PBS | Engineering + Environmental

Lead-Based Paint Inspection and Risk Assessment Report

Park Royal Apartments
Bothell, Washington

Prepared for:

King County Housing Authority

August 2010
Project No. 40573.043

Bend | Boise | Coquille | Eugene | Portland | Seattle | Tri-Cities | Vancouver

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LEAD-BASED PAINT INSPECTION AND RISK ASSESSMENT

King County Housing Authority
Park Royal Apartments
Bothell, Washington

Prepared for:

King County Housing Authority
625 Andover Park West
Tukwila, Washington 98188

Prepared by
PBS Engineering + Environmental
2517 Eastlake Avenue East, Suite 100
Seattle, Washington 98102
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SUPPORTING DATA

1.0 IDENTIFYING INFORMATION

BUILDING DATA

Park Royal Apartments
18417 and 18309 96th Ave. NE
Bothell, WA

CLIENT DATA

King County Housing Authority
625 Andover Park West
Tukwila, Washington 98188

Attn: Ms. Deborah McCaslin

SCOPE OF ASSESSMENT

On August 18-19, 2010, PBS Engineering + Environmental (PBS) conducted a lead-based paint inspection and risk assessment in accordance with the U.S. Department Housing and Urban Development (HUD), in Chapter 5 of the 1995 HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing. Sixteen units in two buildings and the laundry rooms were selected by the client and PBS to be included in the scope. This inspection reflects painted surfaces, soil and dust sampling on August 18th and 19th 2010.

DWELLING SELECTION PROCESS

The client provided access and input in the unit selection process. Building A 18309 96th Ave. NE was under renovation. Unit selection here was based on paint surface condition, cleaning and future re-occupancy. Building B 18417 96th Ave. NE was occupied by families with children. Unit selection here was partly based on tenant agreement. The owner and tenants were not available for Risk Assessment questionnaires.

CERTIFICATIONS

Risk Assessor

Janet Murphy
State of Washington
Department of Community, Trade and Economic Development
Risk Assessor Certification No: 0258 Expiration Date:3/8/2013

Janet Murphy
Signature

August 27, 2010
Date

Certifying Firm

PBS Engineering + Environmental
2517 Eastlake Avenue East
Seattle, Washington 98102
Telephone: 206.223.9639

Certification No: 0178
Expiration Date: 9/3/2010

Certified Laboratory

NVL Laboratories, Inc
4708 Aurora Avenue North
Seattle, Washington 98102
Telephone: 206.547.0100

AIHA NLLAP Certification No: 101861

Advanced Analytical Environmental Testing
2821 152nd Avenue NE
Redmond, WA 98052
Telephone: 425.497.0110

Certification # DOE C856
Expiration Date: 5/12/2011

2.0 LEAD PAINT INSPECTION

2.1 Site Information

The site is a 23 unit apartment complex with two buildings located in Bothell, Washington. Both buildings have undergone mold abatement performed by Affordable Abatement of Everett WA. The old flat roofs were removed. All electrical and plumbing fixtures, cabinets, wiring, plumbing supply, waste and vent materials, ceiling, floor and wall insulation, exterior stucco and flooring materials were removed and replaced.

Building A 18309 96th Avenue NE

Building A was constructed in 1967. It is a two-story building with a basement. There are 17 units. The building is of wood construction with gypsum interior walls. The exterior is fiber cement (Hardy Board) siding. Apartment units contain two bedrooms, one bath, a kitchen/dining area, and living room. The building is in good condition.

The majority of the interior surfaces are painted. Walls are painted gypsum wallboard and joint compound units. Covebase and door frames are MDF with factory painted coatings. The interior doors are painted wood. The exterior doors are painted metal. The windows are vinyl. The exterior is painted fiber cement (Hardy Board) siding with painted wood trim.

At the time of this inspection, Building A was under renovation. New cabinets, doors, covebase, electric heating units and lighting were being installed. Metal flashing was being cut with a circular saw and joint compound was being sanded.

Buildings B 18417 96th Avenue NE

Building B was constructed in 1968. It is a two-storey building with 6 units. The building is of wood construction with gypsum interior walls. The exterior siding is fiber cement (Hardy Board) siding. Apartment units contain two bedrooms, one bath, a kitchen/dining area, and living room. The building is in good condition.

The majority of the interior surfaces are painted. Walls are painted gypsum wallboard, and joint compound units. Covebase and door frames are MDF with factory painted coatings. The interior doors are painted wood. The exterior doors are painted metal. The windows are vinyl. The exterior is painted fiber cement (Hardy Board) siding with painted wood trim.

2.2 Lead-Based Paint Inspection and Sampling

The presence of lead in paint was determined through two methods, x-ray fluorescence spectroscopy and bulk sampling.

2.2.1 XRF Sampling

A handheld INNOV-X Systems Inc. X-Ray Fluorescence Analyzer (XRF) operating in lead paint mode was used to perform a surface by surface lead paint inspection of each selected unit and building.

HUD and Environmental Protection Agency (EPA) have set 1.0 milligrams per square centimeter (mg/cm^2) as the threshold limit for lead-based paint as determined through X-Ray Fluorescence (XRF) testing. HUD and EPA have set 5,000 parts per million (ppm), or 0.5 percent by atomic absorption laboratory analysis as the threshold limit for lead-based paint. Paint that is known to contain lead levels less than those described above does not have to be evaluated,

although all deteriorated paint (paint surfaces in poor condition) should be repaired because it may contain lower levels of lead that may contribute to lead dust or lead contaminated soil hazards.

All calibration readings were within the tolerance for this instrument. No substrate correction is required with the INNOV-X Systems XRF per the instrument's performance characteristic sheet.

The "Side" information presented on the XRF data sheets is in relation to the side of the rooms, or building exteriors where the XRF test spot is located. The inspector/risk assessor used the north side of each residence as the basis to establish side "A". Sides B, C, and D follow in clockwise rotation.

Please refer to the XRF sample data table for the complete list of XRF samples located in Tab 1.

2.2.2 Bulk Paint-Chip Sampling

Bulk paint-chip verification samples were collected from selected painted surfaces. Representative paint-chip samples were submitted to a qualified lab for analysis by atomic absorption, EPA Method 7000. Bulk paint-chip sample laboratory results are located in Tab 1.

2.3 Components with Lead-Based Paint

Lead was not found in any painted components above the HUD level of 1mg/cm^2 by XRF or 0.5% by AAS.

2.4 Deteriorated Lead-Based Paint Surfaces

In general, painted surfaces were evaluated to be in an intact or fair condition. However, one area of blistering paint was identified. It was determined that no lead was present in any of the blistered surfaces.

3.0 LEAD-BASED PAINT RISK ASSESSMENT

3.1 Locations and Types of Lead Hazards Identified

Lead-based paint was not found on any painted components above the HUD levels.

3.2 Dust Sample Results

The purpose of dust sampling is to determine the lead concentration in settled dust. Dust is an important pathway for childhood exposure to lead. Children can be exposed to leaded dust by inhalation or ingestion. Ingestion of leaded dust is a common pathway during normal hand to mouth activities involving their fingers, or toys that that have come in contact with leaded dusts. Wipe sampling is the recommended method for collecting surface dust samples. Dust samples are typically collected from floors near friction and impact spots or areas of deteriorated paint, interior window sills, and window wells. Cabinets, shelves, and table tops may also be sampled if there is reason to suspect a surface dust hazard may exist caused by friction, impact points, or from areas of deteriorated paint nearby.

Dust wipes were collected in accordance with EPA 747-R-95-001, Residential Sampling for Lead: Protocols for Dust and Soil Sampling. All wipe samples were analyzed using EPA Method SW846-7000B, Flame Atomic Absorption.

HUD has established the following threshold limits for lead in settled dust in target housing: 40 µg/ft^2 on floors, 250 µg/ft^2 on window sills, and 400 µg/ft^2 in window wells.

Results of the single surface dust sampling conducted during this assessment revealed lead concentrations below EPA/HUD lead standards indicating that lead hazards do not exist as discussed above. The following table lists the locations and findings from lead dust wipe sampling.

SAMPLE NO.	LOCATION	Surface	LEAD (µg/ft^2)
40720.008-1	Unit 103; Front Entry	Floor (bare)	<14.0
40720.008-2	Unit 103; Bedroom 2	Window Sill	<29.0
40720.008-3	Unit 102; Front Entry	Floor (bare)	<14.0
40720.008-4	Unit 203; Bedroom 2	Window Sill	<29.0
40720.008-5	Unit 203; Kitchen	Window Sill	<29.0
40720.008-6	Unit 203; Entryway	Floor (bare)	<14.0
40720.008-7	Unit 102; Bedroom 2	Window Sill	<29.0
40720.008-8	Unit 102; Kitchen	Window Sill	<29.0
40720.008-9	Unit 201; Bedroom 1	Window Sill	<29.0
40720.008-10	Unit 201; Kitchen	Floor (bare)	<14.0
40720.008-11	Unit 204; Bedroom 1	Window Sill	<29.0
40720.008-12	Unit 204; Entryway	Floor (carpet)	<14.0
40720.008-13	Unit 208; Bedroom 2	Window Sill	<29.0
40720.008-14	Unit 208; Entryway	Floor (carpet)	<14.0
40720.008-15	Unit 104; Kitchen	Window Sill	<14.0
40720.008-16	Unit 104; Bathroom	Floor (bare)	<29.0
40720.008-17	Unit 001; Bedroom 2	Floor (carpet)	<14.0
40720.008-18	Unit 107; Bedroom 1	Window Sill	<14.0
40720.008-19	Unit 108; Bedroom 2	Window Sill	<29.0
40720.008-20	Blank	0	0

Lead wipe sample inventory and lab reports are located under Tab 1.

3.3 Soil Samples

Composite soil sampling was conducted around the foundation or “drip line” of the buildings. The soil samples were collected in accordance with EPA 747-R-95-001, Residential Sampling for Lead: Protocols for Dust and Soil Sampling. All samples were analyzed using EPA Method SW846-7000B, Flame Atomic Absorption.

The EPA/HUD threshold for bare residential soil is 1,200 parts per million (ppm) and for child’s play areas is 400 ppm.

Analysis of the composite soil samples collected from the exterior drip lines of selected buildings revealed lead in soil below the EPA/HUD threshold for bare residential soil. Lead soil sample chain-of-custody and lab reports are located under Tab 1.
There were no playground areas in the complex for soil sampling.

4.0 LEAD HAZARD CONTROL

4.1 Definitions

No lead-based paint was identified on this property. Analysis of dust wipe, paint chip, and soil sample resulted in lead concentrations below the HUD reporting limit.

4.2 Program Development

A hazard control program is not required to be established for this property

4.3 Lead Hazard Control Recommendations

No lead hazards were observed during this assessment. However, It is possible that lead hazards could develop at this site that did not exist at the time of this assessment. In order to prevent hazards from developing, PBS recommends that any new paint added to the buildings be lead-free.

4.4 Notification of Results of the Risk Assessment

The Owner should provide results of this report to the residents in the dwelling. The Owner should explain to the residents:

1. No lead hazards were identified at the property.

2. Provide a copy of the EPA brochure; Protect Your Family From Lead In Your Home located in Tab 2 to the residents.

TAB 1

Lab Reports and Sample Data Sheets

XRF Data Sheets
XRF Field Notes
Bulk Sample Analyses
Dust Wipe Sample Analyses
Soil Sample Analyses

King County Housing Authority
Park Royal Apartments
18417 96th Avenue NE
Bothell, WA

PBS Engineering + Environmental
Project # 40573.043

LEAD XRF SURVEY

Date	Reading	Mode	LiveTime	Match1	MN1	Pass/Fail	Pass Fail Standard	Calibration
18-Aug-10	1	Standardization	33.4	0.019923	226	-0.039063	PASS	
18-Aug-10	2	Lead Paint Inspection	26.59	1.02	0.07	surface	Positive	YES
18-Aug-10	3	Lead Paint Inspection	21.62	0.87	0.07	surface	Negative	
18-Aug-10	4	Lead Paint Inspection	25.59	1.05	0.07	surface	Positive	YES
18-Aug-10	5	Lead Paint Inspection	20.7	1.1	0.09	surface	Positive	YES
18-Aug-10	6	Lead Paint Inspection	25.79	1.04	0.07	surface	Positive	YES
18-Aug-10	7	Lead Paint Inspection	6.04	0	0		Negative	
18-Aug-10	8	Lead Paint Inspection	5.83	0	0		Negative	
18-Aug-10	9	Lead Paint Inspection	6.06	0	0		Negative	
18-Aug-10	10	Lead Paint Inspection	5.63	0	0		Negative	
18-Aug-10	11	Lead Paint Inspection	5.86	0	0		Negative	
18-Aug-10	12	Lead Paint Inspection	5.64	0	0		Negative	
18-Aug-10	13	Lead Paint Inspection	5.87	0.01	0.01		Negative	
18-Aug-10	14	Lead Paint Inspection	6.07	0.02	0.04		Negative	
18-Aug-10	15	Lead Paint Inspection	5.81	0	0		Negative	
18-Aug-10	16	Lead Paint Inspection	5.94	0	0		Negative	
18-Aug-10	17	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	18	Lead Paint Inspection	6.06	0	0		Negative	
18-Aug-10	19	Lead Paint Inspection	6.05	0	0		Negative	
18-Aug-10	20	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	21	Lead Paint Inspection	6.02	0	0		Negative	
18-Aug-10	22	Lead Paint Inspection	6.02	0	0		Negative	
18-Aug-10	23	Lead Paint Inspection	6.02	0	0		Negative	
18-Aug-10	24	Lead Paint Inspection	6.02	0	0		Negative	
18-Aug-10	25	Lead Paint Inspection	5.95	0	0		Negative	
18-Aug-10	26	Lead Paint Inspection	5.6	0	0		Negative	
18-Aug-10	27	Lead Paint Inspection	5.9	0	0		Negative	
18-Aug-10	28	Lead Paint Inspection	6.01	0	0		Negative	
18-Aug-10	29	Lead Paint Inspection	5.97	0	0		Negative	
18-Aug-10	30	Lead Paint Inspection	6	0	0		Negative	

LEAD XRF SURVEY

Date	Reading	Mode	LiveTime	Match1	MN1	Pass/Fail	Pass Fail Standard	Calibration
18-Aug-10	31	Lead Paint Inspection	5.95	0	0		Negative	
18-Aug-10	32	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	33	Lead Paint Inspection	5.9	0	0		Negative	
18-Aug-10	34	Lead Paint Inspection	5.85	0	0		Negative	
18-Aug-10	35	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	36	Lead Paint Inspection	6.06	0	0		Negative	
18-Aug-10	37	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	38	Lead Paint Inspection	6.04	0	0		Negative	
18-Aug-10	39	Lead Paint Inspection	5.97	0	0		Negative	
18-Aug-10	40	Lead Paint Inspection	5.87	0	0		Negative	
18-Aug-10	41	Lead Paint Inspection	5.86	0	0		Negative	
18-Aug-10	42	Lead Paint Inspection	6.02	0	0		Negative	
18-Aug-10	43	Lead Paint Inspection	5.97	0	0		Negative	
18-Aug-10	44	Lead Paint Inspection	5.92	0	0		Negative	
18-Aug-10	45	Lead Paint Inspection	5.82	0	0		Negative	
18-Aug-10	46	Lead Paint Inspection	5.88	0	0		Negative	
18-Aug-10	47	Lead Paint Inspection	5.85	0	0		Negative	
18-Aug-10	48	Lead Paint Inspection	6.02	0	0		Negative	
18-Aug-10	49	Lead Paint Inspection	5.96	0	0		Negative	
18-Aug-10	50	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	51	Lead Paint Inspection	5.75	0	0		Negative	
18-Aug-10	52	Lead Paint Inspection	5.81	0	0		Negative	
18-Aug-10	53	Lead Paint Inspection	5.82	0	0		Negative	
18-Aug-10	54	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	55	Lead Paint Inspection	5.98	0	0		Negative	
18-Aug-10	56	Lead Paint Inspection	6.07	0	0		Negative	
18-Aug-10	57	Lead Paint Inspection	5.93	0	0		Negative	
18-Aug-10	58	Lead Paint Inspection	5.36	0	0		Negative	
18-Aug-10	59	Lead Paint Inspection	5.63	0	0		Negative	
18-Aug-10	60	Lead Paint Inspection	5.44	0	0		Negative	

LEAD XRF SURVEY

Date	Reading	Mode	LiveTime	Match1	MN1	Pass/Fail	Pass Fail Standard	Calibration
18-Aug-10	61	Lead Paint Inspection	6.01	0	0		Negative	
18-Aug-10	62	Lead Paint Inspection	5.95	0	0		Negative	
18-Aug-10	63	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	64	Lead Paint Inspection	6.02	0	0		Negative	
18-Aug-10	65	Lead Paint Inspection	5.98	0	0.02		Negative	
18-Aug-10	66	Standardization	33.77	0.019907	219	0.003579	PASS	
18-Aug-10	67	Lead Paint Inspection	26.21	0.94	0.07	surface	Negative	
18-Aug-10	68	Lead Paint Inspection	26.58	0.98	0.07	surface	Negative	
18-Aug-10	69	Lead Paint Inspection	16.85	1.1	0.1	surface	Positive	YES
18-Aug-10	70	Lead Paint Inspection	25.58	1	0.07	surface	Positive	YES
18-Aug-10	71	Lead Paint Inspection	9.41	1.16	0.14	surface	Positive	YES
18-Aug-10	72	Lead Paint Inspection	5.73	0	0		Negative	
18-Aug-10	73	Lead Paint Inspection	6.03	0	0		Negative	
18-Aug-10	74	Lead Paint Inspection	5.98	0	0		Negative	
18-Aug-10	75	Lead Paint Inspection	6.07	0	0		Negative	
18-Aug-10	76	Lead Paint Inspection	5.62	0	0		Negative	
18-Aug-10	77	Lead Paint Inspection	5.65	0	0		Negative	
18-Aug-10	78	Lead Paint Inspection	5.92	0	0		Negative	
18-Aug-10	79	Lead Paint Inspection	5.92	0	0		Negative	
18-Aug-10	80	Lead Paint Inspection	5.96	0	0		Negative	
18-Aug-10	81	Lead Paint Inspection	5.98	0	0		Negative	
18-Aug-10	82	Lead Paint Inspection	6.01	0	0		Negative	
18-Aug-10	83	Lead Paint Inspection	6.03	0	0		Negative	
18-Aug-10	84	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	85	Lead Paint Inspection	5.9	0	0		Negative	
18-Aug-10	86	Lead Paint Inspection	6.01	0	0		Negative	
18-Aug-10	87	Lead Paint Inspection	5.93	0	0		Negative	
18-Aug-10	88	Lead Paint Inspection	6.04	0	0		Negative	
18-Aug-10	89	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	90	Lead Paint Inspection	5.91	0	0		Negative	

LEAD XRF SURVEY

Date	Reading	Mode	LiveTime	Match1	MN1	Pass/Fail	Pass Fail Standard	Calibration
18-Aug-10	91	Lead Paint Inspection	5.76	0	0		Negative	
18-Aug-10	92	Lead Paint Inspection	5.81	0	0		Negative	
18-Aug-10	93	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	94	Lead Paint Inspection	5.76	0	0		Negative	
18-Aug-10	95	Lead Paint Inspection	6.02	0	0		Negative	
18-Aug-10	96	Lead Paint Inspection	5.95	0	0		Negative	
18-Aug-10	97	Lead Paint Inspection	6.05	0	0		Negative	
18-Aug-10	98	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	99	Lead Paint Inspection	5.9	0	0		Negative	
18-Aug-10	100	Lead Paint Inspection	5.61	0	0		Negative	
18-Aug-10	101	Lead Paint Inspection	5.85	0	0		Negative	
18-Aug-10	102	Lead Paint Inspection	6.02	0	0		Negative	
18-Aug-10	103	Lead Paint Inspection	5.78	0	0		Negative	
18-Aug-10	104	Lead Paint Inspection	5.96	0	0		Negative	
18-Aug-10	105	Lead Paint Inspection	6.05	0	0		Negative	
18-Aug-10	106	Lead Paint Inspection	6.05	0	0		Negative	
18-Aug-10	107	Lead Paint Inspection	5.64	0	0		Negative	
18-Aug-10	108	Lead Paint Inspection	5.88	0	0		Negative	
18-Aug-10	109	Lead Paint Inspection	5.88	0	0		Negative	
18-Aug-10	110	Lead Paint Inspection	6.02	0	0		Negative	
18-Aug-10	111	Lead Paint Inspection	6.03	0	0		Negative	
18-Aug-10	112	Lead Paint Inspection	6.11	0	0		Negative	
18-Aug-10	113	Lead Paint Inspection	5.74	0	0		Negative	
18-Aug-10	114	Lead Paint Inspection	5.84	0	0		Negative	
18-Aug-10	115	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	116	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	117	Lead Paint Inspection	6.02	0	0		Negative	
18-Aug-10	118	Lead Paint Inspection	5.98	0	0		Negative	
18-Aug-10	119	Lead Paint Inspection	6.01	0	0		Negative	
18-Aug-10	120	Lead Paint Inspection	6.02	0	0		Negative	

