTH

RA-0239

Lead Risk Assessor Independent Examination

121 East Seventh Place, Suite 220 • St. Paul, Minnesota 55101 • (651) 215-0700

This certifies that

Andrew Myers

has successfully passed the required independent examination for:

Lead Risk Assessor

June 26, 2001
Minneapolis, Minnesota

This certificate is nontransferable.

Jan K. Malcom
Commissioner

Patricia A. Bloomgren, Director
Division of Environmental Health

Andrew J. Myers

has completed the Minnesota-Approved Lead Training course entitled:

Initial Lead Inspector Training
March 12-14, 2001

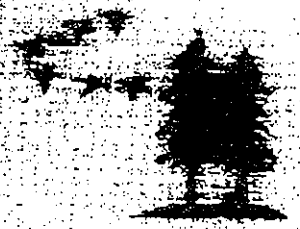
given by

Midwest Environmental Consulting, L.L.C.
145 - 2ND Avenue SE, Cambridge, MN 55008

SUCCESSFULLY PASSED THE EXAMINATION ON MARCH 14, 2001, IN MORRIS, MINNESOTA

IDENTIFICATION NUMBER: MECALI 0053
Expiration Date: March 14, 2002
MDH Permit No: LI - 003

Course Director



Andrew J. Myers

has completed the Minnesota Approved Lead Training course entitled:

Lead-Based Paint Risk Assessor Training

June 25-26, 2001

given by

Midwest Environmental Consulting, L.L.C.
145 - 2nd Avenue SE, Cambridge, MN 55008

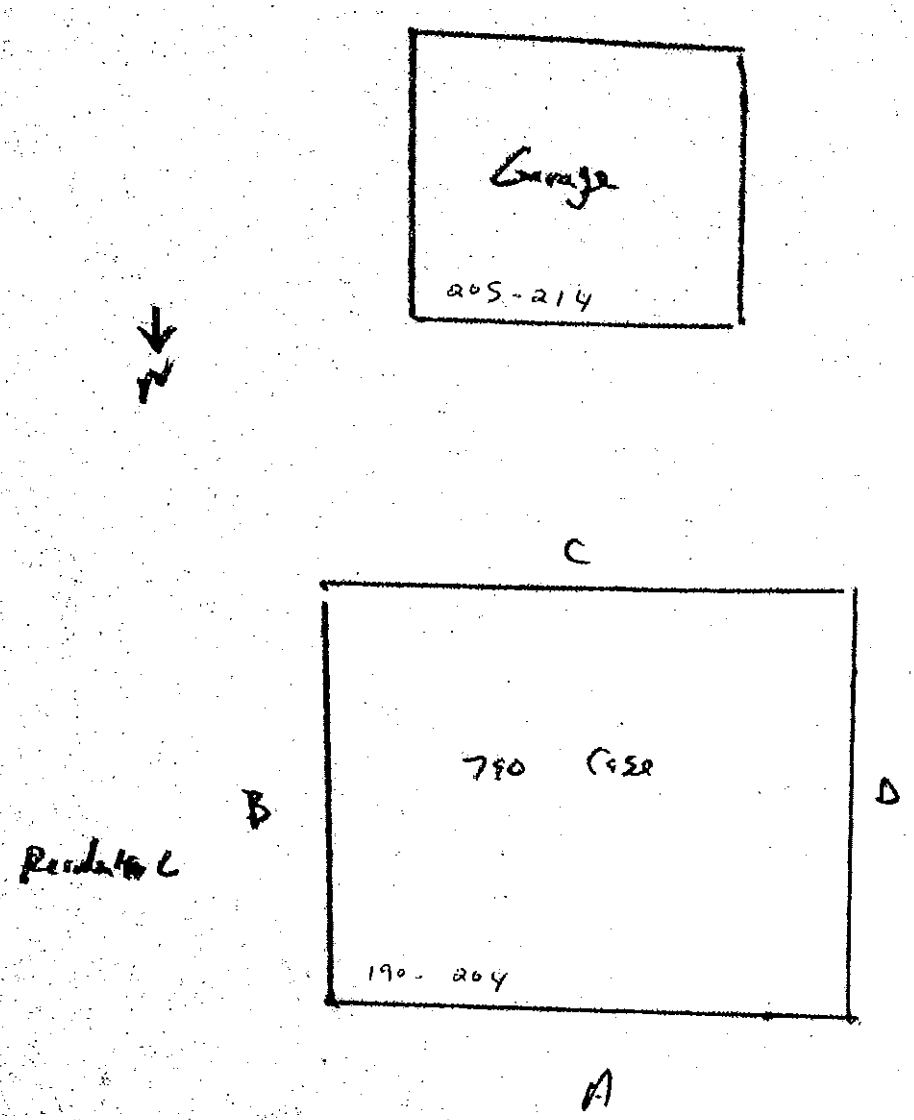
- SUCCESSFULLY PASSED THE EXAMINATION ON JUNE 26, 2001, IN MINNEAPOLIS, MINNESOTA