LEAD XRF SURVEY

Date	Reading	Mode	LiveTime	Match1	MN1	Pass/Fail	Pass Fail Standard	Calibration
18-Aug-10	121	Lead Paint Inspection	5.78	0	0		Negative	
18-Aug-10	122	Lead Paint Inspection	5.85	0	0		Negative	
18-Aug-10	123	Lead Paint Inspection	5.85	0	0		Negative	
18-Aug-10	124	Lead Paint Inspection	6.03	0	0		Negative	
18-Aug-10	125	Lead Paint Inspection	6.06	0	0		Negative	
18-Aug-10	126	Lead Paint Inspection	6.08	0	0		Negative	
18-Aug-10	127	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	128	Lead Paint Inspection	5.74	0	0		Negative	
18-Aug-10	129	Lead Paint Inspection	5.85	0	0		Negative	
18-Aug-10	130	Lead Paint Inspection	5.85	0	0		Negative	
18-Aug-10	131	Lead Paint Inspection	6.07	0	0		Negative	
18-Aug-10	132	Lead Paint Inspection	5.74	0	0		Negative	
18-Aug-10	133	Lead Paint Inspection	5.97	0	0		Negative	
18-Aug-10	134	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	135	Lead Paint Inspection	5.98	0	0		Negative	
18-Aug-10	136	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	137	Lead Paint Inspection	5.83	0	0		Negative	
18-Aug-10	138	Lead Paint Inspection	5.62	0	0		Negative	
18-Aug-10	139	Lead Paint Inspection	5.91	0	0		Negative	
18-Aug-10	140	Lead Paint Inspection	5.95	0	0		Negative	
18-Aug-10	141	Lead Paint Inspection	5.66	0	0		Negative	
18-Aug-10	142	Lead Paint Inspection	5.73	0	0		Negative	
18-Aug-10	143	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	144	Lead Paint Inspection	6.05	0	0		Negative	
18-Aug-10	145	Lead Paint Inspection	6.03	0	0		Negative	
18-Aug-10	146	Lead Paint Inspection	5.71	0	0		Negative	
18-Aug-10	147	Lead Paint Inspection	5.94	0	0		Negative	
18-Aug-10	148	Lead Paint Inspection	5.97	0	0		Negative	
18-Aug-10	149	Lead Paint Inspection	5.77	0	0		Negative	
18-Aug-10	150	Lead Paint Inspection	5.98	0	0.02		Negative	

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LEAD XRF SURVEY

Date	Reading	Mode	LiveTime	Match1	MN1	Pass/Fail	Pass Fail Standard	Calibration
18-Aug-10	151	Lead Paint Inspection	5.54	0	0		Negative	
18-Aug-10	152	Lead Paint Inspection	6.08	0	0		Negative	
18-Aug-10	153	Lead Paint Inspection	6.08	0	0		Negative	
18-Aug-10	154	Lead Paint Inspection	6.11	0	0		Negative	
18-Aug-10	155	Lead Paint Inspection	6.03	0	0		Negative	
18-Aug-10	156	Lead Paint Inspection	6.02	0	0		Negative	
18-Aug-10	157	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	158	Lead Paint Inspection	5.93	0	0		Negative	
18-Aug-10	159	Lead Paint Inspection	6.04	0	0		Negative	
18-Aug-10	160	Lead Paint Inspection	5.95	0	0		Negative	
18-Aug-10	161	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	162	Lead Paint Inspection	6.05	0	0		Negative	
18-Aug-10	163	Lead Paint Inspection	5.8	0	0		Negative	
18-Aug-10	164	Lead Paint Inspection	5.71	0	0		Negative	
18-Aug-10	165	Lead Paint Inspection	5.85	0	0		Negative	
18-Aug-10	166	Lead Paint Inspection	5.77	0	0		Negative	
18-Aug-10	167	Lead Paint Inspection	5.9	0	0		Negative	
18-Aug-10	168	Lead Paint Inspection	5.81	0	0		Negative	
18-Aug-10	169	Lead Paint Inspection	5.68	0	0		Negative	
18-Aug-10	170	Lead Paint Inspection	5.77	0	0		Negative	
18-Aug-10	171	Lead Paint Inspection	5.75	0	0		Negative	
18-Aug-10	172	Lead Paint Inspection	5.74	0	0		Negative	
18-Aug-10	173	Lead Paint Inspection	5.74	0	0		Negative	
18-Aug-10	174	Lead Paint Inspection	5.82	0.01	0.03		Negative	
18-Aug-10	175	Lead Paint Inspection	5.7	0.03	0.1		Negative	
18-Aug-10	176	Standardization	33.49	0.019926	221	-0.021516	PASS	
18-Aug-10	177	Lead Paint Inspection	25.9	1	0.07	surface	Positive	YES
18-Aug-10	178	Lead Paint Inspection	11.81	1.12	0.12	surface	Positive	YES
18-Aug-10	179	Lead Paint Inspection	25.77	1	0.07	surface	Positive	YES

King County Housing Authority
Park Royal Apartments
18309 96th Avenue NE
Bothell, WA

PBS Engineering + Environmental

PBS Engineering + Environmental
Project # 40573.043

LEAD XRF SURVEY

Date	Reading	Mode	LiveTime	Match1	MN1	Pass/Fail	Pass Fail Standard	Calibration
18-Aug-10	180	Lead Paint Inspection	5.98	0	0		Negative	
18-Aug-10	181	Lead Paint Inspection	6.06	0	0		Negative	
18-Aug-10	182	Lead Paint Inspection	6.02	0	0		Negative	
18-Aug-10	183	Lead Paint Inspection	6.08	0	0		Negative	
18-Aug-10	184	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	185	Lead Paint Inspection	5.82	0	0		Negative	
18-Aug-10	186	Lead Paint Inspection	5.98	0	0		Negative	
18-Aug-10	187	Lead Paint Inspection	5.84	0	0		Negative	
18-Aug-10	188	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	189	Lead Paint Inspection	6.04	0	0		Negative	
18-Aug-10	190	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	191	Lead Paint Inspection	5.7	0	0		Negative	
18-Aug-10	192	Lead Paint Inspection	5.77	0	0		Negative	
18-Aug-10	193	Lead Paint Inspection	5.76	0	0		Negative	
18-Aug-10	194	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	195	Lead Paint Inspection	5.96	0	0		Negative	
18-Aug-10	196	Lead Paint Inspection	5.93	0	0		Negative	
18-Aug-10	197	Lead Paint Inspection	6.03	0	0		Negative	
18-Aug-10	198	Lead Paint Inspection	6.03	0	0		Negative	
18-Aug-10	199	Lead Paint Inspection	6.02	0	0		Negative	
18-Aug-10	200	Lead Paint Inspection	5.95	0	0		Negative	
18-Aug-10	201	Lead Paint Inspection	5.87	0	0		Negative	
18-Aug-10	202	Lead Paint Inspection	5.62	0	0		Negative	
18-Aug-10	203	Lead Paint Inspection	5.97	0	0		Negative	
18-Aug-10	204	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	205	Lead Paint Inspection	6.03	0	0		Negative	
18-Aug-10	206	Lead Paint Inspection	5.98	0	0		Negative	
18-Aug-10	207	Lead Paint Inspection	6.02	0	0		Negative	
18-Aug-10	208	Lead Paint Inspection	5.85	0	0		Negative	
18-Aug-10	209	Lead Paint Inspection	5.68	0	0		Negative	

LEAD XRF SURVEY

Date	Reading	Mode	LiveTime	Match1	MN1	Pass/Fail	Pass Fail Standard	Calibration
18-Aug-10	210	Lead Paint Inspection	5.84	0	0		Negative	
18-Aug-10	211	Lead Paint Inspection	5.84	0	0		Negative	
18-Aug-10	212	Lead Paint Inspection	5.83	0	0		Negative	
18-Aug-10	213	Lead Paint Inspection	6.01	0	0		Negative	
18-Aug-10	214	Lead Paint Inspection	5.89	0	0		Negative	
18-Aug-10	215	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	216	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	217	Lead Paint Inspection	5.98	0	0		Negative	
18-Aug-10	218	Lead Paint Inspection	5.94	0	0		Negative	
18-Aug-10	219	Lead Paint Inspection	5.88	0	0		Negative	
18-Aug-10	220	Lead Paint Inspection	5.83	0	0		Negative	
18-Aug-10	221	Lead Paint Inspection	6.02	0	0		Negative	
18-Aug-10	222	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	223	Lead Paint Inspection	6.07	0	0		Negative	
18-Aug-10	224	Lead Paint Inspection	5.91	0	0		Negative	
18-Aug-10	225	Lead Paint Inspection	5.97	0	0		Negative	
18-Aug-10	226	Lead Paint Inspection	5.74	0	0		Negative	
18-Aug-10	227	Lead Paint Inspection	5.98	0	0		Negative	
18-Aug-10	228	Lead Paint Inspection	6.05	0	0		Negative	
18-Aug-10	229	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	230	Lead Paint Inspection	6.04	0	0		Negative	
18-Aug-10	231	Lead Paint Inspection	6.02	0	0		Negative	
18-Aug-10	232	Lead Paint Inspection	5.4	0	0		Negative	
18-Aug-10	233	Lead Paint Inspection	5.79	0	0		Negative	
18-Aug-10	234	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	235	Lead Paint Inspection	6.06	0	0		Negative	
18-Aug-10	236	Lead Paint Inspection	6.07	0	0		Negative	
18-Aug-10	237	Lead Paint Inspection	5.55	0	0		Negative	
18-Aug-10	238	Lead Paint Inspection	6.04	0	0		Negative	
18-Aug-10	239	Lead Paint Inspection	6.08	0	0		Negative	

LEAD XRF SURVEY

Date	Reading	Mode	LiveTime	Match1	MN1	Pass/Fail	Pass Fail Standard	Calibration
18-Aug-10	240	Lead Paint Inspection	6.05	0	0		Negative	
18-Aug-10	241	Lead Paint Inspection	5.74	0	0		Negative	
18-Aug-10	242	Lead Paint Inspection	6.03	0	0		Negative	
18-Aug-10	243	Lead Paint Inspection	5.88	0	0		Negative	
18-Aug-10	244	Lead Paint Inspection	5.8	0	0		Negative	
18-Aug-10	245	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	246	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	247	Lead Paint Inspection	6.01	0	0		Negative	
18-Aug-10	248	Lead Paint Inspection	6.05	0	0		Negative	
18-Aug-10	249	Lead Paint Inspection	6.06	0	0		Negative	
18-Aug-10	250	Lead Paint Inspection	6.01	0	0		Negative	
18-Aug-10	251	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	252	Lead Paint Inspection	6.01	0	0		Negative	
18-Aug-10	253	Lead Paint Inspection	5.93	0	0		Negative	
18-Aug-10	254	Lead Paint Inspection	6.07	0	0		Negative	
18-Aug-10	255	Lead Paint Inspection	5.68	0	0		Negative	
18-Aug-10	256	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	257	Lead Paint Inspection	5.94	0	0		Negative	
18-Aug-10	258	Lead Paint Inspection	5.98	0	0		Negative	
18-Aug-10	259	Lead Paint Inspection	5.97	0	0		Negative	
18-Aug-10	260	Lead Paint Inspection	6.03	0	0		Negative	
18-Aug-10	261	Lead Paint Inspection	5.91	0	0		Negative	
18-Aug-10	262	Lead Paint Inspection	6.07	0	0		Negative	
18-Aug-10	263	Lead Paint Inspection	6.03	0	0		Negative	
18-Aug-10	264	Lead Paint Inspection	5.91	0	0		Negative	
18-Aug-10	265	Lead Paint Inspection	6.01	0	0		Negative	
18-Aug-10	266	Lead Paint Inspection	6.02	0	0		Negative	
18-Aug-10	267	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	268	Lead Paint Inspection	6.02	0	0		Negative	
18-Aug-10	269	Lead Paint Inspection	5.97	0	0		Negative	

LEAD XRF SURVEY

Date	Reading	Mode	LiveTime	Match1	MN1	Pass/Fail	Pass Fail Standard	Calibration
18-Aug-10	270	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	271	Lead Paint Inspection	6.05	0	0		Negative	
18-Aug-10	272	Lead Paint Inspection	6.03	0	0		Negative	
18-Aug-10	273	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	274	Lead Paint Inspection	6.05	0	0		Negative	
18-Aug-10	275	Lead Paint Inspection	6.05	0	0		Negative	
18-Aug-10	276	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	277	Lead Paint Inspection	5.93	0	0		Negative	
18-Aug-10	278	Lead Paint Inspection	6.05	0	0		Negative	
18-Aug-10	279	Lead Paint Inspection	6.06	0	0		Negative	
18-Aug-10	280	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	281	Lead Paint Inspection	5.78	0	0		Negative	
18-Aug-10	282	Lead Paint Inspection	5.67	0	0		Negative	
18-Aug-10	283	Lead Paint Inspection	5.72	0	0		Negative	
18-Aug-10	284	Lead Paint Inspection	6.01	0	0		Negative	
18-Aug-10	285	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	286	Lead Paint Inspection	5.85	0	0		Negative	
18-Aug-10	287	Lead Paint Inspection	5.83	0	0		Negative	
18-Aug-10	288	Lead Paint Inspection	5.96	0	0		Negative	
18-Aug-10	289	Lead Paint Inspection	5.88	0	0		Negative	
18-Aug-10	290	Lead Paint Inspection	5.84	0	0		Negative	
18-Aug-10	291	Lead Paint Inspection	5.91	0	0		Negative	
18-Aug-10	292	Lead Paint Inspection	6.01	0	0		Negative	
18-Aug-10	293	Lead Paint Inspection	5.81	0	0		Negative	
18-Aug-10	294	Lead Paint Inspection	6.01	0	0		Negative	
18-Aug-10	295	Lead Paint Inspection	6.03	0	0		Negative	
18-Aug-10	296	Lead Paint Inspection	6.08	0	0		Negative	
18-Aug-10	297	Lead Paint Inspection	5.98	0	0		Negative	
18-Aug-10	298	Lead Paint Inspection	5.94	0	0		Negative	
18-Aug-10	299	Lead Paint Inspection	6.06	0	0		Negative	

LEAD XRF SURVEY

Date	Reading	Mode	LiveTime	Match1	MN1	Pass/Fail	Pass Fail Standard	Calibration
18-Aug-10	300	Lead Paint Inspection	6.04	0	0		Negative	
18-Aug-10	301	Lead Paint Inspection	6.04	0	0		Negative	
18-Aug-10	302	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	303	Lead Paint Inspection	5.96	0	0		Negative	
18-Aug-10	304	Lead Paint Inspection	5.94	0	0		Negative	
18-Aug-10	305	Lead Paint Inspection	6.02	0	0		Negative	
18-Aug-10	306	Lead Paint Inspection	6.05	0	0		Negative	
18-Aug-10	307	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	308	Lead Paint Inspection	6.01	0	0		Negative	
18-Aug-10	309	Lead Paint Inspection	5.96	0	0		Negative	
18-Aug-10	310	Lead Paint Inspection	6.08	0	0		Negative	
18-Aug-10	311	Lead Paint Inspection	6.05	0	0		Negative	
18-Aug-10	312	Lead Paint Inspection	5.77	0	0		Negative	
18-Aug-10	313	Lead Paint Inspection	6.06	0	0		Negative	
18-Aug-10	314	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	315	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	316	Lead Paint Inspection	6.04	0	0		Negative	
18-Aug-10	317	Lead Paint Inspection	6.05	0	0		Negative	
18-Aug-10	318	Lead Paint Inspection	5.75	0	0		Negative	
18-Aug-10	319	Lead Paint Inspection	5.56	0	0		Negative	
18-Aug-10	320	Lead Paint Inspection	5.98	0	0		Negative	
18-Aug-10	321	Lead Paint Inspection	5.66	0	0		Negative	
18-Aug-10	322	Lead Paint Inspection	5.73	0	0		Negative	
18-Aug-10	323	Lead Paint Inspection	6.09	0	0		Negative	
18-Aug-10	324	Lead Paint Inspection	5.76	0	0		Negative	
18-Aug-10	325	Lead Paint Inspection	5.97	0	0		Negative	
18-Aug-10	326	Lead Paint Inspection	5.82	0	0		Negative	
18-Aug-10	327	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	328	Lead Paint Inspection	5.93	0	0		Negative	
18-Aug-10	329	Lead Paint Inspection	5.93	0	0		Negative	

LEAD XRF SURVEY

Date	Reading	Mode	LiveTime	Match1	MN1	Pass/Fail	Pass Fail Standard	Calibration
18-Aug-10	330	Lead Paint Inspection	5.97	0	0		Negative	
18-Aug-10	331	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	332	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	333	Lead Paint Inspection	6.02	0	0		Negative	
18-Aug-10	334	Lead Paint Inspection	6.01	0	0		Negative	
18-Aug-10	335	Lead Paint Inspection	5.85	0	0		Negative	
18-Aug-10	336	Lead Paint Inspection	5.63	0	0		Negative	
18-Aug-10	337	Lead Paint Inspection	5.73	0	0		Negative	
18-Aug-10	338	Lead Paint Inspection	5.97	0	0		Negative	
18-Aug-10	339	Lead Paint Inspection	5.78	0	0		Negative	
18-Aug-10	340	Lead Paint Inspection	5.65	0	0		Negative	
18-Aug-10	341	Lead Paint Inspection	6.1	0	0		Negative	
18-Aug-10	342	Lead Paint Inspection	5.81	0	0		Negative	
18-Aug-10	343	Lead Paint Inspection	6.07	0	0		Negative	
18-Aug-10	344	Lead Paint Inspection	5.73	0	0		Negative	
18-Aug-10	345	Lead Paint Inspection	5.95	0	0		Negative	
18-Aug-10	346	Lead Paint Inspection	6.04	0	0		Negative	
18-Aug-10	347	Lead Paint Inspection	5.98	0	0		Negative	
18-Aug-10	348	Lead Paint Inspection	5.69	0	0		Negative	
18-Aug-10	349	Lead Paint Inspection	5.98	0	0		Negative	
18-Aug-10	350	Lead Paint Inspection	6.03	0	0		Negative	
18-Aug-10	351	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	352	Lead Paint Inspection	5.98	0	0		Negative	
18-Aug-10	353	Lead Paint Inspection	6.04	0	0		Negative	
18-Aug-10	354	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	355	Lead Paint Inspection	6.07	0	0		Negative	
18-Aug-10	356	Lead Paint Inspection	5.59	0	0.02		Negative	
18-Aug-10	357	Lead Paint Inspection	5.8	0	0		Negative	
18-Aug-10	358	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	359	Lead Paint Inspection	6	0	0		Negative	

LEAD XRF SURVEY

Date	Reading	Mode	LiveTime	Match1	MN1	Pass/Fail	Pass Fail Standard	Calibration
18-Aug-10	360	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	361	Lead Paint Inspection	6.03	0	0		Negative	
18-Aug-10	362	Lead Paint Inspection	5.95	0	0		Negative	
18-Aug-10	363	Lead Paint Inspection	5.97	0	0		Negative	
18-Aug-10	364	Lead Paint Inspection	6.08	0	0		Negative	
18-Aug-10	365	Lead Paint Inspection	6.03	0	0		Negative	
18-Aug-10	366	Lead Paint Inspection	6.09	0	0		Negative	
18-Aug-10	367	Lead Paint Inspection	6.06	0	0		Negative	
18-Aug-10	368	Lead Paint Inspection	6.09	0	0		Negative	
18-Aug-10	369	Lead Paint Inspection	5.95	0	0		Negative	
18-Aug-10	370	Lead Paint Inspection	6.05	0	0		Negative	
18-Aug-10	371	Lead Paint Inspection	5.97	0	0		Negative	
18-Aug-10	372	Lead Paint Inspection	5.83	0	0		Negative	
18-Aug-10	373	Lead Paint Inspection	5.92	0	0		Negative	
18-Aug-10	374	Lead Paint Inspection	5.73	0	0		Negative	
18-Aug-10	375	Lead Paint Inspection	6.09	0	0		Negative	
18-Aug-10	376	Lead Paint Inspection	6.02	0	0		Negative	
18-Aug-10	377	Lead Paint Inspection	6.04	0	0		Negative	
18-Aug-10	378	Lead Paint Inspection	6.01	0	0		Negative	
18-Aug-10	379	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	380	Lead Paint Inspection	5.77	0	0		Negative	
18-Aug-10	381	Lead Paint Inspection	5.97	0	0		Negative	
18-Aug-10	382	Lead Paint Inspection	6.13	0	0		Negative	
18-Aug-10	383	Lead Paint Inspection	5.95	0	0		Negative	
18-Aug-10	384	Lead Paint Inspection	5.97	0	0		Negative	
18-Aug-10	385	Lead Paint Inspection	5.98	0	0		Negative	
18-Aug-10	386	Lead Paint Inspection	5.91	0	0		Negative	
18-Aug-10	387	Lead Paint Inspection	5.84	0	0		Negative	
18-Aug-10	388	Lead Paint Inspection	5.78	0	0		Negative	
18-Aug-10	389	Lead Paint Inspection	5.64	0	0		Negative	