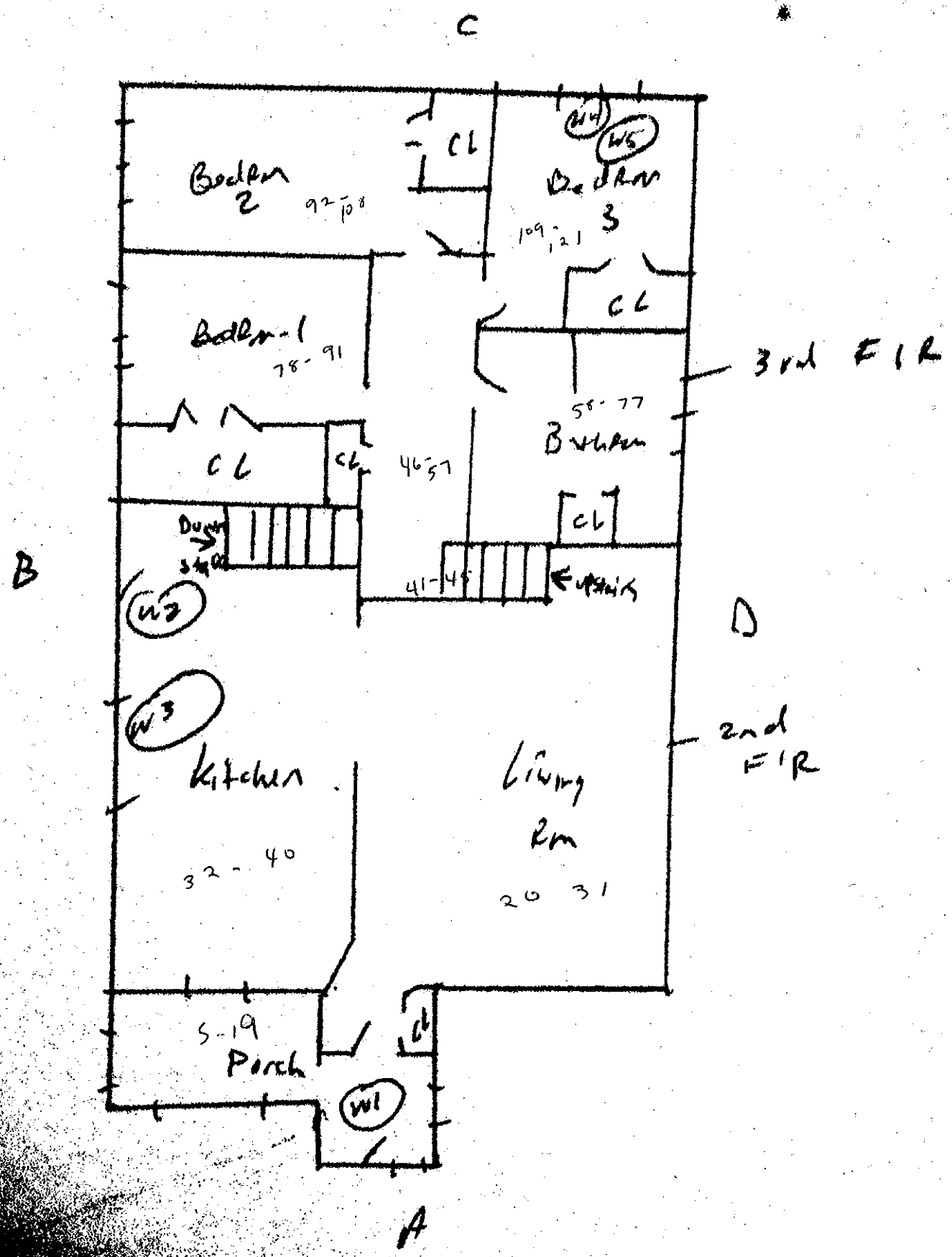
IDENTIFICATION NUMBER: MEC/LRA 0111
Expiration Date: June 26, 2002
MDH Permit #: RA1-002

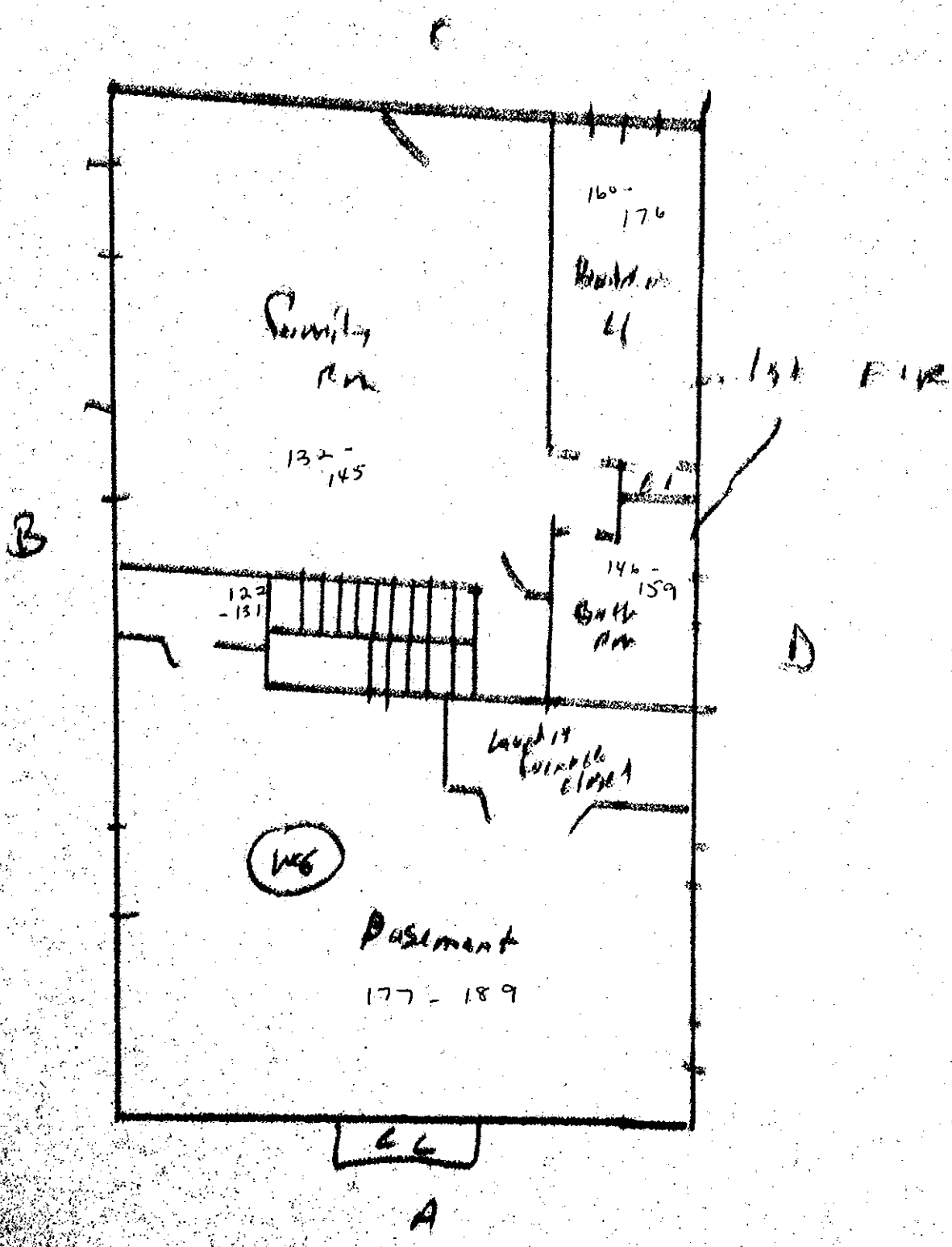
Course Director

APPENDIX B

XRF TEST RESULTS
SAMPLING MAPS
DATA PAGES
CALIBRATION DATA


Garage
205-214
N
C
790 Case
B
D
Residential
190-204
A
Residential
Case Ave


C
Bedrm 2
92-108
CL
W4
W5
Bedrm 3
109-121
CL
3rd FLR
Bedrm-1
78-91
CL
CL
46-57
Bedrm
58-77
CL
Dwn
41-45
Up
B
W2
D
W3
2nd FLR
Kitchen
32-40
Living Rm
20 31
5-19
Porch
CL
W1
A