LEAD XRF SURVEY

Date	Reading	Mode	LiveTime	Match1	MN1	Pass/Fail	Pass Fail Standard	Calibration
18-Aug-10	390	Lead Paint Inspection	5.78	0	0		Negative	
18-Aug-10	391	Lead Paint Inspection	5.69	0	0		Negative	
18-Aug-10	392	Lead Paint Inspection	6.01	0	0		Negative	
18-Aug-10	393	Lead Paint Inspection	5.98	0	0		Negative	
18-Aug-10	394	Lead Paint Inspection	6.07	0	0		Negative	
18-Aug-10	395	Lead Paint Inspection	5.97	0	0		Negative	
18-Aug-10	396	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	397	Lead Paint Inspection	6.05	0	0		Negative	
18-Aug-10	398	Lead Paint Inspection	6.03	0	0		Negative	
18-Aug-10	399	Lead Paint Inspection	5.74	0	0		Negative	
18-Aug-10	400	Lead Paint Inspection	5.62	0	0		Negative	
18-Aug-10	401	Lead Paint Inspection	5.98	0	0		Negative	
18-Aug-10	402	Lead Paint Inspection	6.04	0	0		Negative	
18-Aug-10	403	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	404	Lead Paint Inspection	5.94	0	0		Negative	
18-Aug-10	405	Lead Paint Inspection	6.02	0	0		Negative	
18-Aug-10	406	Lead Paint Inspection	6.05	0	0		Negative	
18-Aug-10	407	Lead Paint Inspection	6.01	0	0		Negative	
18-Aug-10	408	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	409	Lead Paint Inspection	5.97	0	0		Negative	
18-Aug-10	410	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	411	Lead Paint Inspection	5.98	0	0		Negative	
18-Aug-10	412	Lead Paint Inspection	5.88	0	0		Negative	
18-Aug-10	413	Lead Paint Inspection	5.93	0	0		Negative	
18-Aug-10	414	Lead Paint Inspection	5.77	0	0		Negative	
18-Aug-10	415	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	416	Lead Paint Inspection	6.03	0	0		Negative	
18-Aug-10	417	Lead Paint Inspection	5.79	0	0		Negative	
18-Aug-10	418	Lead Paint Inspection	5.87	0	0		Negative	
18-Aug-10	419	Lead Paint Inspection	5.76	0	0		Negative	

LEAD XRF SURVEY

Date	Reading	Mode	LiveTime	Match1	MN1	Pass/Fail	Pass Fail Standard	Calibration
18-Aug-10	420	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	421	Lead Paint Inspection	6.02	0	0		Negative	
18-Aug-10	422	Lead Paint Inspection	6.06	0	0		Negative	
18-Aug-10	423	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	424	Lead Paint Inspection	6.03	0	0		Negative	
18-Aug-10	425	Lead Paint Inspection	5.88	0	0		Negative	
18-Aug-10	426	Lead Paint Inspection	5.99	0	0		Negative	
18-Aug-10	427	Lead Paint Inspection	5.81	0	0		Negative	
18-Aug-10	428	Lead Paint Inspection	6.05	0	0		Negative	
18-Aug-10	429	Lead Paint Inspection	6.02	0	0		Negative	
18-Aug-10	430	Lead Paint Inspection	6.01	0	0		Negative	
18-Aug-10	431	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	432	Lead Paint Inspection	6.04	0	0		Negative	
18-Aug-10	433	Lead Paint Inspection	6.05	0	0		Negative	
18-Aug-10	434	Lead Paint Inspection	5.57	0	0		Negative	
18-Aug-10	435	Lead Paint Inspection	5.89	0	0		Negative	
18-Aug-10	436	Lead Paint Inspection	6	0	0		Negative	
18-Aug-10	437	Lead Paint Inspection	5.98	0	0		Negative	
18-Aug-10	438	Lead Paint Inspection	5.98	0	0		Negative	
18-Aug-10	439	Lead Paint Inspection	6.03	0	0		Negative	
18-Aug-10	440	Lead Paint Inspection	6.06	0	0		Negative	
18-Aug-10	441	Lead Paint Inspection	5.8	0	0		Negative	
18-Aug-10	442	Lead Paint Inspection	6.03	0	0		Negative	
18-Aug-10	443	Lead Paint Inspection	6.01	0	0		Negative	

King County Housing Authority
Park Royal Apartments
18309 96th Avenue NE
Bothell, WA

PBS Engineering + Environmental
Project # 40573.043

LEAD XRF SURVEY

Date	Reading	Mode	LiveTime	Match1	MN1	Pass/Fail	Pass Fail Standard	Calibration
19-Aug-10	1	Standardization	34.08	0.019923	226	-0.043181	PASS	
19-Aug-10	2	Lead Paint Inspection	25.71	1.05	0.08	surface	Positive	YES
19-Aug-10	3	Lead Paint Inspection	25.65	1.01	0.07	surface	Positive	YES
19-Aug-10	4	Lead Paint Inspection	25.67	1.02	0.07	surface	Positive	YES
19-Aug-10	5	Lead Paint Inspection	6.02	0	0		Negative	
19-Aug-10	6	Lead Paint Inspection	5.76	0	0		Negative	
19-Aug-10	7	Lead Paint Inspection	5.91	0	0		Negative	
19-Aug-10	8	Lead Paint Inspection	5.31	0	0		Negative	
19-Aug-10	9	Lead Paint Inspection	5.84	0	0		Negative	
19-Aug-10	10	Lead Paint Inspection	5.85	0	0		Negative	
19-Aug-10	11	Lead Paint Inspection	5.78	0	0		Negative	
19-Aug-10	12	Lead Paint Inspection	6.03	0	0		Negative	
19-Aug-10	13	Lead Paint Inspection	5.77	0	0		Negative	
19-Aug-10	14	Lead Paint Inspection	5.54	0	0		Negative	
19-Aug-10	15	Lead Paint Inspection	5.88	0	0		Negative	
19-Aug-10	16	Lead Paint Inspection	5.96	0	0		Negative	
19-Aug-10	17	Lead Paint Inspection	5.85	0	0		Negative	
19-Aug-10	18	Lead Paint Inspection	5.7	0	0		Negative	
19-Aug-10	19	Lead Paint Inspection	5.97	0	0		Negative	
19-Aug-10	20	Lead Paint Inspection	5.86	0	0		Negative	
19-Aug-10	21	Lead Paint Inspection	5.92	0	0		Negative	
19-Aug-10	22	Lead Paint Inspection	5.54	0	0		Negative	
19-Aug-10	23	Lead Paint Inspection	5.81	0	0		Negative	
19-Aug-10	24	Lead Paint Inspection	5.51	0	0		Negative	
19-Aug-10	25	Lead Paint Inspection	5.84	0	0		Negative	
19-Aug-10	26	Lead Paint Inspection	6	0	0		Negative	
19-Aug-10	27	Lead Paint Inspection	5.88	0	0		Negative	
19-Aug-10	28	Lead Paint Inspection	5.99	0	0		Negative	
19-Aug-10	29	Lead Paint Inspection	5.84	0	0		Negative	
19-Aug-10	30	Lead Paint Inspection	6.06	0	0		Negative	

LEAD XRF SURVEY

19-Aug-10	31	Lead Paint Inspection	5.81	0	0		Negative	
19-Aug-10	32	Lead Paint Inspection	6.09	0	0		Negative	
19-Aug-10	33	Lead Paint Inspection	5.61	0	0		Negative	
19-Aug-10	34	Lead Paint Inspection	5.78	0	0		Negative	
19-Aug-10	35	Lead Paint Inspection	5.83	0	0		Negative	
19-Aug-10	36	Lead Paint Inspection	5.88	0	0		Negative	
19-Aug-10	37	Lead Paint Inspection	6.11	0	0		Negative	
19-Aug-10	38	Lead Paint Inspection	5.67	0	0		Negative	
19-Aug-10	39	Lead Paint Inspection	5.82	0	0		Negative	
19-Aug-10	40	Lead Paint Inspection	6.02	0	0		Negative	
19-Aug-10	41	Lead Paint Inspection	6.03	0	0		Negative	
19-Aug-10	42	Lead Paint Inspection	5.61	0	0		Negative	
19-Aug-10	43	Lead Paint Inspection	5.98	0	0		Negative	
19-Aug-10	44	Lead Paint Inspection	5.59	0	0		Negative	
19-Aug-10	45	Lead Paint Inspection	5.98	0	0		Negative	
19-Aug-10	46	Lead Paint Inspection	5.77	0	0		Negative	
19-Aug-10	47	Lead Paint Inspection	5.87	0	0		Negative	
19-Aug-10	48	Lead Paint Inspection	6.06	0	0		Negative	
19-Aug-10	49	Lead Paint Inspection	6.05	0	0		Negative	
19-Aug-10	50	Lead Paint Inspection	5.98	0	0		Negative	
19-Aug-10	51	Lead Paint Inspection	5.84	0	0		Negative	
19-Aug-10	52	Lead Paint Inspection	5.86	0	0		Negative	
19-Aug-10	53	Lead Paint Inspection	5.9	0	0		Negative	
19-Aug-10	54	Lead Paint Inspection	5.76	0	0		Negative	
19-Aug-10	55	Lead Paint Inspection	6.09	0	0		Negative	
19-Aug-10	56	Lead Paint Inspection	6.01	0	0		Negative	
19-Aug-10	57	Lead Paint Inspection	5.97	0	0		Negative	
19-Aug-10	58	Lead Paint Inspection	6.03	0	0		Negative	
19-Aug-10	59	Lead Paint Inspection	6.02	0	0		Negative	
19-Aug-10	60	Lead Paint Inspection	5.98	0	0		Negative	
19-Aug-10	61	Lead Paint Inspection	5.78	0	0		Negative	

LEAD XRF SURVEY

19-Aug-10	62	Lead Paint Inspection	6.05	0	0		Negative	
19-Aug-10	63	Lead Paint Inspection	6.03	0	0		Negative	
19-Aug-10	64	Lead Paint Inspection	5.77	0	0		Negative	
19-Aug-10	65	Lead Paint Inspection	5.81	0	0		Negative	
19-Aug-10	66	Lead Paint Inspection	5.79	0	0		Negative	
19-Aug-10	67	Lead Paint Inspection	5.96	0	0		Negative	
19-Aug-10	68	Lead Paint Inspection	6.02	0	0		Negative	
19-Aug-10	69	Lead Paint Inspection	6.02	0	0		Negative	
19-Aug-10	70	Lead Paint Inspection	5.99	0	0		Negative	
19-Aug-10	71	Lead Paint Inspection	5.98	0	0		Negative	
19-Aug-10	72	Lead Paint Inspection	5.57	0	0		Negative	
19-Aug-10	73	Lead Paint Inspection	6.01	0	0		Negative	
19-Aug-10	74	Lead Paint Inspection	5.96	0	0		Negative	
19-Aug-10	75	Lead Paint Inspection	6.01	0	0		Negative	
19-Aug-10	76	Lead Paint Inspection	6.02	0	0		Negative	
19-Aug-10	77	Lead Paint Inspection	6.01	0	0		Negative	
19-Aug-10	78	Lead Paint Inspection	6.03	0	0		Negative	
19-Aug-10	79	Lead Paint Inspection	6.02	0	0		Negative	
19-Aug-10	80	Lead Paint Inspection	6.01	0	0		Negative	
19-Aug-10	81	Lead Paint Inspection	6	0	0		Negative	
19-Aug-10	82	Lead Paint Inspection	6.03	0	0		Negative	
19-Aug-10	83	Lead Paint Inspection	6.06	0	0		Negative	
19-Aug-10	84	Lead Paint Inspection	6.04	0	0		Negative	
19-Aug-10	85	Lead Paint Inspection	6.03	0	0		Negative	
19-Aug-10	86	Lead Paint Inspection	6	0	0		Negative	
19-Aug-10	87	Lead Paint Inspection	5.98	0	0		Negative	
19-Aug-10	88	Lead Paint Inspection	6.02	0	0		Negative	
19-Aug-10	89	Lead Paint Inspection	6.05	0	0		Negative	
19-Aug-10	90	Lead Paint Inspection	6.05	0	0		Negative	
19-Aug-10	91	Lead Paint Inspection	5.99	0	0		Negative	
19-Aug-10	92	Lead Paint Inspection	5.72	0	0		Negative	

LEAD XRF SURVEY

19-Aug-10	93	Lead Paint Inspection	6.08	0	0		Negative	
19-Aug-10	94	Lead Paint Inspection	6.03	0	0		Negative	
19-Aug-10	95	Lead Paint Inspection	5.77	0	0		Negative	
19-Aug-10	96	Lead Paint Inspection	5.8	0	0		Negative	
19-Aug-10	97	Lead Paint Inspection	5.85	0	0		Negative	
19-Aug-10	98	Lead Paint Inspection	5.78	0	0		Negative	
19-Aug-10	99	Lead Paint Inspection	5.99	0	0		Negative	
19-Aug-10	100	Lead Paint Inspection	6.01	0	0		Negative	
19-Aug-10	101	Lead Paint Inspection	5.99	0	0		Negative	
19-Aug-10	102	Lead Paint Inspection	6.02	0	0		Negative	
19-Aug-10	103	Lead Paint Inspection	6.01	0	0		Negative	
19-Aug-10	104	Lead Paint Inspection	5.97	0	0		Negative	
19-Aug-10	105	Lead Paint Inspection	6.07	0	0		Negative	
19-Aug-10	106	Lead Paint Inspection	5.97	0	0		Negative	
19-Aug-10	107	Lead Paint Inspection	5.59	0	0		Negative	
19-Aug-10	108	Lead Paint Inspection	6	0	0		Negative	
19-Aug-10	109	Lead Paint Inspection	5.81	0	0		Negative	
19-Aug-10	110	Lead Paint Inspection	6.07	0	0		Negative	
19-Aug-10	111	Lead Paint Inspection	5.79	0	0		Negative	
19-Aug-10	112	Lead Paint Inspection	5.98	0	0		Negative	
19-Aug-10	113	Lead Paint Inspection	5.76	0	0		Negative	
19-Aug-10	114	Lead Paint Inspection	6	0	0		Negative	
19-Aug-10	115	Lead Paint Inspection	5.76	0	0		Negative	
19-Aug-10	116	Lead Paint Inspection	5.52	0	0		Negative	
19-Aug-10	117	Lead Paint Inspection	6.05	0	0		Negative	
19-Aug-10	118	Lead Paint Inspection	5.95	0	0		Negative	
19-Aug-10	119	Lead Paint Inspection	6	0	0		Negative	
19-Aug-10	120	Lead Paint Inspection	5.99	0	0		Negative	
19-Aug-10	121	Lead Paint Inspection	6.01	0	0		Negative	
19-Aug-10	122	Lead Paint Inspection	5.99	0	0		Negative	
19-Aug-10	123	Lead Paint Inspection	5.79	0	0		Negative	

LEAD XRF SURVEY

19-Aug-10	124	Lead Paint Inspection	5.96	0	0		Negative	
19-Aug-10	125	Lead Paint Inspection	6.03	0	0		Negative	
19-Aug-10	126	Lead Paint Inspection	6.03	0	0		Negative	
19-Aug-10	127	Lead Paint Inspection	5.99	0	0		Negative	
19-Aug-10	128	Lead Paint Inspection	6.02	0	0		Negative	
19-Aug-10	129	Lead Paint Inspection	6	0	0		Negative	
19-Aug-10	130	Lead Paint Inspection	5.84	0	0		Negative	
19-Aug-10	131	Lead Paint Inspection	5.83	0	0		Negative	
19-Aug-10	132	Lead Paint Inspection	5.99	0	0		Negative	
19-Aug-10	133	Lead Paint Inspection	5.94	0	0		Negative	
19-Aug-10	134	Lead Paint Inspection	5.97	0	0		Negative	
19-Aug-10	135	Lead Paint Inspection	5.73	0	0		Negative	
19-Aug-10	136	Lead Paint Inspection	6	0	0		Negative	
19-Aug-10	137	Lead Paint Inspection	6.02	0	0		Negative	
19-Aug-10	138	Lead Paint Inspection	6.06	0	0		Negative	
19-Aug-10	139	Lead Paint Inspection	5.77	0	0		Negative	
19-Aug-10	140	Lead Paint Inspection	6.02	0	0		Negative	
19-Aug-10	141	Lead Paint Inspection	5.83	0	0		Negative	
19-Aug-10	142	Lead Paint Inspection	5.9	0	0		Negative	
19-Aug-10	143	Lead Paint Inspection	6	0	0		Negative	
19-Aug-10	144	Lead Paint Inspection	6.06	0	0		Negative	
19-Aug-10	145	Lead Paint Inspection	6	0	0		Negative	
19-Aug-10	146	Lead Paint Inspection	5.77	0	0		Negative	
19-Aug-10	147	Lead Paint Inspection	5.81	0	0		Negative	
19-Aug-10	148	Lead Paint Inspection	6.02	0	0		Negative	
19-Aug-10	149	Lead Paint Inspection	5.96	0	0		Negative	
19-Aug-10	150	Lead Paint Inspection	6.07	0	0		Negative	
19-Aug-10	151	Lead Paint Inspection	6.04	0	0		Negative	
19-Aug-10	152	Lead Paint Inspection	5.59	0	0		Negative	
19-Aug-10	153	Lead Paint Inspection	5.83	0	0		Negative	
19-Aug-10	154	Lead Paint Inspection	6.06	0	0		Negative	

LEAD XRF SURVEY

19-Aug-10	155	Lead Paint Inspection	5.76	0	0		Negative	
19-Aug-10	156	Lead Paint Inspection	5.85	0	0		Negative	
19-Aug-10	157	Lead Paint Inspection	5.9	0	0		Negative	
19-Aug-10	158	Lead Paint Inspection	6.02	0	0		Negative	
19-Aug-10	159	Lead Paint Inspection	6.05	0	0		Negative	
19-Aug-10	160	Lead Paint Inspection	6.04	0	0		Negative	
19-Aug-10	161	Lead Paint Inspection	5.98	0	0		Negative	
19-Aug-10	162	Lead Paint Inspection	5.97	0	0		Negative	
19-Aug-10	163	Lead Paint Inspection	5.99	0	0		Negative	
19-Aug-10	164	Lead Paint Inspection	5.97	0	0		Negative	
19-Aug-10	165	Lead Paint Inspection	6.02	0	0		Negative	
19-Aug-10	166	Lead Paint Inspection	5.81	0	0		Negative	
19-Aug-10	167	Lead Paint Inspection	5.87	0	0		Negative	
19-Aug-10	168	Lead Paint Inspection	5.86	0	0		Negative	
19-Aug-10	169	Lead Paint Inspection	6.01	0	0		Negative	
19-Aug-10	170	Lead Paint Inspection	5.99	0	0		Negative	
19-Aug-10	171	Lead Paint Inspection	5.99	0	0		Negative	
19-Aug-10	172	Lead Paint Inspection	6.04	0	0		Negative	
19-Aug-10	173	Lead Paint Inspection	6	0	0		Negative	
19-Aug-10	174	Lead Paint Inspection	6.04	0	0		Negative	
19-Aug-10	175	Lead Paint Inspection	5.81	0	0		Negative	
19-Aug-10	176	Lead Paint Inspection	6	0	0		Negative	
19-Aug-10	177	Lead Paint Inspection	5.72	0	0		Negative	
19-Aug-10	178	Lead Paint Inspection	6	0	0		Negative	
19-Aug-10	179	Lead Paint Inspection	5.75	0	0		Negative	
19-Aug-10	180	Lead Paint Inspection	5.92	0	0		Negative	
19-Aug-10	181	Lead Paint Inspection	6	0	0		Negative	
19-Aug-10	182	Lead Paint Inspection	6.09	0	0		Negative	
19-Aug-10	183	Lead Paint Inspection	6.05	0	0		Negative	
19-Aug-10	184	Lead Paint Inspection	6.01	0	0		Negative	
19-Aug-10	185	Lead Paint Inspection	6.01	0	0		Negative	

LEAD XRF SURVEY

19-Aug-10	186	Lead Paint Inspection	6.05	0	0		Negative	
19-Aug-10	187	Lead Paint Inspection	6.03	0	0		Negative	
19-Aug-10	188	Lead Paint Inspection	6	0	0		Negative	
19-Aug-10	189	Lead Paint Inspection	6.07	0	0		Negative	
19-Aug-10	190	Lead Paint Inspection	5.97	0	0		Negative	
19-Aug-10	191	Lead Paint Inspection	5.87	0	0		Negative	
19-Aug-10	192	Lead Paint Inspection	5.97	0	0		Negative	
19-Aug-10	193	Lead Paint Inspection	5.81	0	0		Negative	
19-Aug-10	194	Lead Paint Inspection	5.83	0	0		Negative	
19-Aug-10	195	Lead Paint Inspection	6.03	0	0		Negative	
19-Aug-10	196	Lead Paint Inspection	5.92	0	0		Negative	
19-Aug-10	197	Lead Paint Inspection	6.06	0	0		Negative	
19-Aug-10	198	Lead Paint Inspection	5.99	0	0		Negative	
19-Aug-10	199	Lead Paint Inspection	6	0	0		Negative	
19-Aug-10	200	Lead Paint Inspection	5.99	0	0		Negative	
19-Aug-10	201	Lead Paint Inspection	6.08	0	0		Negative	
19-Aug-10	202	Lead Paint Inspection	5.97	0	0		Negative	
19-Aug-10	203	Lead Paint Inspection	5.79	0	0		Negative	
19-Aug-10	204	Lead Paint Inspection	5.9	0	0		Negative	
19-Aug-10	205	Lead Paint Inspection	5.99	0	0		Negative	
19-Aug-10	206	Lead Paint Inspection	6.01	0	0		Negative	
19-Aug-10	207	Lead Paint Inspection	5.98	0	0		Negative	
19-Aug-10	208	Lead Paint Inspection	6.07	0	0		Negative	
19-Aug-10	209	Lead Paint Inspection	6.03	0	0		Negative	
19-Aug-10	210	Lead Paint Inspection	6.02	0	0		Negative	
19-Aug-10	211	Lead Paint Inspection	6.02	0	0		Negative	
19-Aug-10	212	Lead Paint Inspection	5.99	0	0		Negative	
19-Aug-10	213	Lead Paint Inspection	5.72	0	0		Negative	
19-Aug-10	214	Lead Paint Inspection	6.01	0	0		Negative	
19-Aug-10	215	Lead Paint Inspection	6.01	0	0		Negative	
19-Aug-10	216	Lead Paint Inspection	5.85	0	0		Negative	

LEAD XRF SURVEY

19-Aug-10	217	Lead Paint Inspection	5.85	0	0		Negative	
19-Aug-10	218	Lead Paint Inspection	6.02	0	0		Negative	
19-Aug-10	219	Lead Paint Inspection	6.03	0	0		Negative	
19-Aug-10	220	Lead Paint Inspection	5.99	0	0		Negative	
19-Aug-10	221	Lead Paint Inspection	6	0	0		Negative	
19-Aug-10	222	Lead Paint Inspection	6.06	0	0		Negative	
19-Aug-10	223	Lead Paint Inspection	5.65	0	0		Negative	
19-Aug-10	224	Lead Paint Inspection	5.91	0	0		Negative	
19-Aug-10	225	Lead Paint Inspection	5.98	0	0		Negative	
19-Aug-10	226	Lead Paint Inspection	5.99	0	0		Negative	
19-Aug-10	227	Lead Paint Inspection	6.05	0	0		Negative	
19-Aug-10	228	Lead Paint Inspection	6.01	0	0		Negative	
19-Aug-10	229	Lead Paint Inspection	5.9	0	0		Negative	
19-Aug-10	230	Lead Paint Inspection	5.84	0	0		Negative	
19-Aug-10	231	Lead Paint Inspection	6.03	0	0		Negative	
19-Aug-10	232	Lead Paint Inspection	5.93	0	0		Negative	
19-Aug-10	233	Lead Paint Inspection	5.81	0	0		Negative	
19-Aug-10	234	Lead Paint Inspection	5.98	0	0		Negative	
19-Aug-10	235	Lead Paint Inspection	6.01	0	0		Negative	
19-Aug-10	236	Lead Paint Inspection	5.94	0	0		Negative	
19-Aug-10	237	Lead Paint Inspection	6.01	0	0		Negative	
19-Aug-10	238	Lead Paint Inspection	5.94	0	0		Negative	
19-Aug-10	239	Lead Paint Inspection	5.94	0	0		Negative	
19-Aug-10	240	Lead Paint Inspection	5.83	0	0		Negative	
19-Aug-10	241	Lead Paint Inspection	5.99	0	0		Negative	
19-Aug-10	242	Lead Paint Inspection	5.52	0	0		Negative	
19-Aug-10	243	Lead Paint Inspection	5.91	0	0		Negative	
19-Aug-10	244	Lead Paint Inspection	6.07	0	0		Negative	
19-Aug-10	245	Lead Paint Inspection	5.94	0	0		Negative	
19-Aug-10	246	Lead Paint Inspection	6.03	0	0		Negative	
19-Aug-10	247	Lead Paint Inspection	5.97	0	0		Negative	

LEAD XRF SURVEY

19-Aug-10	248	Lead Paint Inspection	5.87	0	0		Negative	
19-Aug-10	249	Lead Paint Inspection	5.86	0	0		Negative	
19-Aug-10	250	Lead Paint Inspection	5.86	0	0		Negative	
19-Aug-10	251	Lead Paint Inspection	5.88	0	0		Negative	
19-Aug-10	252	Lead Paint Inspection	5.89	0	0		Negative	
19-Aug-10	253	Lead Paint Inspection	5.91	0	0		Negative	
19-Aug-10	254	Lead Paint Inspection	5.99	0	0		Negative	
19-Aug-10	255	Lead Paint Inspection	5.99	0	0		Negative	
19-Aug-10	256	Lead Paint Inspection	6.11	0	0		Negative	
19-Aug-10	257	Lead Paint Inspection	6.03	0	0		Negative	
19-Aug-10	258	Lead Paint Inspection	5.81	0	0		Negative	
19-Aug-10	259	Lead Paint Inspection	5.62	0	0		Negative	
19-Aug-10	260	Lead Paint Inspection	5.99	0	0		Negative	
19-Aug-10	261	Lead Paint Inspection	5.74	0	0		Negative	
19-Aug-10	262	Lead Paint Inspection	6.06	0	0		Negative	
19-Aug-10	263	Lead Paint Inspection	6	0	0		Negative	
19-Aug-10	264	Lead Paint Inspection	6.02	0	0		Negative	
19-Aug-10	265	Lead Paint Inspection	6	0	0		Negative	
19-Aug-10	266	Lead Paint Inspection	5.79	0	0		Negative	
19-Aug-10	267	Lead Paint Inspection	5.83	0	0		Negative	
19-Aug-10	268	Lead Paint Inspection	6.01	0	0		Negative	
19-Aug-10	269	Lead Paint Inspection	6	0	0		Negative	
19-Aug-10	270	Lead Paint Inspection	6.05	0	0		Negative	
19-Aug-10	271	Lead Paint Inspection	6.02	0	0		Negative	
19-Aug-10	272	Lead Paint Inspection	5.75	0	0		Negative	
19-Aug-10	273	Lead Paint Inspection	5.84	0	0		Negative	
19-Aug-10	274	Lead Paint Inspection	5.76	0	0		Negative	
19-Aug-10	275	Lead Paint Inspection	6.02	0	0		Negative	
19-Aug-10	276	Lead Paint Inspection	6	0	0		Negative	
19-Aug-10	277	Lead Paint Inspection	6.04	0	0		Negative	
19-Aug-10	278	Lead Paint Inspection	5.72	0	0		Negative	

LEAD XRF SURVEY

19-Aug-10	279	Lead Paint Inspection	5.99	0	0		Negative	
19-Aug-10	280	Lead Paint Inspection	5.75	0	0		Negative	
19-Aug-10	281	Lead Paint Inspection	6.03	0	0		Negative	
19-Aug-10	282	Lead Paint Inspection	5.76	0	0		Negative	
19-Aug-10	283	Lead Paint Inspection	5.8	0	0		Negative	
19-Aug-10	284	Lead Paint Inspection	5.86	0	0		Negative	
19-Aug-10	285	Lead Paint Inspection	5.85	0	0		Negative	
19-Aug-10	286	Lead Paint Inspection	6.06	0	0		Negative	
19-Aug-10	287	Lead Paint Inspection	5.88	0	0		Negative	
19-Aug-10	288	Lead Paint Inspection	5.91	0	0		Negative	
19-Aug-10	289	Lead Paint Inspection	6.04	0	0		Negative	
19-Aug-10	290	Lead Paint Inspection	6.05	0	0		Negative	
19-Aug-10	291	Lead Paint Inspection	5.97	0	0		Negative	
19-Aug-10	292	Lead Paint Inspection	5.75	0	0		Negative	
19-Aug-10	293	Lead Paint Inspection	6	0	0		Negative	
19-Aug-10	294	Lead Paint Inspection	6.01	0	0		Negative	
19-Aug-10	295	Lead Paint Inspection	6.04	0	0		Negative	
19-Aug-10	296	Lead Paint Inspection	5.97	0	0		Negative	
19-Aug-10	297	Lead Paint Inspection	5.99	0	0		Negative	
19-Aug-10	298	Lead Paint Inspection	6.06	0	0		Negative	
19-Aug-10	299	Lead Paint Inspection	6.05	0	0		Negative	
19-Aug-10	300	Lead Paint Inspection	6.01	0	0		Negative	
19-Aug-10	301	Lead Paint Inspection	5.79	0	0		Negative	
19-Aug-10	302	Lead Paint Inspection	5.59	0	0		Negative	
19-Aug-10	303	Lead Paint Inspection	6.04	0	0		Negative	
19-Aug-10	304	Lead Paint Inspection	6	0	0		Negative	
19-Aug-10	305	Lead Paint Inspection	6.08	0	0		Negative	
19-Aug-10	306	Lead Paint Inspection	5.77	0	0		Negative	
19-Aug-10	307	Lead Paint Inspection	5.97	0	0		Negative	
19-Aug-10	308	Lead Paint Inspection	6.02	0.02	0.03		Negative	
19-Aug-10	309	Lead Paint Inspection	5.96	0	0		Negative	

LEAD XRF SURVEY

19-Aug-10	310	Lead Paint Inspection	5.97	0.01	0.03		Negative	
19-Aug-10	311	Lead Paint Inspection	6.09	0	0		Negative	
19-Aug-10	312	Lead Paint Inspection	6.02	0	0		Negative	
19-Aug-10	313	Lead Paint Inspection	5.96	0	0		Negative	
19-Aug-10	314	Lead Paint Inspection	5.98	0	0		Negative	

3/6 Units

Park Royal Apartments
18417 96th Ave. N.E.
Bothell WA (Smaller bldg)

LBP Testing Data Sheet

Address/Unit No. Bothell WA (Smaller bldg) Date 8/18/10

Room Equivalent

XRF Serial No. 6578 Inspector Signature Janet Murphy Cert #0258

Sample ID#	Substrate	Component	Color	Test Locations	XRF Reading	Correction Value	Result	Classification (pos,neg,inc)	Laboratory Result	UNIT?	Final Classification
Ext 7	Wood	Siding	Grn	18309 Ext. A	0		Neg			mg/cm2 %	G/Intact
8	Wood	Corner Trim	Grn	Ext. A	0		Neg			mg/cm2 %	G
9	Wood	Siding	Grn	Ext B	0		Neg			mg/cm2 %	G
10	Wood	Window Frame	white	Ext B	0		Neg			mg/cm2 %	G
11	Wood	Door Frame	white	Ext B	0		Neg			mg/cm2 %	G
12	Metal	Door	White	Ext B	0		Neg			mg/cm2 %	G
13	Metal	Stair Rail	Black	Ext B	.01		Neg			mg/cm2 %	G
14	Metal	Stair Riser	Black	Ext B	.02		Neg			mg/cm2 %	G
15	Metal	Walkway Beam	Black	Ext B	0		Neg			mg/cm2 %	G
103 sills are inset 16	GwB	Wall	White	Liv 103 A	0		Neg			mg/cm2 %	G
17	"	"	"	Liv 103 B	0		Neg			mg/cm2 %	G
18	"	"	"	Kitch 103 C	0		Neg			mg/cm2 %	G
19	"	"	"	Kitch 103 D	0		Neg			mg/cm2 %	G
20	"	Ceiling	"	Kitch 103	0		Neg.			mg/cm2 %	G
21	"	Wall	"	Bathroom A	0		Neg			mg/cm2 %	G
22	"	Wall	"	Bathroom B	0		Neg			mg/cm2 %	G
23	"	Wall	"	Bathroom C	0		Neg			mg/cm2 %	G
24	"	Wall	"	Bathroom D	0		Neg			mg/cm2 %	G
25	"	Ceiling	"	Bathroom	0		Neg			mg/cm2 %	G
26	Wood	Door	"	Bathroom	0		Neg			mg/cm2 %	G
27	Wood	Door Frame	"	Bathroom	0		Neg			mg/cm2 %	G
28	GwB	Wall	White	Bed room A	0		Neg			mg/cm2 %	G
29	"	"	"	" B	0		Neg			mg/cm2 %	G
30	"	"	"	" C	0		Neg			mg/cm2 %	G
31	"	"	"	" D	0		Neg			mg/cm2 %	G

32 Ceiling 0

A = N
B = E
C = S
D = W

G = Good, Intact

Lead-based Paint Testing Operations

LBP Testing Data Sheet

Page 2 of 19

Address/Unit No. Park Royal Apartments 18417 96th Ave NE Bothell WA

Date 8/18/10

Room Equivalent

XRF Serial No. 6578

Inspector Signature Grant Murphy

Sample ID#	Substrate	Component	Color	Test Locations	XRF Reading	Correction Value	Result	Classification (pos,neg,inc)	Laboratory Result	UNIT?	Final Classification
33	Wood	Door	White	Bedroom 1	0			Neg		mg/cm2 %	G
34	Wood	Door Frame	White	Bedroom 1	0			Neg		mg/cm2 %	
35	GWB	Wall		Bedroom 2	0			Neg		mg/cm2 %	
36		Wall			0			Neg		mg/cm2 %	
37		Wall			0			Neg		mg/cm2 %	
38		Wall			0			Neg		mg/cm2 %	
39		Ceiling			0			Neg		mg/cm2 %	
40	Wood	Door			0			Neg		mg/cm2 %	
41	Wood	Door Frame			0			Neg		mg/cm2 %	
42	Wood	Cove base			0			Neg		mg/cm2 %	
43	GWB	Wall	White	Wall / Hall	0			Neg		mg/cm2 %	
44	GWB	Ceiling		Ceiling / Hall	0			Neg		mg/cm2 %	
45	GWB	Cove base		Cove base / Hall	0			Neg		mg/cm2 %	
46	Wood	Front Door	White	Side B	0			Neg		mg/cm2 %	
47	Wood	Door Frame	White	Side B	0			Neg		mg/cm2 %	
48	Wood	Cove base	White	Side B	0			Neg		mg/cm2 %	
49	GWB	Wall		Closet A	0					mg/cm2 %	
50		Wall		Closet B	0					mg/cm2 %	
51		Wall		Closet D	0					mg/cm2 %	
52	Wood	Door		Closet Door	0					mg/cm2 %	
53	Wood	Frame		Closet Frame	0					mg/cm2 %	
~~54~~				Laundry Room	0					mg/cm2 %	
54 ~~55~~	GWB	Wall	White	A	0					mg/cm2 %	
55 ~~56~~		Wall		B	0					mg/cm2 %	
56 ~~57~~		Wall		C	0					mg/cm2 %	✓
57		Wall		D	0						

Lead-based Paint Testing Operations

Park Royal Apartments
18417 96th Ave. N.E,

LBP Testing Data Sheet

Address/Unit No. Bothell WA Date 6/18/10

Room Equivalent

XRF Serial No. 6578 Inspector Signature Janet Murphy

Sample ID#	Substrate	Component	Color	Test Locations	XRF Reading	Correction Value	Result	Classification (pos,neg,inc)	Laboratory Result	UNIT?	Final Classification
58	~~Metal~~ Wood	Door	White	Side B	0			Neg		mg/cm² %	G/Intact
59	Wood	Door Frame	White	Side B	0			Neg		mg/cm² %	G
60	Wood	Cove base	White	Side A	0			Neg		mg/cm² %	G
61	GwB	Ceiling	White	Laundry Rm	0			Neg		mg/cm² %	G
62	GwB	Wall		Closet A	0			Neg		mg/cm² %	
63	GwB	Wall		Closet C	0			Neg		mg/cm² %	
64	GwB	Wall		Closet D	0			Neg		mg/cm² %	
65	Metal	Metal	Black	Post B	0			Neg		mg/cm² %	
66	GwB	Wall	Tan	Unit 102 Liv Rm A						mg/cm² %	
67	"	Wall	"	Liv Rm B	Battery Dies Replace and Re Calibrate					mg/cm² %	
68	"	Wall	"	Liv Rm C						mg/cm² %	
69	"	Wall	"	Liv Rm D						mg/cm² %	
										mg/cm² %	
72	GwB	Wall	Tan	Liv Room A				Neg		mg/cm² %	G/Intact
73		Wall		B						mg/cm² %	
74		Wall		C						mg/cm² %	
75		Wall		D						mg/cm² %	
76	Wood	Door	White	Door B						mg/cm² %	
78	Wood	Frame		Fram B						mg/cm² %	
79	Wood	Cove base		Side A						mg/cm² %	
80	GwB	Wall		Side A						mg/cm² %	
81		Wall		Side B						mg/cm² %	
82		Wall		Side C						mg/cm² %	
83		Wall		Side D						mg/cm² %	
84		Ceiling		Side						mg/cm² %	
86	~~Wood~~ GwB	Cove base	White	~~Wall~~ Side D						mg/cm² %	

Lead-based Paint Testing Operations

Park Royal Apartments
18417 96th NE

LBP Testing Data Sheet

Address/Unit No. Bothell WA Date 8/18/10

Room Equivalent

XRF Serial No. 6578 Inspector Signature Janet Murphy

Sample ID#	Substrate	Component	Color	Test Locations	XRF Reading	Correction Value	Result	Classification (pos,neg,inc)	Laboratory Result	UNIT?	Final Classification
87	GwB	Wall	Tan	Bathroom A	0		Neg			mg/cm2 %	6/Intact
88	|	|	|	B	0		|			mg/cm2 %	|
89	|	|	|	C	0		|			mg/cm2 %	|
90	|	|	V	D	0		|			mg/cm2 %	|
91	Wood	Door	White	C	0		|			mg/cm2 %	|
92	Wood	Frame	|	C	0		|			mg/cm2 %	|
93	Wood	Casing	|	C	0		|			mg/cm2 %	|
94	GwB	Ceiling	|	Bathroom Ceiling	0		|			mg/cm2 %	|
95	GwB	Wall	White	Bedroom A	0		|			mg/cm2 %	|
96	|	Wall	|	Bedroom B	0		|			mg/cm2 %	|
97	|	Wall	|	Bedroom C	0		|			mg/cm2 %	|
98	—	Wall	|	Bedroom D	0		|			mg/cm2 %	|
99	Wood	Door		Bedroom B	0		|			mg/cm2 %	|
100	Wood	Frame		Bedroom B	0		|			mg/cm2 %	|
101	Wood	Casebase		Bedroom B	0		|			mg/cm2 %	|
102	GwB	Ceiling		Bedroom	0		|			mg/cm2 %	|
103	—	Unintentional Shot					|			mg/cm2 %	|
							|			mg/cm2 %	|
103	GwB	Wall	White	Liv Rm 203 A	0		|			mg/cm2 %	|
104	|	Wall	|	B	0		|			mg/cm2 %	|
105	|	Wall	|	C	0		|			mg/cm2 %	|
106	|	Wall	|	D	0		|			mg/cm2 %	|
107	Metal Door	Door	|	B	0		|			mg/cm2 %	|
108	Wood	Frame	|	B	0		|			mg/cm2 %	|
109	Wood	Casebase	|	A	0		|			mg/cm2 %	|

203

Lead-based Paint Testing Operations

Park Royal Apartments
18417 96th Ave NE

LBP Testing Data Sheet

Address/Unit No. Bothell WA Date 8/18/10

Room Equivalent

XRF Serial No. 6578 Inspector Signature Janet Murphy

Sample ID#	Substrate	Component	Color	Test Locations	XRF Reading	Correction Value	Result	Classification (pos,neg,inc)	Laboratory Result	UNIT?	Final Classification
110	GwB	Wall	White	Kitchen A	0		Neg			mg/cm2 %	G/Intact
111		Wall		B	0					mg/cm2 %	
112		Wall		C	0					mg/cm2 %	
113		Wall		D	0					mg/cm2 %	
114	Wood	Cove base	White	B	0					mg/cm2 %	
115	GwB	Ceiling	White	Kitchen Ceiling	0					mg/cm2 %	
116		Wall		Bathroom A	0					mg/cm2 %	
117				B	0					mg/cm2 %	
118				C	0					mg/cm2 %	
119				D	0					mg/cm2 %	
120	GwB	Ceiling	White	Bathroom Ceiling	0					mg/cm2 %	
121	Wood	Door		A	0					mg/cm2 %	
122	Wood	Frame		A	0					mg/cm2 %	
123	Wood	Cove base		A	0					mg/cm2 %	
124		Wall	White	Bedroom 1 A	0					mg/cm2 %	
125		Wall		B	0					mg/cm2 %	
126		Wall		C	0					mg/cm2 %	
127		Wall		D	0					mg/cm2 %	
128		Door		B	0					mg/cm2 %	
129		Frame		B	0					mg/cm2 %	
130		Cove base		B	0					mg/cm2 %	
131		Ceiling		Ceiling	0					mg/cm2 %	
132	GwB	Ceiling	White	Bedroom 2 child occupied	0					mg/cm2 %	
133		Wall	White	A	0					mg/cm2 %	
134		Wall	White	B	0					mg/cm2 %	

Lead-based Paint Testing Operations

Park Royal Apartments
18417 96th Ave. NE.