C
160 - 176
Family rm
132 - 145
B
146 - 159
122 - 131
Bath rm
D
Laundry
WC
Basement
177 - 189
A

Alll Phase Companies
790 Case Avenue
St. Paul MN

Site: All Phase Companies: 790 Case Avenue, St. Paul MN																		
Date: Oct. 21, 2014																		
XRF: XLp 303A, Serial # 26848																		
Site	Rdg #	Date/Time	Floor	Room	Trig	Side	Component	Substrate	Condition	Color	Result	LBC	Pb	PR	Comment	Depth	Test
	1	10/21/2014 13:04										1.71	0.37	0	170.28		AM
790 Case Ave	2	10/21/2014 13:06					calibrate				POS	1	1	0.8	21.14	1.1	AM
790 Case Ave	3	10/21/2014 13:08					calibrate				POS	1	1	< LOD	20.81	1.05	AM
790 Case Ave	4	10/21/2014 13:09					calibrate				POS	1	1	< LOD	21.06	1.09	AM
790 Case Ave	5	10/21/2014 13:43	2	porch		A	DOOR	METAL	INTACT	BEIGE	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	6	10/21/2014 13:44	2	porch		A	WINDOW	vinyl	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	4.39	2.48	AM
790 Case Ave	7	10/21/2014 13:45	2	porch		A	WINDOW	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	8	10/21/2014 13:45	2	porch		A	BASEBOARD	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.27	1	AM
790 Case Ave	9	10/21/2014 13:46	2	porch		A	TRIM	WOOD	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	10	10/21/2014 13:46	2	porch		C	DOOR	METAL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	3.34	1	AM
790 Case Ave	11	10/21/2014 13:47	2	porch		C	DOOR jamb	WOOD	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	3.34	1	AM
790 Case Ave	12	10/21/2014 13:47	2	porch		A	WINDOW sill	METAL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.27	1	AM
790 Case Ave	13	10/21/2014 13:48	2	porch			CEILING	METAL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.12	2.07	AM
790 Case Ave	14	10/21/2014 13:48	2	porch			FLOOR	vinyl	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.27	1	AM
790 Case Ave	15	10/21/2014 13:49	2	porch		C	WALL	vinyl	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.57	1	AM
790 Case Ave	16	10/21/2014 13:49	2	porch		B	WALL	WOOD	INTACT	WHITE	Null	< LOD	< LOD	< LOD	0.46	10	AM
790 Case Ave	17	10/21/2014 13:49	2	porch		D	WALL	WOOD	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.12	1	AM
790 Case Ave	18	10/21/2014 13:50	2	porch		A	WALL	WOOD	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.13	1	AM
790 Case Ave	19	10/21/2014 13:50	2	porch		B	WALL	WOOD	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	20	10/21/2014 13:51	2	LIVING ROOM		A	DOOR	METAL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.43	1	AM
790 Case Ave	21	10/21/2014 13:51	2	LIVING ROOM		A	DOOR casing	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	22	10/21/2014 13:52	2	LIVING ROOM		A	BASEBOARD	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.27	2.22	AM
790 Case Ave	23	10/21/2014 13:52	2	LIVING ROOM		A	WINDOW	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.43	1.55	AM
790 Case Ave	24	10/21/2014 13:53	2	LIVING ROOM		A	WINDOW	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	1.82	1	AM
790 Case Ave	25	10/21/2014 13:53	2	LIVING ROOM		D	vent	METAL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	26	10/21/2014 13:54	2	LIVING ROOM		A	WALL	DRYWALL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	3.18	1	AM
790 Case Ave	27	10/21/2014 13:55	2	LIVING ROOM		B	WALL	DRYWALL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	2.73	1	AM
790 Case Ave	28	10/21/2014 13:55	2	LIVING ROOM		C	WALL	DRYWALL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	2.27	1	AM
790 Case Ave	29	10/21/2014 13:55	2	LIVING ROOM		D	WALL	DRYWALL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	2.57	1	AM
790 Case Ave	30	10/21/2014 13:56	2	LIVING ROOM			CEILING	DRYWALL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	1.22	1	AM
790 Case Ave	31	10/21/2014 13:56	2	LIVING ROOM			CEILING	DRYWALL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	3.32	1	AM
790 Case Ave	32	10/21/2014 13:57	2	KITCHEN		A	WALL	DRYWALL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.43	1	AM
790 Case Ave	33	10/21/2014 13:58	2	KITCHEN		B	WALL	DRYWALL	INTACT	PINK	Neg	< LOD	< LOD	< LOD	2.43	1	AM
790 Case Ave	34	10/21/2014 13:58	2	KITCHEN		C	WALL	DRYWALL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	2.43	1	AM
790 Case Ave	35	10/21/2014 13:59	2	KITCHEN		D	WALL	DRYWALL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	3.01	1	AM
790 Case Ave	36	10/21/2014 13:59	2	KITCHEN			FLOOR	vinyl	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.27	1.38	AM

Alll Phase Companies
790 Case Avenue
St. Paul MN

Site	Sample	Date/Time	Floor	Room	Wall	Side	Component	Substrate	Condition	Color	Results					
790 Case Ave	37	10/21/2014 14:00	2	KITCHEN		D	WINDOW	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	38	10/21/2014 14:00	2	KITCHEN		D	WINDOW	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.27	1	AM
790 Case Ave	39	10/21/2014 14:00	2	KITCHEN		D	CABINET	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.27	1.08	AM
790 Case Ave	40	10/21/2014 14:01	2	KITCHEN		D	CABINET	WOOD	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	41	10/21/2014 14:02	3	STAIR		A	newel post	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	1.21	1	AM
790 Case Ave	42	10/21/2014 14:02	3	STAIR		C	BASEBOARD	WOOD	INTACT	varnish	Null	< LOD	< LOD	< LOD	0.91	1.46	AM
790 Case Ave	43	10/21/2014 14:03	3	STAIR		C	BASEBOARD	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.28	1.09	AM
790 Case Ave	44	10/21/2014 14:03	3	STAIR		B	WALL	DRYWALL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	2.58	1	AM
790 Case Ave	45	10/21/2014 14:03	3	STAIR		C	WALL	DRYWALL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	2.42	1	AM
790 Case Ave	46	10/21/2014 14:04	3	HALL		A	WALL	DRYWALL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	3.79	1	AM
790 Case Ave	47	10/21/2014 14:04	3	HALL		B	WALL	DRYWALL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	2.88	1	AM
790 Case Ave	48	10/21/2014 14:05	3	HALL		C	WALL	DRYWALL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	2.58	2.38	AM
790 Case Ave	49	10/21/2014 14:05	3	HALL		D	WALL	DRYWALL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	2.58	1	AM
790 Case Ave	50	10/21/2014 14:05	3	HALL			CEILING	DRYWALL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.42	1	AM
790 Case Ave	51	10/21/2014 14:06	3	HALL		D	CEILING hatch	WOOD	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.43	1	AM
790 Case Ave	52	10/21/2014 14:06	3	HALL		D	DOOR	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.27	1	AM
790 Case Ave	53	10/21/2014 14:07	3	HALL		D	DOOR	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	3.33	1	AM
790 Case Ave	54	10/21/2014 14:07	3	HALL		D	BASEBOARD	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.27	1	AM
790 Case Ave	55	10/21/2014 14:07	3	HALL		B	CLOSET dr	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.43	1	AM
790 Case Ave	56	10/21/2014 14:08	3	HALL		B	CLOSET dr	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.29	1	AM
790 Case Ave	57	10/21/2014 14:08	3	HALL		B	CLOSET wall	DRYWALL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	3.33	1	AM
790 Case Ave	58	10/21/2014 14:10	3	BATHROOM		B	DOOR	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	3.35	1	AM
790 Case Ave	59	10/21/2014 14:10	3	BATHROOM		B	DOOR	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.13	1	AM
790 Case Ave	60	10/21/2014 14:10	3	BATHROOM		C	BASEBOARD	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.12	1	AM
790 Case Ave	61	10/21/2014 14:11	3	BATHROOM		D	hatch	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	62	10/21/2014 14:11	3	BATHROOM		D	WINDOW	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.44	1	AM
790 Case Ave	63	10/21/2014 14:11	3	BATHROOM		D	WINDOW	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	3.34	1	AM
790 Case Ave	64	10/21/2014 14:12	3	BATHROOM		A	CLOSET dr	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	3.33	1	AM
790 Case Ave	65	10/21/2014 14:12	3	BATHROOM		A	CLOSET dr	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.13	1.84	AM
790 Case Ave	66	10/21/2014 14:13	3	BATHROOM		A	CLOSET wall	DRYWALL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.27	1	AM
790 Case Ave	67	10/21/2014 14:13	3	BATHROOM		A	WALL	DRYWALL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	2.26	1	AM
790 Case Ave	68	10/21/2014 14:14	3	BATHROOM		B	WALL	DRYWALL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	69	10/21/2014 14:14	3	BATHROOM		C	WALL	DRYWALL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	3.04	1	AM
790 Case Ave	70	10/21/2014 14:14	3	BATHROOM		D	WALL	DRYWALL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	2.88	1	AM
790 Case Ave	71	10/21/2014 14:15	3	BATHROOM		D	WALL	ceramic	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.27	3.81	AM
790 Case Ave	72	10/21/2014 14:15	3	BATHROOM		D	WALL vent	METAL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	1.51	1	AM
790 Case Ave	73	10/21/2014 14:16	3	BATHROOM			FLOOR	vinyl	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.43	1	AM
790 Case Ave	74	10/21/2014 14:16	3	BATHROOM		A	CABINET	WOOD	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	75	10/21/2014 14:16	3	BATHROOM		A	CABINET	WOOD	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	76	10/21/2014 14:17	3	BATHROOM			CEILING	DRYWALL	INTACT	BLUE	Null	< LOD	< LOD	< LOD	1.22	1	AM

Alll Phase Companies
790 Case Avenue
St. Paul MN

Site	Sample #	Date/Time	Floor	Room	Wall	Side	Component	Substrate	Condition	Color	Result	PLM	PCM	TEM	Volume	Dilution	Lab
790 Case Ave	77	10/21/2014 14:17	3	BATHROOM			CEILING	DRYWALL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	2.88	1	AM
790 Case Ave	78	10/21/2014 14:19	3	BEDROOM 1			CEILING	DRYWALL	INTACT	WHITE	Null	< LOD	< LOD	< LOD	0.15	1	AM
790 Case Ave	79	10/21/2014 14:19	3	BEDROOM 1			CEILING	DRYWALL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.72	1	AM
790 Case Ave	80	10/21/2014 14:19	3	BEDROOM 1		D	DOOR	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.26	1	AM
790 Case Ave	81	10/21/2014 14:20	3	BEDROOM 1		D	DOOR	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.27	2.76	AM
790 Case Ave	82	10/21/2014 14:20	3	BEDROOM 1		D	BASEBOARD	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.26	1	AM
790 Case Ave	83	10/21/2014 14:21	3	BEDROOM 1		B	WINDOW	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	3.33	1	AM
790 Case Ave	84	10/21/2014 14:21	3	BEDROOM 1		B	WINDOW	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	85	10/21/2014 14:21	3	BEDROOM 1		B	vent	METAL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	3.33	1	AM
790 Case Ave	86	10/21/2014 14:22	3	BEDROOM 1		A	CLOSET dr	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	87	10/21/2014 14:22	3	BEDROOM 1		A	CLOSET dr	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.12	1	AM
790 Case Ave	88	10/21/2014 14:23	3	BEDROOM 1		A	CLOSET wall	DRYWALL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	3.32	1	AM
790 Case Ave	89	10/21/2014 14:23	3	BEDROOM 1		B	CLOSET wall	DRYWALL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	3.18	1	AM
790 Case Ave	90	10/21/2014 14:24	3	BEDROOM 1		C	CLOSET wall	DRYWALL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	3.32	1	AM
790 Case Ave	91	10/21/2014 14:24	3	BEDROOM 1		D	CLOSET wall	DRYWALL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	3.18	1.2	AM
790 Case Ave	92	10/21/2014 14:25	3	BEDROOM 2		A	DOOR	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	93	10/21/2014 14:25	3	BEDROOM 2		A	DOOR	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.27	1.56	AM
790 Case Ave	94	10/21/2014 14:26	3	BEDROOM 2		A	BASEBOARD	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.27	1	AM
790 Case Ave	95	10/21/2014 14:26	3	BEDROOM 2		B	WINDOW	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.26	1.65	AM
790 Case Ave	96	10/21/2014 14:26	3	BEDROOM 2		B	WINDOW	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.28	1.56	AM
790 Case Ave	97	10/21/2014 14:27	3	BEDROOM 2		D	CLOSET dr	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.12	1	AM
790 Case Ave	98	10/21/2014 14:27	3	BEDROOM 2		D	CLOSET dr	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	99	10/21/2014 14:28	3	BEDROOM 2		D	CLOSET wall	DRYWALL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	3.78	1	AM
790 Case Ave	100	10/21/2014 14:28	3	BEDROOM 2		A	vent	METAL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.27	1	AM
790 Case Ave	101	10/21/2014 14:29	3	BEDROOM 2		A	WALL	DRYWALL	INTACT	purple	Neg	< LOD	< LOD	< LOD	2.71	1	AM
790 Case Ave	102	10/21/2014 14:29	3	BEDROOM 2		B	WALL	DRYWALL	INTACT	purple	Neg	< LOD	< LOD	< LOD	2.57	1	AM
790 Case Ave	103	10/21/2014 14:29	3	BEDROOM 2		C	WALL	DRYWALL	INTACT	purple	Neg	< LOD	< LOD	< LOD	3.33	1	AM
790 Case Ave	104	10/21/2014 14:30	3	BEDROOM 2		D	WALL	DRYWALL	INTACT	purple	Neg	< LOD	< LOD	< LOD	3.64	1.31	AM
790 Case Ave	105	10/21/2014 14:30	3	BEDROOM 2			CEILING	DRYWALL	INTACT	WHITE	Null	< LOD	< LOD	< LOD	1.06	1	AM
790 Case Ave	106	10/21/2014 14:30	3	BEDROOM 2			CEILING	DRYWALL	INTACT	WHITE	Null	< LOD	< LOD	< LOD	0.45	10	AM
790 Case Ave	107	10/21/2014 14:31	3	BEDROOM 2			CEILING	DRYWALL	INTACT	WHITE	Null	< LOD	< LOD	< LOD	1.36	1	AM
790 Case Ave	108	10/21/2014 14:31	3	BEDROOM 2			CEILING	DRYWALL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.42	1	AM
790 Case Ave	109	10/21/2014 14:32	3	BEDROOM 3			CEILING	DRYWALL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	3.49	3.96	AM
790 Case Ave	110	10/21/2014 14:32	3	BEDROOM 3		C	vent	METAL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	111	10/21/2014 14:33	3	BEDROOM 3		B	DOOR	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	1.97	1.7	AM
790 Case Ave	112	10/21/2014 14:33	3	BEDROOM 3		B	DOOR	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	113	10/21/2014 14:33	3	BEDROOM 3		B	BASEBOARD	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.42	1.55	AM
790 Case Ave	114	10/21/2014 14:34	3	BEDROOM 3		C	WINDOW	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.27	1	AM
790 Case Ave	115	10/21/2014 14:34	3	BEDROOM 3		C	WINDOW	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.26	1	AM
790 Case Ave	116	10/21/2014 14:35	3	BEDROOM 3		A	CLOSET dr	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.57	1	AM