LBP Testing Data Sheet

Address/Unit No. Bothell WA Date 8/18/10

Room Equivalent

XRF Serial No. 6578 Inspector Signature Janet Murphy

Sample ID#	Substrate	Component	Color	Test Locations	XRF Reading	Correction Value	Result	Classification (pos,neg,inc)	Laboratory Result	UNIT?	Final Classification
135	GwB	Wall	White	Bedroom 2 Cent. C				Neg		mg/cm2 %	G/Intact
136	GwB	Wall	White	D						mg/cm2 %	
137	Wood	Door		B						mg/cm2 %	
138		Door Frame		B						mg/cm2 %	
139		Cowbase		B						mg/cm2 %	
140		Closet Sliding		B						mg/cm2 %	
141	Wood	Door Door		D	0					mg/cm2 %	
142	Wood	Frame		D	0					mg/cm2 %	
143	GwB	Wall		A	0					mg/cm2 %	
144	GwB	Wall		B	0					mg/cm2 %	
145	GwB	Wall		D	0					mg/cm2 %	
146	Wood	Cowbase		B	0					mg/cm2 %	
147	GwB	Ceiling		Closet Ceiling	0					mg/cm2 %	
EXT →				Ext	0					mg/cm2 %	
148	Wood	Grn	Siding	Siding A	0					mg/cm2 %	
149	Wood	Grn	Trim	Corner Trim B	0					mg/cm2 %	
150	metal	Black	Black	Walkway Pole A	0					mg/cm2 %	
151	Metal	Pole	Yellow	Yellow Pole Bollard A	0					mg/cm2 %	
152	Hardy Board	Siding	Grn	C	0					mg/cm2 %	
153				C	0					mg/cm2 %	
154				C	0					mg/cm2 %	
155				C	0					mg/cm2 %	
156				C	0					mg/cm2 %	
157				D	0					mg/cm2 %	
158				D	0					mg/cm2 %	

Lead-based Paint Testing Operations

Hardy Board

Park Royal Apartments
18417 96th Ave. NE.
Bothell WA

LBP Testing Data Sheet

Address/Unit No. _____ Date 8/18/10

Room Equivalent _____

XRF Serial No. 6578 Inspector Signature Janet Murphy

Sample ID#	Substrate	Component	Color	Test Locations	XRF Reading	Correction Value	Result	Classification (pos,neg,inc)	Laboratory Result	UNIT?	Final Classification
159	~~159~~	Siding	Grn	Siding D	0			Neg		mg/cm2 %	Intact
160	~~160~~			D	0					mg/cm2 %	
161	~~161~~			B	0					mg/cm2 %	
162	~~162~~			B	0					mg/cm2 %	
163	~~163~~			B	0					mg/cm2 %	
164	~~164~~			A	0					mg/cm2 %	
165	Wood	Window Frame	white	B	0					mg/cm2 %	
166				B	0					mg/cm2 %	
167				B	0					mg/cm2 %	
168				B	0					mg/cm2 %	
169				D	0					mg/cm2 %	
170				D	0					mg/cm2 %	
171				D	0					mg/cm2 %	
172				D	0					mg/cm2 %	
173	Metal	Rail side of walkway	Black	B	0					mg/cm2 %	
174	Metal		Black	B	0					mg/cm2 %	
175	Metal	underside of walkway	Black	B	0					mg/cm2 %	
										mg/cm2 %	
										mg/cm2 %	
										mg/cm2 %	
										mg/cm2 %	
										mg/cm2 %	
										mg/cm2 %	
										mg/cm2 %	
										mg/cm2 %	

13/17 Units

LBP Testing Data Sheet

Address/Unit No. Park Royal Apartments 18309 96th Ave N.E. Bothell WA (Larger Bldg) Date 8/18/10

Room Equivalent

XRF Serial No. 6578 Inspector Signature [signature] Cert# 0258

Sample ID#	Substrate	Component	Color	Test Locations	XRF Reading	Correction Value	Result	Classification (pos,neg,inc)	Laboratory Result	UNIT? mg/cm² %	Final Classification
				Unit 201			Neg				G/Intact
180	GwB	Wall	White	Kitchen A	0						
181		Wall		B	0						
182		Wall		C	0						
183		Wall		D	0						
184	GwB	Ceiling	White	Kitchen	0						
185	Wood	Coveboase	White	Kitchen B	0						
186	GwB	Wall	White	Liv Rm A	0						
187		Wall		B	0						
188		Wall		C	0						
189		Wall		D	0						
190		Ceiling			0						
191	Wood	Coveboose		B	0						
192	Wood	Door		B	0						
193	Wood	Door Jam		B	0						
194	GwB	Sil	White	B	0						
195	Metal	Heater Cover	White	Liv Rm B	0						
196	GwB			Bathroom Wall A	0						
197	GwB			B	0						
198	GwB			C	0						
199	GwB			D	0						
200	GwB			Ceiling	0						
201	Wood			Door C	0						
202	Wood			Frame C	0						
203	Wood			Coveboase C	0						

Lead-based Paint Testing Operations

Insp/Tech: Janet Murphy Da 8/18/10 PBS#: Janet Murphy

Complex Name: Park Royal Bldg #: 18309 96th Ave. NE. Bothell WA

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
204	201	Bedroom 1	A	Wall		Good	GWB	White	0	Good/Intact
205			B	"			GWB		0	
206			C	"			GWB		0	
207			D	"			GWB		0	
208			B	Door			Wood		0	
209			B	Door Frame			Wood		0	
210				Ceiling			GWB		0	
211			D	Sil			GWB		0	
212			B	Covebase			Wood B		0	
213			C	Covebase			Wood C		0	
214			B	Roll Door			Wood		0	
215		Bedroom 2	A	Wall			GWB		0	
216			B	"					0	
217			C	"					0	
218			D	"					0	
219			B	Door			Wood		0	
220			B	Door Frame					0	
221			1	Ceiling			GWB		0	
222			D	~~Covebase~~ Sil			GWB		0	
223			B	Covebase			Wood		0	
224			C	Covebase			Wood		0	
225			B	Roll Door			Wood.		0	
226			D	Cover on Heater			Metal		0	

Insp/Tech: Janet Murphy Dat 8/18/10 PBS#:

Complex Name: Park Royal Bldg # 18309 96th Ave. N.E. Bothell WA 1 of 19

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
227	203	kitchen	A	wall		G	GWB	white	O	Good/Intact
228			B	wall						
229			C	wall						
230			D	wall						
231				Ceiling						
232				Covebase			wood			
233				Heater Cover			metal			
234		Liv Rm	A	wall			GWB			
235			B	wall						
236			C	wall						
237			D	wall						
238				Ceiling						
239				Covebase			wood			
240				Door			~~metal~~			
241				Door Frame			wood			
242		Bathroom	A	wall			GWB			
243			B	wall						
244			C	wall						
245			D	wall						
246				Ceiling						
247			D	Door			wood			
248			B	Door Frame			wood			
249			B	Covebase			wood			

Insp/Tech: Janet Murphy Dat 8/18/10 PBS#:

Complex Name: Park Royal Bldg #: 18309 96th Ave NE Bothell WA 11 1 of 19

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
250	203	Bedroom1	A	Wall		G	GwB	White	P	Good Intact
251			B	Wall						
252			C	Wall						
253			D	Wall						
254			B	Door			Wood			
255			B	Coucbase						
256			C	Frame						
257			D	Sil			GwB			
258			D	Heater Cover			Metal			
259		Bedroom 2	A	Wall			GWB			
260			B	Wall						
261			C	Wall						
262			D	Wall						
263			B	Door			Wood			
264			B	Cove Base						
265			C	Frame						
266			D	Sil			GwB			
267			D	Heater Cover			Metal			
268		Bedroom 1	B	Roll Door			Wood			
269		Bedroom2	B	Roll Door Frame			Wood			

Insp/Tech: Janet Murphy Date: 8/18/10 PBS#:

Complex Name: Park Royal Bldg #: 18309 96th Ave NE Bothell WA 12 1-i 19

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
270	204	Liv Rm	A	Wall		G		White	O	Good/Intact
271			B							
272			C							
273			D							
274			B	Door			Metal			
275			B	Door Frame						
276			B	Cove base			Wood			
277			B	Heater Cover			Metal			
278		Kitchen	A	Wall			GwB			
279			B	Wall						
280			C	Wall						
281			D	Wall						
282				Ceiling						
283			C	Cove base			Wood			
284			B	Sil			GwB			
285		Bathroom	A	Wall						
286			B							
287			C							
288			D							
289				Ceiling						
290			C	Door			Wood			
291			C	Door Frame			Wood			
292			B	Cove base			Wood			

Insp/Tech: Janet Murphy Date 8/18/10 PBS#:

Complex Name: Park Royal Bldg #: 18309 96th Ave NE Bothell WA 13 1-1 19

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
	204	Bedroom 1	A	Wall		G	GwB	White	O	Good/Intact
293			B							
294			C							
295			D							
296			B	Door			Wood			
297			B	Frame						
298			B	Covebase						
299			B	Roll Door						
300			B	Frame						
301				Ceiling			GwB			
3022		Bedroom 2	A	Wall						
303			B							
304			C							
305			D							
306			B	Door			Wood			
307			B	Frame						
308			B	Covebase						
309			B	Frame						
310			D	Heater Cover			Metal			
311				Ceiling			GwB			

Insp/Tech: Janet Murphy Dat 8/18/10 PBS#:

Complex Name: Park Royal Bldg #: 18309 96th Ave. N.E. Bothell WA 14 of 19

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
312	205	LivRm	A	Wall		G	GWB	White	O	Good / Intact
313			B							
314			C							
315			D							
316			B	Door			Metal			
317			B	Door Frame						
318			B	Cove base			Wood			
319			B	Heater Cover			Metal			
320		Kitchen	A	Wall			GWB			
321			B							
322			C							
323			D							
324				Ceiling						
325			B	Covebase			Wood			
326			B	Sil			GWB			
327		Bathroom	A	Wall						
328			B							
329			C							
330			D							
331				Ceiling						
332			C	Door			Wood			
333			C	Door Frame						
334			C	Covebase						

Insp/Tech: Janet Murphy Date: 8/18/10 PBS#:

Complex Name: Park Royal Bldg #: 18309 96th Ave. N.E. Bothell WA of 15 of 19

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
335	205	Bedroom1	A	Wall		G	BWB	W	0	Good/Intact
336			B							
337			C							
338			D							
339			B	Door			metal			
340			B	Frame			wood			
341			B	Covebase			Wood			
342			B	Roll Door			Wood			
343			B	Frame			Wood			
344				Ceiling			GWB			
345		Bedroom2	A	Wall			GWB			
346			B							
347			C							
348			D							
349			B	Door			Wood			
350			B	Frame						
351			B	Covebase						
352			B	Frame						
353			D	Heater Cover			metal			
354				Ceiling			GWB			

Insp/Tech: Janet Murphy Date: 8/18/10 PBS#:

Complex Name: Park Royal Bldg #: 18309 96th Ave. NE, Bothell WA

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
355	207	Liv Rm	A	Wall		G	GwB	White	0	Good/Intact
356			B							
357			C							
358			D							
359			B	Door			Metal			
360			B	Door Frame						
361			B	Covebase			Wood			
362			D	Heater Cover			Metal			
363		Kitchen	A	Wall			GwB			
364			B							
365			C							
366			D							
367				Ceiling						
368			B	Covebase			Wood			
369			B	Sil			GwB			
370		Bathroom	A	Wall						
371			B							
372			C							
373			D							
374				Ceiling						
375			C	Door			Wood			
376			C	Door Frame			Wood			
377			C	Covebase			Wood			
378										

Insp/Tech: Janet Murphy Date: 8/18/10 PBS#:

Complex Name: Park Royal Bldg #: 18309 96th Ave. NE Bothell WA 17of 19

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
379	207	Bedroom 1	A	Wall		G	GWB	White	0	Good/Intact
380			B							
381			C							
382			D							
383			B	Door			Metal			
384			B	Frame			Wood			
385			B	Casebase			Wood			
386			B	Roll Door						
387			B	Frame						
388				Ceiling			GWB			
389		Bedroom 2	A	Wall						
390			B							
391			C							
392			D							
393			B	Door			Wood			
394			B	Frame						
395			B	Casebase						
396			B	Frame						
397			D	Heater Cover			Metal			
398				Ceiling			GWB			

Insp/Tech: Janet Murphy Date: 8/18/10 PBS#:

Complex Name: Park Royal Bldg #: 18309 96th Ave. NE Bothell WA

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
399	208	Liv Rm	A	Wall		G	GWB	White	O	Good/Intact
400			B							
401			C							
402			D							
403			B	Door			Metal			
404			B	Door Frame						
405			B	Cove base			Wood			
406			B	Heater Cover			Metal			
407		Kitchen	A	Wall			GWB			
408			B							
409			C							
410			D							
411				Ceiling						
412			B	Cove base			Wood			
413			B	Sill			GWB			
414		Bathroom	A	Wall						
415			B							
416			C							
417			D							
418				Ceiling						
419			C	Door			Wood			
420			C	Door Frame						
421			C	Cove base						

Insp/Tech: Janet Murphy Date: 8/18/10 PBS#:

Complex Name: Park Royal Bldg: 18309 96th Ave. NE Bothell WA

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
422	208	Bedroom 1	A			G	GwB	White	0	Good/Intact
423			B							
424			C							
425			D							
426			B	Door			~~Pad~~ Wood			
427			B	Frame						
428			B	Cove base						
429			B	Roll Door						
430			B	Frame						
431				Ceiling			GwB			
432			D	Sil			GwB			
433		Bedroom 2	A				GwB			
434			B							
435			C							
436			D							
437			B	Door			Wood			
438			B	Frame						
439			B	Cove base						
440			D	Heater cover			Metal			
441			D	Sil			GwB			
442				Ceiling						

Insp/Tech: Janet Murphy Da. 8/19/10 PBS#: Cert # 0258

Complex Name: Park Royal Bldg #: 18309 Larger Bldg

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
5	Ext		A	Wall/Siding		G	Hardy Board	Green	0	Good/Intact
6			A							
7			A							
8			B							
9			B							
10			B							
11			C							
12			C							
13			C							
14			D							
15			D							
16			D							
17			D	Window Frame			Wood	White		
18			D							
19			D							
20			B							
21			B							
22			B							
23			B	Doors			Metal			
24			B							
25			B							
26			B							
27			B							
28			B							

Insp/Tech: Janet Murphy Da. 8/19/10 PBS#: Cert # 0258

Complex Name: Park Royal Bldg #: 18309

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
29	Ext		B	Door Frames		G	Metal	White	O	Good/Intact
30			B							
31			B							
32			B							
33			B							
34			D							
35			B	Stair Rail				Black		
36			B	Stair Rail						
37			B	Stair Rise						
38			B	Stair Riser						
39			B	Under Deck						
40			B	Under Deck						
41			B	Under Stair						Fair
42			B	Corner Peice						Good/Intact
43			C	↓						
44			D	↓			—	—		
→ 45	101	Liv Rm	A	Wall			GWB	White		
46			B				GWB			
47			C				GWB			
48			D				GWB			
49		Front D	B				Metal	White		
50		Door Frame	B				Metal	White		
51		Heater Cover	B				Metal	White		
~~52~~										

Insp/Tech: Janet Murphy Da. 8/19/10 PBS#: Cert # 0258

Complex Name: Park Royal Bldg #: 18309

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
52	101	Kitch	A	Wall		G	GwB	White	O	Good/Intact
53			B							
54			C							
55			D							
56			B	cove base			Wood			
57			B	Sil			GwB			
58		Bathroom	A							
59			B							
60			C							
61			D							
62			C	Door			Wood			
63			A	Cove Base			Wood			
64				Ceiling			GwB			
65		Bedroom1	A	Wall						
66			B							
67			C							
68			D							
69				Door Frame			Wood			
70				Ceiling			GwB			
71		Bedroom2	A	Wall			GwB			
72			B							
73			C							
74			D							
75				Ceiling			GwB			
76			B	Roll Door			Wood			
77			D	Roll Door Frame						

Insp/Tech: Janet Murphy Da 8/19/10 PBS#: Cert # 0258

Complex Name: Park Royal Bldg #: 18309

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
78	102	Liv Rm	A	Wall		G	GwB	White	0	Good/Intact
79			B							
80			C							
81			D							
82		Ceiling		Ceiling						
83		Kitchen	A							
84			B							
85			C							
86			D							
87			B	Ceiling						
88			B	Sil						
89			B	Coubase B			Wood			
90		Bathroom	A	Wall			GwB			
91			B							
92			C							
93			D							
94			B	Door			Wood			
95				Ceiling			GwB			
96		Bedroom'	A	Wall						
97			B							
98			C							
99			D							
100				Ceiling						
101			D	Sil						

Insp/Tech: Janet Murphy Date: 8/19/10 PBS#: Cert # 0258

Complex Name: Park Royal Bldg #: 18309 5 of 15

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
102	102	Bedroom 2	A	Wall		G	GwB	White	O	Good/Intact
103			B							
104			C							
105			D							
106				Ceiling						
107			D	Sil						
108			D	Heater Cover			Metal			
109			B	Roll Door			Wood			
110			B	Frame			Wood			
111		Kitchen		Cabinets				Brown		
112										
113										

p:\masters\forms\xrf data sheet.xls

MDF - Door Fomes & Coveboase > pre primed

Cabinets - Pre Painted At Manufacturer

Insp/Tech: Janet Murphy Da: 8/19/10 PBS#: Cert # 0258

Complex Name: Park Royal Bldg #: 18309

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
114	104	104 Rm	A	Wall		G	GwB	White	O	Good / Intact
115			B							
116			C	-						
117			D							
118				Ceiling						
119		Kitchen	A							
120			B							
121			C							
122			D							
123				Ceiling						
124			B	Sil						
125			B	Cove base			Wood			
126		Bathroom	A				GwB			
127			B							
128			C							
129			D							
130			B	Door			Wood			
131				Ceiling			GwB			
132		Bedroom	A							
133			B							
134			C							
135			D							
136				Ceiling						
137			D	Sil						

Insp/Tech: Janet Murphy Da: 8/19/10 PBS#: Cert # 0258

Complex Name: Park Royal Bldg #: 18309

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
138	104	Bedroom 2	A	Wall		G	GyB	White	O	Good / Intact
139			B							
140			C							
141			D							
142				Ceiling						
143			D	Sil						
144			D	Heater Cover			Metal			
145				Roll Door			Wood			
146				Frame						
147		Kitchen		Cabinets				Brown		

Insp/Tech: Janet Murphy Da 8/19/10 PBS#: Cert # 0258

Complex Name: Park Royal Bldg #: 18309 8 of 15

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
147	001	kitchen	A	Wall		G	GwB	White	0	Good/Intact
148			B							
149			C							
150			D							
151				Sil						
152										
153		Bathroom	A	Heater Cover			Metal			
154			A	Wall			GwB			
155			B							
156			C							
157			D							
158				Ceiling						
159		Bedroom 1	A							
160			B							
161			C							
162			D							
163				Door			Wood			
164		Bedroom 2	A				GwB			
165			B							
166			C							
167			D							
168				Roll Door			Wood			
169		Liv Rm	A	Wall			GwB			
170			B							
171			C							
172			D							
173			B	Ceiling Cove base						
174		Kitchen Cabinet A					Wood Wood	Brown		

Insp/Tech: Janet Murphy Da 8/19/10 PBS#: Cert # 0258

Complex Name: Park Royal Bldg #: 18309

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
176	106	Liv Rm	A	Wall		G	G&B	White	O	Good/Intact
177			B							
178			C	-						
179			D							
180				Ceiling						
181			B	Sil						
182		Kitchen	A	Wall						
183			B							
184			C							
185			D							
186			B	Sil						
187				Ceiling						
188			B	Cove base			Wood			
189		Bathroom	A	Wall			G&B			
190			B							
191			C							
192			D							
193				Ceiling						
194				Heater Cover			Metal			
195		Bedroom 1	A	Wall			G&B			
196			D							
197			C							
198			D							
199				Ceiling						

Insp/Tech: Janet Murphy Da 8/19/10 PBS#: Cert # 0258

Complex Name: Park Royal Bldg #: 18309 1 of 15

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
200	106	Bedroom 1	B	Door		G	Wood	White	O	Good / Intact
201			B	Frame			Wood			
202		Bedroom 2	A	Wall			GWB			
203			B							
204			C							
205			D							
206				Ceiling						
207			B	Roll Door			Wood			
208			B	Frame			Wood			
209		Kitchen	A	Cove base			Wood			
210			C	Cabinets			Wood	Brown		

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Insp/Tech: Janet Murphy Date: 8/19/10 PBS#: Cert # 0258

Complex Name: Park Royal Bldg #: 18309

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
211	167	Liv Room	A	Wall		G	GwB		0	Good / Intact
212			B							
213			C	-						
214			D							
215			B	Sil						
216				Ceiling						
217		Kitchen	A	Wall						
218			B							
219			C							
220			D							
221			B	Sil						
222				Ceiling						
223			B	Cove Base			Wood			
224		Bathroom		Ceiling			GwB			
225			A	Wall						
226			B							
227			C							
228			D							
229			A	Door			Wood			
230			A	Door Frame			Wood			
231		Bedroom	A	Wall			GwB			
232			B							
233			C							
234			D							

Insp/Tech: Janet Murphy Da. 8/19/10 PBS#: Cert # 0258

Complex Name: Park Royal Bldg #: 18309

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
235	107	Bedroom 1	B	Door		G	Wood	White	O	Good / Intact
236			B	Door Frame			Wood			
237			D	Sill			GwB			
238				Ceiling						
239		Bedroom 2	D	Heater Cover			Metal			
240			D	Sill			GwB			
241			A	Wall						
242			B							
243			C							
244			D							
245				Ceiling						
246			B	Door			Wood			
247			B	Frame						
248			B	Roll Door						
249			B	Frame						
250		Kitchen	A	Cabinet				Brown		
251		Utility Closet	B	Walls			GwB	White		
252			C							
253			D							

Insp/Tech: Janet Murphy Da 8/19/10 PBS#: Cert # 0258

Complex Name: Park Royal Bldg #: 18309

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
254	108	Liv Room	A	Wall		G	G w B	Tan	C	Good / Intact
255			B							
256			C							
257			D							
258			B	Sil						
259				Ceiling						
260			B	Cove base			Wood	White		
261		Kitchen	A	Wall			G w B	Tan		
262			B							
263			C							
264			D							
265				Ceiling						
266			B	Cove base			Wood	White		
267			C	Cabinets			Wood	Brown		
268		Bathroom		Ceiling			G w B	White		
267			A	Wall				Tan		
268			B							
269			C							
270			D							
271			A	Door			Wood	White		
272			A	Door Frame			Wood	White		
273		Bedroom	A	Wall			G w B			
274			B	Wall						
275			C	Wall						

Insp/Tech: Janet Murphy Da 8/19/10 PBS#: Cert # 0258

Complex Name: Park Royal Bldg #: 18309

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
276	108	Bedroom 1	D	Wall		G	GwB	Tan	O	Good / Intact
277			B	Door			wood	white		
278			B	Door Frame			wood	white		
279			D	Sil			GwB	Tan		
280				Ceiling			GwB			
281		Bedroom 2	D	Heater Cover						
282			D	Sil						
283			A	Wall						
284			B							
285			C							
286			D							
287				Ceiling						
288			B	Door				white		
289			B	Frame				white		
290			B	Roll Door				white		
291			B	Frame				white		
292		kitchen	C	Cabinet			wood	Brown		
293		Utility Closet	A	Wall			GwB	~~white~~ Tan		
294			B					Tan		
295			D					Tan		

Insp/Tech: Janet Murphy Da. 8/19/10 PBS#: Cert # 0258

Complex Name: Park Royal Bldg #: 18309 1 of 15

xl #	Unit	Room	Side	Structure	Feature	Condition	Substrate	Color	Result	Assessment / notes / xls
296	~~Laundry~~ Laundry Rm	Laundry	A	Wall		G	GwB	White	O	Good / Intact
297		Room	B							
298			C							
299			D							
300			B	Door			wood			
301			B	Frame			wood			
302			B	Sill			GwB			
303	Laundry Utility ~~BR~~ Closet		A	Wall						
304			B							
305			C							
306			B	Door			wood			
307			B	Frame			"			
	Ext	Ext								
308	001 Basement Level		B	Under walkway			metal	Black		
309	001 Basement Level		B	Foundation			Concrete	Green		
310	001 Basement Level		B	Pole			Metal	Black		
311			C	Stucco in Soil		Demo	Stucco			N/A
312			C	Stucco in Soil		Demo	Stucco			N/A
313	Ext		B	Sofit			Wood	Green		Good Intact
314	Ext		B	Sofit			Wood	Green		Good Intact

8/18/10

PBS | Engineering + Environmental

XRF CALIBRATION CHECK TEST RESULTS

Address/Unit No. Park Royal Apartments.