Alll Phase Companies
790 Case Avenue
St. Paul MN

Site	Point	Date/Time	Floor	Room	Unit	Side	Component	Substrate	Condition	Color	Results	Pb	Cd	Cr	Depth	Depth Unit	AM/PM
790 Case Ave	117	10/21/2014 14:35	3	BEDROOM 3		A	CLOSET dr	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.29	1	AM
790 Case Ave	118	10/21/2014 14:35	3	BEDROOM 3		A	CLOSET wall	DRYWALL	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.58	3.37	AM
790 Case Ave	119	10/21/2014 14:36	3	BEDROOM 3		B	WALL	DRYWALL	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.42	1	AM
790 Case Ave	120	10/21/2014 14:36	3	BEDROOM 3		C	WALL	DRYWALL	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.72	1	AM
790 Case Ave	121	10/21/2014 14:36	3	BEDROOM 3		D	WALL	DRYWALL	INTACT	varnish	Neg	< LOD	< LOD	< LOD	3.63	1.1	AM
790 Case Ave	122	10/21/2014 14:38	1	STAIR		D	balistrude	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.28	1.75	AM
790 Case Ave	123	10/21/2014 14:38	1	STAIR		D	BASEBOARD	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	1.51	1	AM
790 Case Ave	124	10/21/2014 14:39	1	STAIR		C	handrail	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	3.34	1	AM
790 Case Ave	125	10/21/2014 14:39	1	STAIR		C	DOOR	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.42	1	AM
790 Case Ave	126	10/21/2014 14:40	1	STAIR		C	DOOR	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	127	10/21/2014 14:40	1	STAIR		A	WALL	DRYWALL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	4.08	1	AM
790 Case Ave	128	10/21/2014 14:41	1	STAIR		B	WALL	DRYWALL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	2.43	1	AM
790 Case Ave	129	10/21/2014 14:41	1	STAIR		C	WALL	DRYWALL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	2.44	1	AM
790 Case Ave	130	10/21/2014 14:41	1	STAIR		D	WALL	DRYWALL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	3.18	1	AM
790 Case Ave	131	10/21/2014 14:42	1	STAIR			CEILING	DRYWALL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	4.26	1	AM
790 Case Ave	132	10/21/2014 14:43	1	family rm			CEILING	DRYWALL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.87	1.33	AM
790 Case Ave	133	10/21/2014 14:44	1	family rm		C	DOOR	METAL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.58	1	AM
790 Case Ave	134	10/21/2014 14:44	1	family rm		C	DOOR casing	WOOD	INTACT	VARNISH	Neg	< LOD	< LOD	< LOD	2.27	2.15	AM
790 Case Ave	135	10/21/2014 14:45	1	family rm		C	BASEBOARD	WOOD	INTACT	VARNISH	Neg	< LOD	< LOD	< LOD	3.33	1.48	AM
790 Case Ave	136	10/21/2014 14:45	1	family rm		A	DOOR	WOOD	INTACT	VARNISH	Neg	< LOD	< LOD	< LOD	2.27	1	AM
790 Case Ave	137	10/21/2014 14:45	1	family rm		A	DOOR	WOOD	INTACT	VARNISH	Neg	< LOD	< LOD	< LOD	2.12	1	AM
790 Case Ave	138	10/21/2014 14:46	1	family rm		B	WINDOW	WOOD	INTACT	VARNISH	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	139	10/21/2014 14:46	1	family rm		B	WINDOW	WOOD	INTACT	VARNISH	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	140	10/21/2014 14:47	1	family rm		B	FLOOR VENT	METAL	INTACT	BROWN	Neg	< LOD	< LOD	< LOD	3.48	5.55	AM
790 Case Ave	141	10/21/2014 14:47	1	family rm		B	WALL VENT	METAL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.28	1.53	AM
790 Case Ave	142	10/21/2014 14:48	1	family rm		A	WALL	DRYWALL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	2.72	1	AM
790 Case Ave	143	10/21/2014 14:48	1	family rm		B	WALL	DRYWALL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	2.26	1	AM
790 Case Ave	144	10/21/2014 14:48	1	family rm		C	WALL	DRYWALL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	2.43	2.63	AM
790 Case Ave	145	10/21/2014 14:49	1	family rm		D	WALL	DRYWALL	INTACT	BLUE	Neg	< LOD	< LOD	< LOD	2.88	1	AM
790 Case Ave	146	10/21/2014 14:50	1	BATHROOM		C	DOOR	WOOD	INTACT	VARNISH	Neg	< LOD	< LOD	< LOD	2.27	1	AM
790 Case Ave	147	10/21/2014 14:50	1	BATHROOM		C	DOOR	WOOD	INTACT	VARNISH	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	148	10/21/2014 14:50	1	BATHROOM		C	BASEBOARD	WOOD	INTACT	VARNISH	Neg	< LOD	< LOD	< LOD	2.27	1.24	AM
790 Case Ave	149	10/21/2014 14:51	1	BATHROOM		D	WINDOW	WOOD	INTACT	VARNISH	Neg	< LOD	< LOD	< LOD	2.44	1	AM
790 Case Ave	150	10/21/2014 14:51	1	BATHROOM		D	WINDOW	WOOD	INTACT	VARNISH	Neg	< LOD	< LOD	< LOD	2.13	1	AM
790 Case Ave	151	10/21/2014 14:51	1	BATHROOM		A	CABINET	WOOD	INTACT	VARNISH	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	152	10/21/2014 14:52	1	BATHROOM		A	CABINET	WOOD	INTACT	VARNISH	Neg	< LOD	< LOD	< LOD	2.42	1	AM
790 Case Ave	153	10/21/2014 14:52	1	BATHROOM			FLOOR	VINYL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.27	1	AM
790 Case Ave	154	10/21/2014 14:53	1	BATHROOM		A	FLOOR VENT	METAL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.12	1	AM
790 Case Ave	155	10/21/2014 14:53	1	BATHROOM		A	WALL	DRYWALL	INTACT	PURPLE	Neg	< LOD	< LOD	< LOD	3.02	1	AM
790 Case Ave	156	10/21/2014 14:54	1	BATHROOM		B	WALL	DRYWALL	INTACT	PURPLE	Neg	< LOD	< LOD	< LOD	2.72	1	AM

Alll Phase Companies
790 Case Avenue
St. Paul MN

Site	Rec	Date/Time	Floor	Room	Area	Side	Component	Substrate	Condition	Color	Results	PbC	PbI	PbK	Duration	Depth	Insp
790 Case Ave	157	10/21/2014 14:54	1	BATHROOM		C	WALL	DRYWALL	INTACT	PURPLE	Neg	< LOD	< LOD	< LOD	5.29	1	AM
790 Case Ave	158	10/21/2014 14:55	1	BATHROOM		D	WALL	DRYWALL	INTACT	PURPLE	Neg	< LOD	< LOD	< LOD	2.57	1	AM
790 Case Ave	159	10/21/2014 14:55	1	BATHROOM			CEILING	DRYWALL	INTACT	PURPLE	Neg	< LOD	< LOD	< LOD	2.72	1	AM
790 Case Ave	160	10/21/2014 14:56	1	BEDROOM 4			CEILING	DRYWALL	INTACT	WHITE	Null	< LOD	< LOD	< LOD	2.27	1	AM
790 Case Ave	161	10/21/2014 14:56	1	BEDROOM 4			CEILING	DRYWALL	INTACT	WHITE	Null	< LOD	< LOD	< LOD	0.9	1	AM
790 Case Ave	162	10/21/2014 14:56	1	BEDROOM 4			CEILING	DRYWALL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.41	1	AM
790 Case Ave	163	10/21/2014 14:57	1	BEDROOM 4		B	vent	METAL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.42	2.73	AM
790 Case Ave	164	10/21/2014 14:57	1	BEDROOM 4		B	FLOOR vent	METAL	INTACT	BROWN	Neg	< LOD	< LOD	< LOD	2.28	1.63	AM
790 Case Ave	165	10/21/2014 14:58	1	BEDROOM 4		A	DOOR	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.27	1	AM
790 Case Ave	166	10/21/2014 14:58	1	BEDROOM 4		A	DOOR	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.27	1	AM
790 Case Ave	167	10/21/2014 14:59	1	BEDROOM 4		A	BASEBOARD	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	3.48	1	AM
790 Case Ave	168	10/21/2014 14:59	1	BEDROOM 4		C	WINDOW	WOOD	INTACT	varnish	Null	< LOD	< LOD	< LOD	0.91	1	AM
790 Case Ave	169	10/21/2014 14:59	1	BEDROOM 4		C	WINDOW	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	170	10/21/2014 14:59	1	BEDROOM 4		C	WINDOW	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	171	10/21/2014 15:00	1	BEDROOM 4		A	CLOSET dr	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.27	1	AM
790 Case Ave	172	10/21/2014 15:00	1	BEDROOM 4		A	CLOSET dr	WOOD	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	173	10/21/2014 15:01	1	BEDROOM 4		A	CLOSET WALL	DRYWALL	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.43	1.64	AM
790 Case Ave	174	10/21/2014 15:01	1	BEDROOM 4		B	WALL	DRYWALL	INTACT	varnish	Neg	< LOD	< LOD	< LOD	3.01	1	AM
790 Case Ave	175	10/21/2014 15:01	1	BEDROOM 4		C	WALL	DRYWALL	INTACT	varnish	Neg	< LOD	< LOD	< LOD	2.87	1	AM
790 Case Ave	176	10/21/2014 15:02	1	BEDROOM 4		D	WALL	DRYWALL	INTACT	varnish	Neg	< LOD	< LOD	< LOD	3.63	1	AM
790 Case Ave	177	10/21/2014 15:03	0			A	WALL	DRYWALL	POOR	WHITE	Neg	< LOD	< LOD	< LOD	2.58	1	AM
790 Case Ave	178	10/21/2014 15:04	0			B	WALL	DRYWALL	POOR	WHITE	Neg	< LOD	< LOD	< LOD	2.57	1	AM
790 Case Ave	179	10/21/2014 15:04	0			C	WALL	DRYWALL	POOR	WHITE	Null	< LOD	< LOD	< LOD	0.45	1	AM
790 Case Ave	180	10/21/2014 15:04	0			C	WALL	DRYWALL	POOR	WHITE	Neg	< LOD	< LOD	< LOD	2.27	1	AM
790 Case Ave	181	10/21/2014 15:05	0			D	WALL	DRYWALL	POOR	WHITE	Neg	< LOD	< LOD	< LOD	4.7	1	AM
790 Case Ave	182	10/21/2014 15:05	0			D	COLUMN	DRYWALL	POOR	WHITE	Neg	< LOD	< LOD	< LOD	4.22	1	AM
790 Case Ave	183	10/21/2014 15:06	0			C	CLOSET WALL	DRYWALL	POOR	WHITE	Neg	< LOD	< LOD	< LOD	2.89	1.04	AM
790 Case Ave	184	10/21/2014 15:06	0			C	CLOSET DR	WOOD	POOR	VARNISH	Null	< LOD	< LOD	< LOD	0.31	10	AM
790 Case Ave	185	10/21/2014 15:07	0			C	CLOSET DR	WOOD	POOR	VARNISH	Neg	< LOD	< LOD	< LOD	3.33	1	AM
790 Case Ave	186	10/21/2014 15:07	0			B	WINDOW	WOOD	POOR	VARNISH	Neg	< LOD	< LOD	< LOD	1.35	1	AM
790 Case Ave	187	10/21/2014 15:07	0			B	WINDOW	WOOD	POOR	VARNISH	Neg	< LOD	< LOD	< LOD	2.26	1	AM
790 Case Ave	188	10/21/2014 15:08	0				CEILING	METAL	POOR	WHITE	Neg	< LOD	< LOD	< LOD	2.27	1	AM
790 Case Ave	189	10/21/2014 15:08	0				CEILING	METAL	POOR	WHITE	Neg	< LOD	< LOD	< LOD	2.88	1	AM
790 Case Ave	190	10/21/2014 15:10		OUTSIDE		B	DOOR	METAL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.42	1	AM
790 Case Ave	191	10/21/2014 15:10		OUTSIDE		B	DOOR jamb	WOOD	POOR	WHITE	Neg	< LOD	< LOD	< LOD	2.27	1	AM
790 Case Ave	192	10/21/2014 15:11		OUTSIDE		B	TRIM	WOOD	POOR	BLUE	Neg	< LOD	< LOD	< LOD	2.27	1	AM
790 Case Ave	193	10/21/2014 15:11		OUTSIDE		B	DOWN SPOUT	METAL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.88	1.13	AM
790 Case Ave	194	10/21/2014 15:12		OUTSIDE		B	GUTTER	METAL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.27	4.27	AM
790 Case Ave	195	10/21/2014 15:12		OUTSIDE		B	SOFFIT	METAL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	3.81	2.73	AM
790 Case Ave	196	10/21/2014 15:13		OUTSIDE		B	FASCIA	METAL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.28	1	AM