Device InnovX systems.

Date 8/18/10 XRF Serial No. 2-40005 0576

Contractor

Inspector Name Janet Murphy Signature Janet Murphy

NIST SRM Used 1.040 +/- 0.064 mg/cm² Calibration check Tolerance used .35 mg/cm²

First Calibration Check Red / 1.040 ± -0.064

NIST SRM			First Average	Difference Between First Average and NIST SRM*
First Reading	Second Reading	Third Reading		
266 Standardization	1.02 ± 0.07	Neg		Re-check
	Reading #2	↑Reading #3	↑Reading #4	

Second Calibration Check

NIST SRM			Second Average	Difference Between Second Average and NIST SRM*
First Reading #4	Second Reading #5	Third Reading #6		
1.05 ± 0.07	1.10 +/- 0.09	1.04 +/- 0.07	1.06	.02
pos	pos	pos		

Third Calibration Check (if required)

NIST SRM			Third Average	Difference Between Third Average and NIST SRM*
First Reading 69 ~~68~~	Second Reading 70	Third Reading 71		
1.10 +/- 0.10	1.00 +/- 0.07	1.16 +/- 0.14	1.08	.04

Fourth Calibration Check (if required)

NIST SRM			Fourth Average	Difference Between Fourth Average and NIST SRM*
First Reading 177	Second Reading 178	Third Reading 179		
1.00 +/- 0.07	1.12 +/- 0.12	1.00 +/- 0.07	1.04	0

*If the difference of the Calibration Check Average from the NIST SRM film value is greater than the specified Calibration Check tolerance for this device, consult the manufacturer's recommendations to bring the instrument back into control. Retest all testing combinations tested since the last successful Calibration Check test.

8/19/10

PBS | Engineering + Environmental

XRF CALIBRATION CHECK TEST RESULTS

Address/Unit No. Park Royal Apartments

Device Innov X Systems.

Date 8/19/10 XRF Serial No. 2 - 41000S 0576

Contractor

Inspector Name Janet Murphy Signature Janet Murphy

NIST SRM Used 1.040 +/- 0.064 mg/cm² Calibration check Tolerance used .35 mg/cm²

First Calibration Check

NIST SRM			First Average	Difference Between First Average and NIST SRM*
First Reading 2	Second Reading 3	Third Reading 4		
1.05 +/- 0.08	1.01 +/- 0.07	1.02 +/- 0.07	1.02	-.01

Second Calibration Check

NIST SRM			Second Average	Difference Between Second Average and NIST SRM*
First Reading	Second Reading	Third Reading		

Third Calibration Check (if required)

NIST SRM			Third Average	Difference Between Third Average and NIST SRM*
First Reading	Second Reading	Third Reading		

Fourth Calibration Check (if required)

NIST SRM			Fourth Average	Difference Between Fourth Average and NIST SRM*
First Reading	Second Reading	Third Reading		

*If the difference of the Calibration Check Average from the NIST SRM film value is greater than the specified Calibration Check tolerance for this device, consult the manufacturer's recommendations to bring the instrument back into control. Retest all testing combinations tested since the last successful Calibration Check test.

PBS ENVIRONMENTAL

BATCH ID
3010672.00

Project: Park Royal Apartments **Project #:** 40513.043

Analysis requested: Lead EPA Method 7420 **Date:** 8/19/20

Relinq'd by/Signature: Janet Murphy **Date/Time:** 8/19/20

Received by/Signature: Janet Murphy Sara King NVL 8/19/20 1605 **Date/Time:**

Fax results to:

☐	Brian Stanford	☒	Janet Murphy	☐	Willem Mager
☐	Ernest Edwards	☐	Harry Goren	☐	Tim Ogden
☐	Mark Hiley	☐	Mike Smith	☐	Ferman Fletcher
☐	Gregg Middaugh	☐	Prudy Stoudt-McRae	☐	Other

TURN AROUND TIME:

☐	1 Hour	☐	24 Hours	☐	5 Days
☐	2 Hours	☐	48 Hours	☒	Other 3 Days.
☐	4 Hours				

BULK SAMPLE DATA FORM

Lab #	Sample #	Material	Location	Lab
	Pb-P-1	Paint Tan / GwB / wall	Unit 108 2"x2"	
	Pb-P-2	Red Black Paint / Metal / Stairs	South End of 18309 96th Ave N.E. 2"x2"	
	Pb-P-3	White Paint / Stucco / Debris on Ground	South End of 18309 96th Ave NE 1"x1"	

PBS ENVIRONMENTAL, 2517 Eastlake Ave E- Suite 100, SEATTLE, WASHINGTON 98102, (206)-233-9639, FAX: (206)-762-4780

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

Analysis Report

AIHA - IH # 101861
WA - DOE # C1765

AIHA Environmental Lead and Industrial Hygiene ACCREDITED LABORATORY

Total Lead (Pb)

Client: PBS Environmental (Seattle)
Address: 2517 Eastlake Ave E, Suite 100
Seattle, WA 98102

Attention: Ms. Janet Murphy
Project Location: Park Royal Apartments

Batch #: 3010672.00
Matrix: Paint Chips
Method: EPA 7000B
Client Project #: 40573.043
Date Received: 08/19/2010
Samples Received: 3
Samples Analyzed: 3

Lab ID	Client Sample #	Sample Area (cm^2)	RL in mg/cm^2	Results mg/cm^2
30063036	Pb-P-1	25.80	0.00040	< 0.00030
30063037	Pb-P-2	25.80	0.00040	0.00500
30063038	Pb-P-3	6.45	0.00200	< 0.00100

Sampled by: Client
Analyzed by: Yasuyuki Hida
Reviewed by: Nick Ly

Date Analyzed: 08/20/2010
Date Issued: 08/20/2010

Nick Ly, Technical Director

mg =Milligrams
cm^2 = Square centimeter

RL = Reporting Limit
'<' = Below the reporting Limit

Note : Method QC results are acceptable unless stated otherwise.
Unless otherwise indicated, the condition of all samples was acceptable at time of receipt.

Bench Run No: 30-0820-02

PBS

BATCH ID
3010673.00

Project: Park Royal Apartments Project #: 40573.043

Analysis requested: Lead EPA method SW846-7000B Date: August 19 2010

Relinq'd by/Signature: Janet Murphy Date/Time: August 19 2010

Received by/Signature: Janet Murphy / Sara Kilby NVL Date/Time: 8/19/10 1605

E-Mail results to:

☐	Brian Stanford	☐	Prudy Stoudt-McRae	☐	Ferman Fletcher
☐	Ernest Edwards	☐	Joe Lucas		Tim Ogden
☐	Gregg Middaugh	☒	Janet Murphy	☐	Mike Smith
☐	Mark Hiley	☐	Willem Mager	☐	Chuck Greeb

TURN AROUND TIME:

☐	1 Hour	☐	24 Hours	☐	3-5 Days
☐	2 Hours	☐	48 Hours	☒	Other 3 Days.
☐	4 Hours				

Analyzed by: Brittany Vogel NVL 8/20/10 11:30

BULK SAMPLE DATA FORM

Lab #	Sample #	Material	Location	Lab
	Pb-W-1	Dust Wipe	Unit 103 Bare Floor @ Entry	
	" 2	Dust Wipe	Unit 103 Sill Bedroom #2	
	" 3	Dust Wipe	Unit 102 F Bare Floor @ Entry	
	" 4	Dust Wipe	Unit 203 Sill Bedroom #2	
	" 5	Dust Wipe	Unit 203 Sill Kitchen	
	" 6	Dust Wipe	Unit 203 Floor Bare @ Entry	
	" 7	Dust Wipe	Unit 102 Sill Bedroom #2	
	" 8	Dust Wipe	Unit 102 Sill Kitchen	
	" 9	Dust Wipe	Unit 201 Sill Bedroom 1	
	" 10	Dust Wipe	Unit 201 Floor Kitchen	
	" 11	Dust Wipe	Unit 204 Sill Bedroom 1	
	" 12	Dust Wipe	Unit 204 Front Door Carpet	
	" 13	Dust Wipe	Unit 208 Sill Bedroom 2	
	All Flooring	Wipe Samples Are 9"x8"		
	All Sill	Wipe Samples Are 18"x2"		

18417 96th Ave N.E.

18309 98th Ave. N.E.

S:\Masters\Office\Tech Forms & Templates\Lab Chain-of-Custody.doc

PBS ENVIRONMENTAL

BATCH ID
3010673.00

Project: Park Royal Apartments **Project #:** 40573.043

Analysis requested: Lead EPA Method 6010B - 7000B **Date:** August 19 2010

Relinq'd by/Signature: Janet Murphy **Date/Time:** August 19 2010

Received by/Signature: Janet Murphy Sach Rng 405pm 8/19/10 **Date/Time:**

Fax results to:

☐	Brian Stanford	☒	Janet Murphy	☐	Willem Mager
☐	Ernest Edwards	☐	Harry Goren	☐	Tim Ogden
☐	Mark Hiley	☐	Mike Smith	☐	Ferman Fletcher
☐	Gregg Middaugh	☐	Prudy Stoudt-McRae	☐	Other

TURN AROUND TIME:

☐	1 Hour	☐	24 Hours	☐	5 Days
☐	2 Hours	☐	48 Hours	☐	Other
☐	4 Hours				

Analyzed by: BrittanyVogel NW 8/20/10 11:30

BULK SAMPLE DATA FORM

Lab #	Sample #	Material	Location	Lab
	Pb-w- 14.	Dust Wipe	Unit 208 Front Entry Carpet	
	" 15.	Dust Wipe	Unit 104 Kitchen Sill	
	" 16.	Dust Wipe	Unit 104 Bathroom Floor	
	" 17.	Dust Wipe	Unit 001 Bedroom 2 Carpet Floor	
	" 18.	Dust Wipe	Unit 107 Bedroom 1 Sill	
	" 19.	Dustwipe	Unit 108 Bedroom 2 Sill	
	"	Dustwipe		

18309 9th Ave. N. E.

PBS ENVIRONMENTAL, 2517 Eastlake Ave E- Suite 100, SEATTLE, WASHINGTON 98102, (206)-233-9639, FAX: (206)-762-4780

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

Analysis Report

AIHA - IH # 101861
WA - DOE # C1765

AIHA Environmental Lead and Industrial Hygiene ACCREDITED LABORATORY

Total Lead (Pb)

Client: PBS Environmental (Seattle)
Address: 2517 Eastlake Ave E, Suite 100
Seattle, WA 98102

Attention: Ms. Janet Murphy
Project Location: Park Royal Apartments

Batch #: 3010673.00
Matrix: Dust/wipe (Area)
Method: EPA 7000B
Client Project #: 40573.043
Date Received: 08/19/2010
Samples Received: 20
Samples Analyzed: 20

Lab ID	Client Sample #	Element	Sample sq ft	RL ug/ sq ft	Results in ug/wipe	Results in ug/sq. ft
30063039	Pb-W-1	Lead (Pb)	0.50	14.0	< 7.2	< 14.0
30063040	Pb-W-2	Lead (Pb)	0.25	29.0	< 7.2	< 29.0
30063041	Pb-W-3	Lead (Pb)	0.50	14.0	< 7.2	< 14.0
30063042	Pb-W-4	Lead (Pb)	0.25	29.0	< 7.2	< 29.0
30063043	Pb-W-5	Lead (Pb)	0.25	29.0	< 7.2	< 29.0
30063044	Pb-W-6	Lead (Pb)	0.50	14.0	< 7.2	< 14.0
30063045	Pb-W-7	Lead (Pb)	0.25	29.0	< 7.2	< 29.0
30063046	Pb-W-8	Lead (Pb)	0.25	29.0	< 7.2	< 29.0
30063047	Pb-W-9	Lead (Pb)	0.25	29.0	< 7.2	< 29.0
30063048	Pb-W-10	Lead (Pb)	0.50	14.0	< 7.2	< 14.0
30063049	Pb-W-11	Lead (Pb)	0.25	29.0	< 7.2	< 29.0
30063050	Pb-W-12	Lead (Pb)	0.50	14.0	< 7.2	< 14.0
30063051	Pb-W-13	Lead (Pb)	0.25	29.0	< 7.2	< 29.0
30063109	Pb-W-14	Lead (Pb)	0.50	14.0	< 7.2	< 14.0
30063110	Pb-W-15	Lead (Pb)	0.25	29.0	< 7.2	< 29.0
30063111	Pb-W-16	Lead (Pb)	0.50	14.0	< 7.2	< 14.0
30063112	Pb-W-17	Lead (Pb)	0.50	14.0	< 7.2	< 14.0
30063113	Pb-W-18	Lead (Pb)	0.25	29.0	< 7.2	< 29.0
30063114	Pb-W-19	Lead (Pb)	0.25	29.0	< 7.2	< 29.0
30063115	Pb-W-20	Lead (Pb)	0.00		< 7.2	

Sampled by: Client
Analyzed by: Brittany Vogel
Reviewed by: Nick Ly

Date Analyzed: 08/20/2010
Date Issued: 08/20/2010

Nick Ly, Technical Director

ug/ sq. ft. =Micrograms per square foot
ug / wipe = Micrograms per wipe

RL = Reporting Limit
'<' = Below the reporting Limit

Note : Method QC results are acceptable unless stated otherwise. Concentration (ug/ft^2) not reported if sample area is zero. Unless otherwise indicated, the condition of all samples was acceptable at time of receipt.

Bench Run No: 30-0820-01

ADVANCED ANALYTICAL

Environmental Testing Laboratory

August 26, 2010

Harry Goren
PBS Environmental
2517 Eastlake Ave. East, Suite 100
Seattle, WA 98102

Dear Mr. Goren:

Please find enclosed the analytical data report for the *Park Royal Apts., 40573.043* ***(A00824-3)*** Project.

Samples were received on *August 24, 2010*. The results of the analyses are presented in the attached tables. Applicable reporting limits, QA/QC data and data qualifiers are included. A copy of the chain-of-custody and an invoice for the work is also enclosed.

ADVANCED ANALYTICAL LABORATORY appreciates the opportunity to provide analytical services for this project. Should there be any questions regarding this report, please contact me at (425) 497-0110.

It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,

V. Ivanov

Val G. Ivanov, Ph.D.
Laboratory Manager

Overlake Business Center ■ 2821 152 Avenue NE ■ Redmond, WA 98052
ph 425.497.0110 fax 425.497.8089
E-mail: aachemlab@yahoo.com

Advanced Analytical Laboratory
(425) 497-0110, fax (425) 497-8089

AAL Job Number: A00824-3
Client: PBS Environmental
Project Manager: Harry Goren
Client Project Name: Park Royal Apts
Client Project Number: 40573.043
Date received: 08/24/10

Analytical Results

Metals (7010), mg/kg		MTH BLK	LCS	LD-1	LD-2	Dupl LD-2	RPD LD-2
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	08/25/10	08/25/10	08/25/10	08/25/10	08/25/10	08/25/10
Date analyzed	Limits	08/25/10	08/25/10	08/25/10	08/25/10	08/25/10	08/25/10
Lead (Pb)	1.0	nd	118%	17	15	18	16%

Data Qualifiers and Analytical Comments
nd - not detected at listed reporting limits
na - not analyzed
Results reported on dry-weight basis
Acceptable Recovery limits: 65% TO 135%
Acceptable RPD limit: 30%

ADVANCED ANALYTICAL

Chain of Custody Record

Page 1 of 1

Laboratory Job #: A00824-3

2821 152 Avenue NE
Redmond, WA 98052
(425) 497-0110 fax: (425) 497-8089
aachemlab@yahoo.com

Client: PBS Eng + Env

Project Manager: Harry Gorem

Address: 2517 Eastlake ave E

Phone: 206.255.4647 Fax:

Project Name: Park Royal apts

Project Number: 40573.043

Collector: H Gorem

Date of collection: 8/18/10

	Sample ID	Time	Matrix	Container type	8260 Volatiles	8021B Volatiles	BTEX	BTEX/NWTPH-Gx	NWTPH-Gx	NWTPH-Dx	NWTPH-HCID	8270 Semivolatiles	8270 PAH	8082 PCbs	8081 Pesticides	RCRA 8 Metals	Lead				Notes, comments	# of containers
1	LD-1	1000	S														X				18417 96th NE	
2	LD-2	1010	S														X				18309 96th NE	
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

Relinquished by:	Date/Time	Received by:	Date/Time
Harry Gorem	8/24/1530	V. Ivanov	08/24/10 15:30
Relinquished by:	Date/Time	Received by:	Date/Time

Sample receipt info:

Total # of containers:

Condition (temp, °C)

Seals (intact?, Y/N)

Comments:

Turnaround time:

Same day O

24 hr O

48 hr X

Standard O

TAB 2

Publications

Pamphlet *"Protect Your Family From Lead In Your Home"*
Pamphlet *"Testing Your Home for Lead in Paint, Dust, and Soil"*
Pamphlet *"The Lead-Based Paint Pre-Renovation Education Rule"*
Provided Electronically

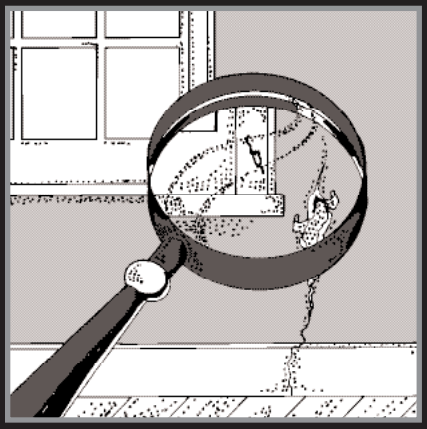
THIS PAGE
DOES NOT
PRINT

Simple Steps To Protect Your Family From Lead Hazards

If you think your home has high levels of lead:

- Get your young children tested for lead, even if they seem healthy.
- Wash children's hands, bottles, pacifiers, and toys often.
- Make sure children eat healthy, low-fat foods.
- Get your home checked for lead hazards.
- Regularly clean floors, window sills, and other surfaces.
- Wipe soil off shoes before entering house.
- Talk to your landlord about fixing surfaces with peeling or chipping paint.
- Take precautions to avoid exposure to lead dust when remodeling or renovating (call 1-800-424-LEAD for guidelines).
- Don't use a belt-sander, propane torch, high temperature heat gun, scraper, or sandpaper on painted surfaces that may contain lead.
- Don't try to remove lead-based paint yourself.

Recycled/Recyclable
Printed with vegetable oil based inks on recycled paper (minimum 50% postconsumer) process chlorine free.



Protect Your Family From Lead In Your Home

United States Environmental Protection Agency

United States Consumer Product Safety Commission

United States Department of Housing and Urban Development

Are You Planning To Buy, Rent, or Renovate a Home Built Before 1978?

Many houses and apartments built before 1978 have paint that contains high levels of lead (called lead-based paint). Lead from paint, chips, and dust can pose serious health hazards if not taken care of properly.

OWNERS, BUYERS, and RENTERS are encouraged to check for lead (see page 6) before renting, buying or renovating pre-1978 housing.

Federal law requires that individuals receive certain information before renting, buying, or renovating pre-1978 housing:

LANDLORDS have to disclose known information on lead-based paint and lead-based paint hazards before leases take effect. Leases must include a disclosure about lead-based paint.

SELLERS have to disclose known information on lead-based paint and lead-based paint hazards before selling a house. Sales contracts must include a disclosure about lead-based paint. Buyers have up to 10 days to check for lead.

RENOVATORS disturbing more than 2 square feet of painted surfaces have to give you this pamphlet before starting work.

IMPORTANT!

Lead From Paint, Dust, and Soil Can Be Dangerous If Not Managed Properly

FACT: Lead exposure can harm young children and babies even before they are born.

FACT: Even children who seem healthy can have high levels of lead in their bodies.

FACT: People can get lead in their bodies by breathing or swallowing lead dust, or by eating soil or paint chips containing lead.

FACT: People have many options for reducing lead hazards. In most cases, lead-based paint that is in good condition is not a hazard.

FACT: Removing lead-based paint improperly can increase the danger to your family.

If you think your home might have lead hazards, read this pamphlet to learn some simple steps to protect your family.

Lead Gets in the Body in Many Ways

Childhood lead poisoning remains a major environmental health problem in the U.S.

Even children who appear healthy can have dangerous levels of lead in their bodies.

People can get lead in their body if they:

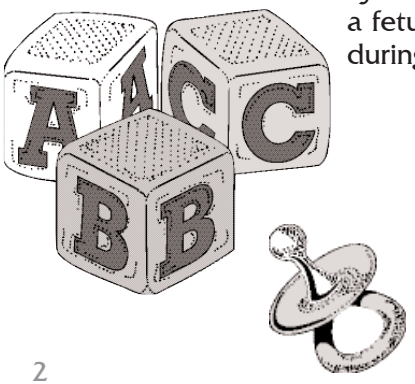
- Breathe in lead dust (especially during renovations that disturb painted surfaces).
- Put their hands or other objects covered with lead dust in their mouths.
- Eat paint chips or soil that contains lead.

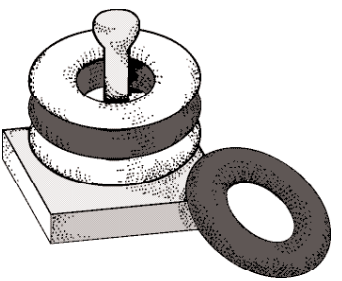
Lead is even more dangerous to children under the age of 6:

- At this age children's brains and nervous systems are more sensitive to the damaging effects of lead.
- Children's growing bodies absorb more lead.
- Babies and young children often put their hands and other objects in their mouths. These objects can have lead dust on them.

Lead is also dangerous to women of childbearing age:

- Women with a high lead level in their system prior to pregnancy would expose a fetus to lead through the placenta during fetal development.





Lead's Effects

It is important to know that even exposure to low levels of lead can severely harm children.

In children, lead can cause:

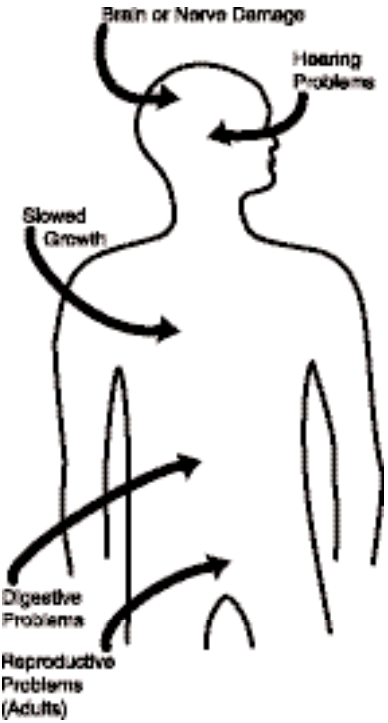
- Nervous system and kidney damage.
- Learning disabilities, attention deficit disorder, and decreased intelligence.
- Speech, language, and behavior problems.
- Poor muscle coordination.
- Decreased muscle and bone growth.
- Hearing damage.

While low-lead exposure is most common, exposure to high levels of lead can have devastating effects on children, including seizures, unconsciousness, and, in some cases, death.

Although children are especially susceptible to lead exposure, lead can be dangerous for adults too.

In adults, lead can cause:

- Increased chance of illness during pregnancy.
- Harm to a fetus, including brain damage or death.
- Fertility problems (in men and women).
- High blood pressure.
- Digestive problems.
- Nerve disorders.
- Memory and concentration problems.
- Muscle and joint pain.



Lead affects the body in many ways.

Where Lead-Based Paint Is Found

In general, the older your home, the more likely it has lead-based paint.

Many homes built before 1978 have lead-based paint. The federal government banned lead-based paint from housing in 1978. Some states stopped its use even earlier. Lead can be found:

- In homes in the city, country, or suburbs.
- In apartments, single-family homes, and both private and public housing.
- Inside and outside of the house.
- In soil around a home. (Soil can pick up lead from exterior paint or other sources such as past use of leaded gas in cars.)

Checking Your Family for Lead

Get your children and home tested if you think your home has high levels of lead.

To reduce your child's exposure to lead, get your child checked, have your home tested (especially if your home has paint in poor condition and was built before 1978), and fix any hazards you may have. Children's blood lead levels tend to increase rapidly from 6 to 12 months of age, and tend to peak at 18 to 24 months of age.

Consult your doctor for advice on testing your children. A simple blood test can detect high levels of lead. Blood tests are usually recommended for:

- Children at ages 1 and 2.
- Children or other family members who have been exposed to high levels of lead.
- Children who should be tested under your state or local health screening plan.

Your doctor can explain what the test results mean and if more testing will be needed.

Identifying Lead Hazards

Lead-based paint is usually not a hazard if it is in good condition, and it is not on an impact or friction surface, like a window. It is defined by the federal government as paint with lead levels greater than or equal to 1.0 milligram per square centimeter, or more than 0.5% by weight.

Lead from paint chips, which you can see, and lead dust, which you can't always see, can both be serious hazards.

Deteriorating lead-based paint (peeling, chipping, chalking, cracking or damaged) is a hazard and needs immediate attention. It may also be a hazard when found on surfaces that children can chew or that get a lot of wear-and-tear, such as:

- Windows and window sills.
- Doors and door frames.
- Stairs, railings, banisters, and porches.

Lead dust can form when lead-based paint is scraped, sanded, or heated. Dust also forms when painted surfaces bump or rub together. Lead chips and dust can get on surfaces and objects that people touch. Settled lead dust can re-enter the air when people vacuum, sweep, or walk through it. The following two federal standards have been set for lead hazards in dust:

- 40 micrograms per square foot ($\mu g/ft^2$) and higher for floors, including carpeted floors.
- 250 $\mu g/ft^2$ and higher for interior window sills.

Lead in soil can be a hazard when children play in bare soil or when people bring soil into the house on their shoes. The following two federal standards have been set for lead hazards in residential soil:

- 400 parts per million (ppm) and higher in play areas of bare soil.
- 1,200 ppm (average) and higher in bare soil in the remainder of the yard.

The only way to find out if paint, dust and soil lead hazards exist is to test for them. The next page describes the most common methods used.

Checking Your Home for Lead

Just knowing that a home has lead-based paint may not tell you if there is a hazard.

You can get your home tested for lead in several different ways:

- A paint **inspection** tells you whether your home has lead-based paint and where it is located. It won't tell you whether or not your home currently has lead hazards.
- A **risk assessment** tells you if your home currently has any lead hazards from lead in paint, dust, or soil. It also tells you what actions to take to address any hazards.
- A combination risk assessment and inspection tells you if your home has any lead hazards and if your home has any lead-based paint, and where the lead-based paint is located.

Hire a trained and certified testing professional who will use a range of reliable methods when testing your home.

- Visual inspection of paint condition and location.
- A portable x-ray fluorescence (XRF) machine.
- Lab tests of paint, dust, and soil samples.

There are state and federal programs in place to ensure that testing is done safely, reliably, and effectively. Contact your state or local agency (see bottom of page 11) for more information, or call **1-800-424-LEAD (5323)** for a list of contacts in your area.

Home test kits for lead are available, but may not always be accurate. Consumers should not rely on these kits before doing renovations or to assure safety.

What You Can Do Now To Protect Your Family

If you suspect that your house has lead hazards, you can take some immediate steps to reduce your family's risk:

- **If you rent, notify your landlord of peeling or chipping paint.**
- **Clean up paint chips immediately.**
- **Clean floors, window frames, window sills, and other surfaces weekly**. Use a mop or sponge with warm water and a general all-purpose cleaner or a cleaner made specifically for lead. REMEMBER: NEVER MIX AMMONIA AND BLEACH PRODUCTS TOGETHER SINCE THEY CAN FORM A DANGEROUS GAS.

- **Thoroughly rinse sponges and mop heads after cleaning dirty or dusty areas**.
- **Wash children's hands often, especially before they eat and before nap time and bed time.**
- **Keep play areas clean.** Wash bottles, pacifiers, toys, and stuffed animals regularly.
- **Keep children from chewing window sills or other painted surfaces.**
- **Clean or remove shoes before entering your home to avoid tracking in lead from soil.**

- **Make sure children eat nutritious, low-fat meals high in iron and calcium,** such as spinach and dairy products. Children with good diets absorb less lead.

Reducing Lead Hazards In The Home

Removing lead improperly can increase the hazard to your family by spreading even more lead dust around the house.

Always use a professional who is trained to remove lead hazards safely.

In addition to day-to-day cleaning and good nutrition:

- You can **temporarily** reduce lead hazards by taking actions such as repairing damaged painted surfaces and planting grass to cover soil with high lead levels. These actions (called "interim controls") are not permanent solutions and will need ongoing attention.
- To **permanently** remove lead hazards, you should hire a certified lead "abatement" contractor. Abatement (or permanent hazard elimination) methods include removing, sealing, or enclosing lead-based paint with special materials. Just painting over the hazard with regular paint is not permanent removal.

Always hire a person with special training for correcting lead problems—someone who knows how to do this work safely and has the proper equipment to clean up thoroughly. Certified contractors will employ qualified workers and follow strict safety rules as set by their state or by the federal government.

Once the work is completed, dust cleanup activities must be repeated until testing indicates that lead dust levels are below the following:

- 40 micrograms per square foot ($\mu g/ft^2$) for floors, including carpeted floors;
- 250 $\mu g/ft^2$ for interior windows sills; and
- 400 $\mu g/ft^2$ for window troughs.

Call your state or local agency (see bottom of page 11) for help in locating certified professionals in your area and to see if financial assistance is available.

Remodeling or Renovating a Home With Lead-Based Paint

Take precautions before your contractor or you begin remodeling or renovating anything that disturbs painted surfaces (such as scraping off paint or tearing out walls):

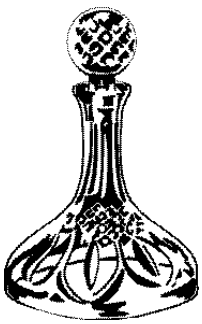
- **Have the area tested for lead-based paint.**
- **Do not use a belt-sander, propane torch, high temperature heat gun, dry scraper, or dry sandpaper** to remove lead-based paint. These actions create large amounts of lead dust and fumes. Lead dust can remain in your home long after the work is done.
- **Temporarily move your family** (especially children and pregnant women) out of the apartment or house until the work is done and the area is properly cleaned. If you can't move your family, at least completely seal off the work area.
- **Follow other safety measures to reduce lead hazards.** You can find out about other safety measures by calling 1-800-424-LEAD. Ask for the brochure "Reducing Lead Hazards When Remodeling Your Home." This brochure explains what to do before, during, and after renovations.

If not conducted properly, certain types of renovations can release lead from paint and dust into the air.

If you have already completed renovations or remodeling that could have released lead-based paint or dust, get your young children tested and follow the steps outlined on page 7 of this brochure.

Other Sources of Lead

While paint, dust, and soil are the most common sources of lead, other lead sources also exist.



- **Drinking water.** Your home might have plumbing with lead or lead solder. Call your local health department or water supplier to find out about testing your water. You cannot see, smell, or taste lead, and boiling your water will not get rid of lead. If you think your plumbing might have lead in it:
  - Use only cold water for drinking and cooking.
  - Run water for 15 to 30 seconds before drinking it, especially if you have not used your water for a few hours.
- **The job.** If you work with lead, you could bring it home on your hands or clothes. Shower and change clothes before coming home. Launder your work clothes separately from the rest of your family's clothes.
- Old painted **toys** and **furniture.**
- Food and liquids stored in **lead crystal** or **lead-glazed pottery or porcelain.**
- **Lead smelters** or other industries that release lead into the air.
- **Hobbies** that use lead, such as making pottery or stained glass, or refinishing furniture.
- **Folk remedies** that contain lead, such as "greta" and "azarcon" used to treat an upset stomach.

For More Information

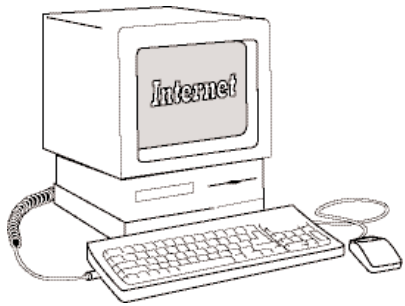
The National Lead Information Center

Call **1-800-424-LEAD (424-5323)** to learn how to protect children from lead poisoning and for other information on lead hazards. To access lead information via the web, visit **www.epa.gov/lead** and **www.hud.gov/offices/lead/.**

EPA's Safe Drinking Water Hotline

Call **1-800-426-4791** for information about lead in drinking water.

Consumer Product Safety Commission (CPSC) Hotline



To request information on lead in consumer products, or to report an unsafe consumer product or a product-related injury call **1-800-638-2772**, or visit CPSC's Web site at: **www.cpsc.gov.**

Health and Environmental Agencies

Some cities, states, and tribes have their own rules for lead-based paint activities. Check with your local agency to see which laws apply to you. Most agencies can also provide information on finding a lead abatement firm in your area, and on possible sources of financial aid for reducing lead hazards. Receive up-to-date address and phone information for your local contacts on the Internet at **www.epa.gov/lead** or contact the National Lead Information Center at **1-800-424-LEAD.**

For the hearing impaired, call the Federal Information Relay Service at **1-800-877-8339** to access any of the phone numbers in this brochure.

EPA Regional Offices

Your Regional EPA Office can provide further information regarding regulations and lead protection programs.

EPA Regional Offices

Region 1 (Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, Vermont)

Regional Lead Contact
U.S. EPA Region 1
Suite 1100 (CPT)
One Congress Street
Boston, MA 02114-2023
1 (888) 372-7341

Region 2 (New Jersey, New York, Puerto Rico, Virgin Islands)

Regional Lead Contact
U.S. EPA Region 2
2890 Woodbridge Avenue
Building 209, Mail Stop 225
Edison, NJ 08837-3679
(732) 321-6671

Region 3 (Delaware, Maryland, Pennsylvania, Virginia, Washington DC, West Virginia)

Regional Lead Contact
U.S. EPA Region 3 (3WC33)
1650 Arch Street
Philadelphia, PA 19103
(215) 814-5000

Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee)

Regional Lead Contact
U.S. EPA Region 4
61 Forsyth Street, SW
Atlanta, GA 30303
(404) 562-8998

Region 5 (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin)

Regional Lead Contact
U.S. EPA Region 5 (DT-8J)
77 West Jackson Boulevard
Chicago, IL 60604-3666
(312) 886-6003

Region 6 (Arkansas, Louisiana, New Mexico, Oklahoma, Texas)

Regional Lead Contact
U.S. EPA Region 6
1445 Ross Avenue, 12th Floor
Dallas, TX 75202-2733
(214) 665-7577

Region 7 (Iowa, Kansas, Missouri, Nebraska)

Regional Lead Contact
U.S. EPA Region 7
(ARTD-RALI)
901 N. 5th Street
Kansas City, KS 66101
(913) 551-7020

Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming)

Regional Lead Contact
U.S. EPA Region 8
999 18th Street, Suite 500
Denver, CO 80202-2466
(303) 312-6021

Region 9 (Arizona, California, Hawaii, Nevada)

Regional Lead Contact
U.S. Region 9
75 Hawthorne Street
San Francisco, CA 94105
(415) 947-4164

Region 10 (Alaska, Idaho, Oregon, Washington)

Regional Lead Contact
U.S. EPA Region 10
Toxics Section WCM-128
1200 Sixth Avenue
Seattle, WA 98101-1128
(206) 553-1985

CPSC Regional Offices

Your Regional CPSC Office can provide further information regarding regulations and consumer product safety.

Eastern Regional Center
Consumer Product Safety Commission
201 Varick Street, Room 903
New York, NY 10014
(212) 620-4120

Western Regional Center
Consumer Product Safety Commission
1301 Clay Street, Suite 610-N
Oakland, CA 94612
(510) 637-4050

Central Regional Center
Consumer Product Safety Commission
230 South Dearborn Street, Room 2944
Chicago, IL 60604
(312) 353-8260

HUD Lead Office

Please contact HUD's Office of Healthy Homes and Lead Hazard Control for information on lead regulations, outreach efforts, and lead hazard control and research grant programs.

U.S. Department of Housing and Urban Development
Office of Healthy Homes and Lead Hazard Control
451 Seventh Street, SW, P-3206
Washington, DC 20410
(202) 755-1785

U.S. EPA Washington DC 20460
U.S. CPSC Washington DC 20207
U.S. HUD Washington DC 20410

EPA747-K-99-001
June 2003

United States
Environmental Protection
Agency

Office of
Pollution Prevention and Toxics
7404

EPA 747-K-00-001
July 2000

Testing Your Home For Lead

In Paint, Dust, And Soil

Preface

About This Publication

This publication is for anyone who is considering having a home or residence tested for lead in paint, dust, or soil by a lead-based paint professional. It explains the technical aspects of lead testing without overwhelming the reader. Thus, commonly asked questions are presented in logical order. The first section tells why you would test for lead, the approaches for testing for lead, and what information you will get from each approach. The second section answers specific questions about how paint, soil, and dust sampling are conducted by a lead-based paint professional in your home. Finally, the last section answers other questions about testing, including questions about home test kits and testing of water and ceramics.

Important:

This publication addresses federal regulations and guidelines. Your state may have its own lead program and different regulations. For more information, contact the National Lead Information Center (NLIC) at **1-800-424-LEAD** or visit **http://www.epa.gov/lead**.

Table Of Contents

Section 1: General Questions About Testing Approaches

Section 2: Specific Questions About Testing Paint, Dust, And Soil

Section 3: Miscellaneous Questions Frequently Asked About Testing

Section 1

General Questions About Testing Procedures

Q: Why Should I Test My Home For Lead?

A: There are numerous reasons why you might want to test your home for lead, especially if built before 1978.

I. There Are (Or Will Be) Children Age Six And Younger In The Home

Lead from paint, especially peeling or flaking paint, can get into dust and soil in and around a home. Young children may then swallow the lead during normal hand-to-mouth activity. In addition, an unborn child may be exposed to lead in the mother's womb. High levels of lead in the fetus and in children age six and younger have been linked to nervous system damage, behavior and learning problems, and slow growth. Testing can tell you whether there is lead-based paint or a lead-based paint hazard in your home.

II. You Are About To Remodel, Renovate, Or Repaint Your Home

Any disturbance of lead-based paint can create a hazard by depositing lead chips or particles in the house dust or in the soil around the house. If you are planning on doing renovation, remodeling, or repainting, you should have testing done by a certified lead-based paint professional on any painted surfaces that will be removed, disturbed, scraped, or sanded before starting the work. The EPA brochure *Reducing Lead Hazards When Remodeling Your Home* (see page 16) provides guidelines for renovating or remodeling your home.

If your house was built before 1978 and you hire a professional to renovate, the renovator must, before beginning renovation, give you a copy of the EPA pamphlet *Protect Your Family From Lead In Your Home*.

III. You Are Renting Or Buying A Home

The Federal Lead-Based Paint and Lead-Based Paint Hazards Disclosure Rule requires that the landlord or seller of a residential dwelling built prior to 1978 provide the renter or buyer with:

- The pamphlet *Protect Your Family From Lead In Your Home* and
- Any available information on lead-based paint or lead-based paint hazards in the home.

A buyer must be given the opportunity to conduct testing to determine whether lead-based paint or lead-based paint hazards are present. While you are not required by law to test for lead, it may be advisable if you have (or plan to have) young children in the home.

IV. You Are A Landlord Or Selling A Home

As discussed above, a homeowner is required to provide renters or buyers with any available information on lead-based paint or lead-based paint hazards in homes built before 1978. Testing will give you the information that may be requested by potential renters or buyers.

Q: Why Is Testing Recommended For Houses Built Before 1978?

A: Federal regulations placed a limit on the amount of lead in paint sold for residential use starting in 1978. That is why homes built before 1978 are subject to the Disclosure Rule. The older the home, the greater the chance of lead-based paint and lead-based paint hazards, and the more important it is to have the home tested.

Q: What Kind Of Testing Do I Want?

A: Three different approaches for testing lead are available: a lead-based paint inspection, a risk assessment, and a lead hazard screen. A combination inspection and risk assessment may also be done. Selection of the approach depends on why you are testing.

I. Lead-Based Paint Inspection

A lead-based paint *inspection* is a surface-by-surface investigation to determine whether there is lead-based paint in the home and where it is located. An inspection may be particularly useful before renovation, repainting, or paint removal.

An inspection includes:

- An inventory of all painted surfaces, including the outside as well as the inside of the home. 'Painted surfaces' include all surfaces coated with paint, shellac, varnish, stain, coating, or even paint covered by wallpaper.
- Selection and testing of each type of painted surface.