Alll Phase Companies
790 Case Avenue
St. Paul MN

Site	ID	Date Time	Zone	Room	Side	Component	Material	Condition	Color	Results	Pb			Dust Wipe Result	Depth	AM/PM
790 Case Ave	197	10/21/2014 15:13		OUTSIDE		B	WINDOW	METAL	INTACT	GREEN	Null	< LOD	< LOD	< LOD	0.15	1	AM
790 Case Ave	198	10/21/2014 15:14		OUTSIDE		B	WINDOW	METAL	INTACT	GREEN	Neg	< LOD	< LOD	< LOD	4.38	1	AM
790 Case Ave	199	10/21/2014 15:14		OUTSIDE		C	DOOR	METAL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	200	10/21/2014 15:15		OUTSIDE		C	WINDOW	METAL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	201	10/21/2014 15:16		OUTSIDE		B	SIDING	VINYL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	3.04	1	AM
790 Case Ave	202	10/21/2014 15:16		OUTSIDE		C	SIDING	VINYL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	3.33	1	AM
790 Case Ave	203	10/21/2014 15:17		OUTSIDE		D	SIDING	VINYL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	4.24	1	AM
790 Case Ave	204	10/21/2014 15:17		OUTSIDE		A	SIDING	VINYL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	4.39	1	AM
790 Case Ave	205	10/21/2014 15:18		GARAGE		A	SIDING	VINYL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	3.63	1	AM
790 Case Ave	206	10/21/2014 15:18		GARAGE		D	SIDING	VINYL	INTACT	WHITE	Null	< LOD	< LOD	< LOD	1.36	1	AM
790 Case Ave	207	10/21/2014 15:19		GARAGE		D	SIDING	VINYL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	4.4	1.78	AM
790 Case Ave	208	10/21/2014 15:20		GARAGE		C	SIDING	VINYL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	4.38	1	AM
790 Case Ave	209	10/21/2014 15:20		GARAGE		B	SIDING	VINYL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.88	1.66	AM
790 Case Ave	210	10/21/2014 15:20		GARAGE		C	DOOR	METAL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	211	10/21/2014 15:21		GARAGE		C	DOOR	WOOD	POOR	WHITE	Neg	< LOD	< LOD	< LOD	2.28	1	AM
790 Case Ave	212	10/21/2014 15:21		GARAGE		A	DOOR	WOOD	POOR	WHITE	Neg	< LOD	< LOD	< LOD	3.33	1	AM
790 Case Ave	213	10/21/2014 15:22		GARAGE		D	SOFFIT	METAL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.27	6.03	AM
790 Case Ave	214	10/21/2014 15:23		GARAGE		D	FASCIA	METAL	INTACT	WHITE	Neg	< LOD	< LOD	< LOD	2.27	1	AM
790 Case Ave	215	10/21/2014 15:24					CALIBRATE				Neg	0.9	0.9	< LOD	7.41	1.06	AM
790 Case Ave	216	10/21/2014 15:25					CALIBRATE				POS	1	1	0.7	21.11	1.1	AM
790 Case Ave	217	10/21/2014 15:26					CALIBRATE				POS	1.2	1.2	< LOD	3.95	1.26	AM

Description of Column Titles

Site: The sequential number of the site (homes or buildings) inspected on a particular day.

No: The sequential XRF sample number for a given site.

XL No/Map: The sample number recorded on the maps of a particular site.

Date: Date that the XRF sample was analyzed.

Time: Time of XRF sample analysis.

Floor: The sample location floor level (0 = basement, 1 = first floor, 2 = second floor).

Room: The specific location where the sample was analyzed on the site. Calibrate is also recorded in this column when appropriate.

Side: Side of the room based on sampling methodology as described earlier in this report. The only four sides that can be designated are **A, B, C,** and **D.**

Structure: This refers to the general building component that the test was performed on. It may also include modifications such as: upper, lower, exterior, interior, right, and left.

Feature: Specifies additional information about a structure.

Condition: Describes whether the surface being tested is **Intact:** good condition; **Fair:** less than 2 square feet of damage to large interior surface, i.e., wall, less than 10 square feet of damage to large exterior surface, i.e., outside walls, or less than 10% damage to small surface areas, i.e., baseboards, trim, etc.; **Poor:** more than 2 square feet of damage on large interior surfaces, more than 10 square feet of damage to large exterior surface areas, or more than 10% damage to small surface areas.

Substrate: Refers to the material that the structure was made of, i.e., wood, concrete, drywall, etc.

Color: Color of surface tested.

Result: The lead concentration in mg/cm^2 as determined with L-shell and K-shell X-ray data.

PbL(mg/cm^2): The lead concentration as determined with L-shell X-ray data.

RES: Results: POS - above action level, NEG - below action level.

PbK: The lead concentration in mg/cm^2 on the K-shell X-ray data spectrum.

PbC: The combined lead concentration in mg/cm^2 of the L-shell and K-shell X-ray data spectrum.

Depth: This is the index that is a qualitative indication of the depth of the lead in paint. As the number approaches 1, the lead is concentrated close to the top layers of paint. The largest number available for depth index is 10. The greater the number, the more likely interfering elements may have been detected.

Duration: The length of the XRF sample analysis in seconds.

Inspector: When multiple inspectors are used, this number indicates who sampled at the time indicated.

Note: This refers to any notes that were collected during the analysis of the particular sample. Then can be found on the field data sheet titled "Lead-Based Paint Inspection Data Page."

SAMPLING METHODOLOGY

Buildings were systematically inspected for lead-based paints. The **A** side of the building is the side facing the street. Starting from the **A** side, the other sides are lettered consecutively (**B, C, D**), going clockwise around the building.

Inside the unit, each floor was assigned a number starting with **0** for the basement, **1** for the first floor, and **2** for the second floor.

Some rooms that are unique in the building are named on the inspection report. These would include things like pantry, kitchen, halls, bathrooms, and staircases. If there is more than one of a certain type of named room, then they are numbered (e.g., staircases to basements are numbered staircase 1, while staircases to the second floor are labeled staircase 2). Room numbering starts in the **A-D** corner of the building and continues clockwise from that point.

Within each room of the building, each of the sides of the room are named. The naming of walls in a room, for instance, follows the same pattern as that used on the exterior of the building, namely, the street side of each room is labeled **A,** and then clockwise from that wall, walls are labeled **B, C, D**.

APPENDIX C

LABORATORY RESULTS
CHAIN-OF-CUSTODY

EMSL Analytical, Inc.
14375 23rd Avenue North, Minneapolis, Mn 55447
Phone/Fax (763) 449-4922 / (763) 449-4924
http://www.EMSL.com minneapolislab@emsl.com

EMSL Order:	351406548
CustomerID:	MIDW56
CustomerPO:	cc/
ProjectID:	

Attn: **Greg Myers**
Midwest Environmental Consulting, L.L.C.
125 Railroad Ave SW

Mora, MN 55051

Phone:	(763) 691-0111
Fax:	(763) 691-0145
Received:	10/22/14 1:10 PM
Collected:	10/21/2014

Project: **502/1014, 790 Case Ave St. Paul**

Test Report: Lead in Dust by Flame AAS (SW 846 3050B/7000B)*

Client SampleDescription	*Collected*	*Analyzed*	*Area Sampled*	*RDL*	*Lead Concentration*
502/1014-W1 *351406548-0001*	10/21/2014	10/23/2014 Site: Porch Side A Entry FLR	144 in²	10 µg/ft²	<10 µg/ft²
502/1014-W2 *351406548-0002*	10/21/2014	10/23/2014 Site: Kitchen Side B Entry FLR	144 in²	10 µg/ft²	<10 µg/ft²
502/1014-W3 *351406548-0003*	10/21/2014	10/23/2014 Site: Kitchen Side B Entry Window Stool	36 in²	40 µg/ft²	<40 µg/ft²
502/1014-W4 *351406548-0004*	10/21/2014	10/23/2014 Site: Bed Rm 3 Side C Window Stool	36 in²	40 µg/ft²	<40 µg/ft²
502/1014-W5 *351406548-0005*	10/21/2014	10/23/2014 Site: Bed Rm 3 Side C FLR	144 in²	10 µg/ft²	<10 µg/ft²
502/1014-W6 *351406548-0006*	10/21/2014	10/23/2014 Site: Family Rm Side C FLR	144 in²	10 µg/ft²	<10 µg/ft²
502/1014-W7 *351406548-0007*	10/21/2014	10/23/2014 Site: Family Rm Side B Stool	36 in²	40 µg/ft²	<40 µg/ft²
502/1014-W8 *351406548-0008*	10/21/2014	10/23/2014 Site: Basement Middle FLR	144 in²	10 µg/ft²	<10 µg/ft²
502/1014-W9 *351406548-0009*	10/21/2014	10/23/2014 Site: Bath Rm Middle FLR	0 in²	10 µg/wipe	<10 µg/wipe

Rachel Travis, Laboratory Manager
or other approved signatory

*Analysis following Lead in Dust by EMSL SOP/ Determination of Environmental Lead by FLAA. Reporting limit is 10 ug/wipe. ug/wipe = ug/ft2 x area sampled in ft2. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities (such as volume sampled) or analytical method limitations. Samples received in good condition unless otherwise noted. The lab is not responsible for data reported in µg/ft² which is dependant on the area provided by non-lab personnel. The test results contained within this report meet the requirements of NELAC unless otherwise noted. "<" (less than) results signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements established by the AIHA-LAP, unless specifically indicated otherwise

Samples analyzed by EMSL Analytical, Inc. Minneapolis, Mn AIHA-LAP, LLC--ELLAP Accredited #163162

Initial report from 10/23/2014 12:16:45

6548

Midwest Environmental Consulting, L.L.C.
125 Railroad Avenue SW • Mora, MN 55051
763-691-0111 / 320-679-4054
Fax: 763-691-0145 / 320-679-4442

Client Address:
Contact:

CHAIN OF CUSTODY

Project Number: 502/10th
Client: All Phase
Project: 790 Case Ave St. Paul
Phone/Fax:

Sample ID	Sample Description	Collection Date/Time	Matrix (Vol./Area)	Analysis Requested
502/10th w1	Birch Side A Entry F/K	10-21-14	12" x 12"	PCB's by EPA 8082
w2	Kitchen Side-B Entry F/K		"	
w3	" " window Stool		2" x 18"	
w4	Bedrm-3 Side-C " "		"	
w5	" " F/K		12" x 12"	
w6	Family Rm Side-C "		"	
w7	" Side-B Stool		2" x 18"	
w8	Basement middle F/R		12" x 12"	
w9	Bathrm " "		"	

Sampled by: Date: 10-21-14 Time:
Received by: Date: Time:
Received by Lab: C Rother WI Date: 10/22/14 Time: 1:10pm
Notes: One Aashto wipes used contains field blank

Delivered by: Date: 10-22 Time: 1:10
Delivered by: Date: Time:
Disposition of Samples: 24 hour turnaround

Page 1 Of 1

OrderID: 351406548