Then you should get a report listing the painted surfaces in the home and whether each painted surface contains lead-based paint.

An inspection does not typically test painted furniture unless it is a permanent part of the home, such as kitchen or bathroom cabinets or built-in bookshelves. Soil, dust, and water are not typically tested during an inspection.

The presence of lead-based paint in a home does not necessarily mean there is a lead-based paint hazard to occupants. To make sure, you may want a different testing approach (either a risk assessment or hazard screen).

Typical Painted Surfaces Tested During Inspection			
Inside The Home		**Outside The Home**	
Baseboards	Heating Units	Chimneys	Mailboxes
Built-In Cabinets	Railings	Door Trim	Porches
Ceilings	Shelves	Fascia, Soffits	Roofing
Chair Rails	Stairs	Fences	Siding
Doors	Walls	Gutters, Downspouts	Stairs
Fireplaces	Windows	Handrails	Sheds
Floors		Lattice Work	Swing Sets

II. Risk Assessment

A *risk assessment* is an on-site investigation to determine the presence, type, severity, and location of lead-based paint hazards. The presence of deteriorated lead-based paint or high levels of lead in dust or soil pose potential hazards to children who may ingest lead inside or playing outside.

A risk assessment includes:

- A visual inspection of the residence to determine the location of deteriorated paint, the extent and causes of the deterioration, and other factors that may cause lead exposure to young children inside or outside the home.
- Testing deteriorated paint and paint on surfaces where there is reason to believe (from teeth marks or from reports of a parent) that a child has chewed, licked, or mouthed the paint. Painted surfaces in good condition are not tested.
- Testing household dust from floors and windows. Samples should include areas from a child's bedroom, a child's main play area, the main entrance, and other locations to be chosen by the certified Risk Assessor.
- Testing bare soil from play areas, the building foundation, and possibly other areas around the home.
- Optional water testing.

Finally, you should get a report identifying the location of the types of lead-based paint hazards and ways to control them. Because not all paint is tested, a risk assessment cannot conclude that there is no lead-based paint in the home.

An important point is that a risk assessment identifies current lead-based paint hazards. New hazards may arise if lead-based paint is disturbed, damaged, or deteriorates.

If you want to know which painted surfaces contain lead-based paint and whether any lead-based hazards are present, you will need a combination inspection and risk assessment.

III. Lead Hazard Screen

A *lead hazard screen* is a limited version of a risk assessment for houses with a low chance of lead risks.

In a lead hazard screen:

- Any painted surfaces in a deteriorated condition are tested.
- Two sets of dust samples are collected in a lead hazard screen. One set represents the floors and the other set represents the windows. Typically, there is less dust sampling in a lead hazard screen than in a risk assessment.
- Usually soil samples are not collected in a lead hazard screen, with one exception. If there is evidence of paint chips in the soil from previous exterior repainting, then the soil should be sampled and tested.

The outcome of the lead hazard screen is either a conclusion that lead-based paint hazards are probably not present or a recommendation that a full risk assessment be conducted to determine if such hazards are present.

In a lead hazard screen, only deteriorated paint is tested. Thus, a lead hazard screen cannot conclude there is no lead-based paint in the home.

A lead hazard screen is only recommended for residences that are generally in good condition, with little visible dust, and with paint in good condition (very little chipping or flaking). If not, the screen is likely to be a waste of time and money. In general, a lead hazard screen will be more useful in housing built after 1960.

As with a risk assessment, a lead hazard screen identifies current lead-based paint hazards. If there is lead-based paint in the home, new hazards may arise if that paint is disturbed, damaged, or deteriorates.

Q: Who Can Do Lead Testing For Me?

A: It is strongly recommended that testing be performed by a certified Inspector or certified Risk Assessor.

- Certified Inspectors can perform only lead-based paint inspections.
- Certified Risk Assessors can perform both risk assessments and lead hazard screens.

Your state may define the titles for lead-based paint professionals and the types of testing they can perform differently from what this brochure says. You can find out by calling NLIC at **1-800-424-LEAD**.

Q: What Will The Testing Report Tell Me?

A: That will depend on which approach has been used: inspection, risk assessment, or lead hazard screen. Request a sample report before the testing is done so that you may see what information will be provided and how it will be presented. You should also request that actual lead values (not just 'positive' or 'negative' classifications) be provided in the report as evidence that the testing was actually done.

I. Inspection Report

If you have an inspection done, you should receive a report that tells you which painted surfaces were tested and the test results for each surface. An inspection report will not tell you the condition of the lead-based paint or whether lead-based paint hazards exist.

II. Risk Assessment Report

If you have a risk assessment done, you will receive a report that tells you whether there are any lead-based paint hazards and recommends ways to reduce or control any hazards present.

The certified Risk Assessor will take into account the test results and the results of the visual inspection to decide if there are any lead-based paint hazards and how to control them. Lead-based paint hazards identified include lead-based paint in deteriorated condition or on surfaces mouthed by a child. In addition, house dust or bare soil with hazardous lead levels will be identified.

The certified Risk Assessor will provide a list of options for controlling each hazard. Options may include both interim controls and abatement.

- *Interim Controls* – These are short-term or temporary actions. Examples include recommendations to repair deteriorated surfaces that contain lead-based paint, to clean house dust more frequently, or to plant grass or shrubs in areas with bare soil.

- *Abatement* – These are long-term or permanent actions. Examples include replacing old windows, building a new wall over an existing one, or removing soil.

The certified Risk Assessor will also identify the probable source of the paint deterioration and determine whether other repairs are warranted. For example, a water leak may need to be repaired to prevent further damage to the paint.

III. Hazard Screen Report

If you have a lead hazard screen done, the report tells you either that there are probably no lead-based paint hazards in the house or that full-scale risk assessment is needed.

Q: Do I Have To Do Anything After The Testing Is Completed?

A: There is no EPA requirement for you to do anything to any lead-based paint or lead-based paint hazards found when testing your home. However, if your home was built before 1978, you will be required to provide the test results to any renter or buyer when you lease or sell the home. For more information on the responsibilities of sellers, landlords and their agents, contact NLIC at **1-800-424-LEAD** or visit **http://www.epa.gov/lead**.

Be aware that there may be state or other requirements for action based on the test results. You can call NLIC at **1-800-424-LEAD** for information about what is required in your locality before you start testing.

Q: May I Abate Lead-Based Paint Hazards In My Own Home?

A: If you decide to abate lead-based paint hazards in your own home, it is not recommended that you do the work yourself. Abatement activities must be done following careful procedures to prevent contamination of the home with lead dust. To be safe, hire a certified lead-based paint contractor (a certified professional who can do lead-based paint related abatement). Dust samples should be collected to check the thoroughness of the work.

Be aware that you must be certified yourself or you must hire a certified lead-based paint professional in the following cases: 1) if a child with a blood-lead level of 20 µg/dL* or higher for a single venous test (or 15–19 µg/dL in two consecutive tests taken 3 to 4 months apart) lives in the house or 2) you own the house and rent it to someone else.

If you hire a firm to do testing for lead-based paint hazards, note that you are not under any obligation to hire the same firm to do the abatement. In fact, it would be better to have one firm conduct all testing and another firm conduct the abatement work. That will prevent a conflict of interest.

Be sure to maintain a record of the work to help during any future sale or rental of the home.

*Pronounced micrograms of lead per deciliter of blood.

Section 2

Specific Questions About Testing Paint, Dust, And Soil

Q: Are All Painted Surfaces In The Home Tested?

A: Not every single painted surface in the home will be tested in an inspection, but all types of painted surfaces are tested. For example, a room may have three windows, all painted the same color and all made out of wood. The certified Inspector may not test all three windows, because they appear to be the same.

In a similar fashion, the certified Inspector will go through every room and test the different types of painted surfaces in the rooms. Painted surfaces on the outside of the home, detached structures (such as garages), and items like painted fences and swing sets should also be tested.

Inspections differ from risk assessments and lead hazard screens. In a risk assessment, only deteriorated paint and paint that has been mouthed or chewed by a child will be tested. In a lead hazard screen, only deteriorated paint is tested.

Q: How Are Painted Surfaces Tested?

A: There are currently two methods recognized by EPA for testing paint: portable X-Ray Fluorescence (XRF) analyzers and paint chip sampling followed by analysis by a laboratory recognized by EPA's National Lead Laboratory Accreditation Program (NLLAP).

I. Portable X-Ray Fluorescence Analyzers (XRFs)

A portable XRF measures lead in paint, generally without damaging the paint. However, readings from some XRFs are affected by the base material (known as the "substrate") underneath the paint, such as wood, plaster, or metal. For these cases, the certified Inspector removes paint from a few surfaces of each type and takes a measurement on the unpainted surface. These measurements provide a baseline to adjust the lead in paint value. This procedure may do some paint damage. Also, for curved surfaces or very deteriorated paint, XRF analyzers may not read accurately and a paint chip sample may be required.

When a certified lead-based paint professional follows good testing practices,

XRF analyzers provide a fast and reliable method for classifying many painted surfaces. However, some XRF test results may be inconclusive (neither positive nor negative). Then laboratory testing of a paint chip sample may be necessary.

Because the XRF analyzer uses a radiation source to detect lead, occupants in the household should be asked to stay out of rooms behind the surfaces being tested.

II. Paint Chip Sampling And Laboratory Analysis

Paint chip samples are collected for laboratory analysis by removing one to four square inches of paint from the surface. All layers of paint in the sampled area are included in the sample. Usually samples will contain some of the material beneath the paint, such as wood, plaster, or concrete particles. The amount of this material will be kept to a minimum.

Tools such as chisels and scrapers are used to remove the paint. Sometimes a heat gun is used to soften the paint and make the removal easier. If so, a respirator should be worn by the person operating the heat gun for protection from lead and other fumes. In addition, the room or area should be well ventilated to protect occupants.

After collecting the paint chip sample, the certified lead-based paint professional will repair the scraped area so that adjacent paint will not peel or flake off. Any paint chips or dust from the sampling should be cleaned up by the certified lead-based paint professional to ensure no lead dust is left behind.

Paint chip samples should be analyzed for lead by a laboratory recognized by EPA's NLLAP as proficient for testing lead in paint. EPA has established the NLLAP to ensure that laboratory analyses are done accurately. A laboratory on the list is recognized as proficient for testing for lead in whichever of the three sample types (paint, dust, or soil) the laboratory has qualified. The certified Inspector and certified Risk Assessor must ensure that any paint chip samples from your home are analyzed by a laboratory on the NLLAP list for paint. This publication addresses federal regulations and guidelines. Your state may have its own lead program and different regulations. For more information, contact NLIC at **1-800-424-LEAD** or visit **http://www.epa.gov/lead**.

While paint chip sampling followed by laboratory analysis is generally more accurate than XRF testing, sampling and analysis take longer to complete and paint chips must be scraped from many surfaces in the home. In some cases, a surface may be curved or so deteriorated that an XRF cannot be used properly and sampling may be the only way to test the paint.

Q: What Do The Results Of Paint Testing Mean?

A: A certified lead-based paint professional will use guidance specific for each type of XRF analyzer to determine whether a measurement indicates that:

- Lead-based paint is present,
- Lead-based paint is not present, or
- The measurement is inconclusive and a laboratory test is necessary.

The guidance ensures the XRF measurement classifies paint as lead-based when there is 1.0 milligram of lead per square centimeter of painted surface or greater (1.0 mg/cm^2). An XRF analyzer typically reads in mg/cm^2, meaning milligrams per square centimeter.

When the paint chip sampling followed by laboratory analysis method is used, the federal definition of lead-based paint is dependent on how the results are reported.

- If the laboratory report is expressed as weight of lead per weight of paint chip, the federal definition of lead-based paint is 0.5 percent lead (0.5%). This is mathematically the same as 5,000 milligrams of lead per kilogram of

Federal Definition Of Lead-Based Paint Depends On How Test Results Are Reported	
How Test Results Are Reported	**Federal Definition Of Lead-Based Paint**
If results are reported as percent (or equivalent)	Then, in order for it to be considered lead-based paint, the paint must have greater than or equal to 0.5% (which is the same as 5,000 µg/g or 5,000 mg/kg or 5,000 ppm) lead
If results are reported as milligrams per square centimeter	Then, in order for it to be considered lead-based paint, the paint must have greater than or equal to 1 mg/cm^2 lead

paint chip (5,000 mg/kg), or 5,000 micrograms of lead per gram of paint chip (5,000 µg/g), or 5,000 parts per million lead (5,000 ppm).

- If the laboratory report is expressed as a weight of lead per unit area of painted surface, the federal definition of lead-based paint is 1.0 mg/cm^2 (the same as for XRF analysis).

It is possible to report laboratory results in both types of units, but this is rarely done because of the additional time and work required.

Unfortunately, there is no universal definition of lead-based paint. Some state and local governments have definitions of lead-based paint which differ from those in federal law. It is recommended that when there is a conflict between the federal definition and a state or local definition, the more stringent standard (that is, the lower number) be used to define lead-based paint. A certified lead-based paint professional (certified Inspector or certified Risk Assessor) will be aware of and will follow the appropriate standard.

Q: What If No Lead-Based Paint Is Found In My Home?

A: Lead can still be present in paint which is not classified as "lead-based." This would occur when the paint has a lower amount of lead than the federal government regulates. If lead is present in the paint, lead dust can be released when the paint deteriorates, or is disturbed during remodeling, renovation,

sanding, or some maintenance work that breaks the surface of the paint. This is especially important in homes built before 1978. Since the amount of lead in paint was limited by federal regulation in 1978, lead exposure during remodeling and renovation is not as much a concern in newer homes. So you should be careful when there is work that involves extensive breaking of painted surfaces in a home built before 1978. Make sure any dust and debris created by breaking painted surfaces are thoroughly cleaned up, painted surfaces are repaired and left intact when the work is done, and children stay away from the work areas until all repairs and clean-up are completed.

The EPA brochure *Reducing Lead Hazards When Remodeling Your Home* provides guidelines for renovating and remodeling your home. See page 16 for more information on how to order the brochure.

Q: How Are Dust Samples Collected And Analyzed?

A: The most common method for dust collection is a surface wipe sample. Most certified Risk Assessors will use baby wipes or wet wipes to collect dust.

If dust is collected from a floor, an area of one square foot is usually sampled. The area is wiped several times in different directions to pick up all the dust. After sampling, the wipe is placed in a container and sent to a laboratory for analysis. The certified Risk Assessor will also collect wipe samples from windows and measure the surface area wiped.

In some situations, special types of vacuum samplers may be used for dust collection. These are different from home vacuum cleaners, although some may look the same.

The certified lead-based paint professional must send dust samples to a laboratory recognized by EPA's NLLAP that is proficient for dust analysis. This publication addresses federal regulations and guidelines. Your state may have its own lead program and different regulations. For more information, contact NLIC at **1-800-424-LEAD** or visit **http://www.epa.gov/lead**.

Q: What Do The Results Of Dust Sampling Mean?

A: Dust sample results are usually expressed as a weight of lead per unit area of surface. The units will usually be micrograms of lead per square foot. For example, a floor wipe sample may be expressed as 50 micrograms of lead per square foot. This is written as 50 $\mu g/ft^2$. The certified lead-based paint professional will provide guidance in interpreting the results of the dust testing.

Q: How Are Soil Samples Collected And Analyzed?

A: Soil samples are collected from bare soil areas (soil with no grass or other covering) near your home where children play and from bare soil areas near the house foundation or dripline. Optional sampling areas are gardens, pathways, and pet sleeping areas. Samples are collected by coring or scooping methods that take the top half-inch of soil. Samples of non-bare soil may sometimes be collected.

Soil samples must be sent to a laboratory recognized by EPA's NLLAP that is proficient in soil analysis. This publication addresses federal regulations and guidelines. Your state may have its own lead program and different regulations. For more information, contact NLIC at **1-800-424-LEAD** or visit **http://www.epa.gov/lead**.

Q: What Do The Results Of Soil Testing Mean?

A: Results of soil samples are expressed as a weight of lead per unit weight of soil, usually in parts per million. For example, a soil sample result may be 300 parts per million. This is written 300 ppm. The certified lead-based paint professional will help you interpret the results of the soil testing.

Q: What Are Composite Samples?

A: Composite samples are combinations of individual samples analyzed together in a laboratory to obtain a single average result. Both dust and soil samples may be composited. For example, a floor dust sample may be collected in each of three rooms and combined to obtain one composite dust sample to be analyzed by the laboratory. Or four soil samples taken in a play area may be combined to obtain one composite soil sample. Paint samples may also be composited, but this is not as common as compositing dust and soil samples.

Composite samples may often be used in risk assessments and lead hazard screens to reduce the cost of laboratory analysis or to increase the representativeness of a single sample. The disadvantage of composite samples is that information is not available for each room (or location) from which samples were collected.

The certified Risk Assessor will interpret composite sample results, if any. The advantage of composite samples is that information is obtained at reduced cost or more samples are collected for the same cost.

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Section 3

Miscellaneous Questions Frequently Asked About Testing

Q: What Are Home Test Kits?

A: Home test kits are used in the home to detect lead in paint, soil, and dust (and, in some cases, water, dishware, glasses, and ceramics). A reaction occurs causing a color change when chemicals in the kit are exposed to lead.

Q: Does EPA Recommend Test Kits For Paint, Dust, Or Soil Testing?

A: No. EPA does not currently recommend home test kits to detect lead in paint, dust, or soil. Studies show that these kits are not reliable enough to tell the difference between high and low levels of lead. At this time, the kits are not recommended for testing performed by either homeowners or certified lead-based paint professionals.

Q: May I Collect Paint, Dust, And Soil Samples Myself And Send Them To A Laboratory?

A: You may do this, although your samples may not be of the same quality as those collected by a certified lead-based paint professional. If you want to collect samples yourself, it is recommended that you send paint, dust, or soil samples to a laboratory recognized by EPA's NLLAP. A list of NLLAP laboratories is available from NLIC by calling **1-800-424-LEAD**. If the samples contain high levels of lead, you should have a certified lead-based paint professional do a risk assessment of your home.

Q: What About Testing For Lead In Water?

A: Lead pipes and lead solder were once used in plumbing and lead leaked into drinking water. Water testing is not routinely conducted by certified lead-based paint testing professionals, but you may ask for it as an optional service. If you

would like information about testing for lead in water, call the EPA Drinking Water Hotline at **1-800-426-4791**.

Q: What About Testing For Lead In Furniture, Dishware, And Mini-Blinds?

A: Lead may be present in the paint on furniture. If the furniture is old or the paint is damaged, you may want to have it tested. A certified Inspector or certified Risk Assessor may do this testing for you.

Lead may also be present in some glassware (for example, lead crystal) and in glazes found on ceramic ware. The lead may be absorbed into the drink and food stored in these items.

Contact NLIC at **1-800-424-LEAD** or the Food and Drug Administration (FDA) Food Information Line at **1-800-FDA-4010** for information on testing glassware and ceramics or access the FDA webpage at **http://vm.cfsan.fda.gov/~dms/lead.html#advice**.

The Consumer Product Safety Commission (CPSC) has issued a warning that some mini-blinds may contain lead. For further information, contact the CPSC hotline at **1-800-638-2772** or access the CPSC webpage at **http://www.cpsc.gov/cpscpub/prerel/prhtml96/96150.html**.

Contacts For Further Information:

Topic	Agency	Contact Information
Testing ceramic ware and related items	Food and Drug Administration (FDA) Food Information Line	1-800-FDA-4010 http://vm.cfsan.fda.gov/~dms/lead.html#advice
Information on lead in mini-blinds	Consumer Product Safety Commission (CPSC)	1-800-638-2772 http://www.cpsc.gov/cpscpub/prerel/prhtml96/96150.html
State lead programs and regulations, Current list of NLLAP laboratories, Lead brochures and fact sheets, General lead hazard information	National Lead Information Center (NLIC)	1-800-424-LEAD OR for the hearing impaired 1-800-877-8339 http://www.epa.gov/lead/nlic.htm
EPA and HUD related web sites	Environmental Protection Agency Housing and Urban Development	http://www.epa.gov/lead http://www.hud.gov/lea
Information on testing drinking water for lead	EPA Drinking Water Hotline	1-800-426-4791
Information on state and territory lead professional and contractor certification and licensing	EPA Regional Offices Region 1 CT, ME, MA, NH, RI, VT Region 2 NJ, NY, PR, VI Region 3 DE, DC, MD, PA, VA, WV Region 4 AL, FL, GA, KY, MS, NC, SC, TN Region 5 IL, IN, MI, MN, OH, WI Region 6 AR, LA, NM, OK, TX Region 7 IA, KS, MO, NE Region 8 CO, MT, ND, SD, UT, WY Region 9 AS, AZ, CA, GU, HI, NV, NP Region 10 AK, ID, OR, WA	 1-617-918-1524 1-732-321-6671 1-215-814-2084 1-404-562-8998 1-312-886-7836 1-214-665-7577 1-913-551-7518 1-303-312-6021 1-415-744-1069 1-206-553-1985

Additional Reading:

These brochures and fact sheets can be obtained by calling NLIC at **1-800-424-LEAD** or visiting **http://www.epa.gov/lead**.

Buying A Home? Here's What You Need To Know About Lead-Based Paint, EPA brochure, EPA publication number EPA 747-F-99-001 (January 2000).

Lead In Your Home: A Parent's Reference Guide, EPA brochure, EPA publication number EPA 747-B-99-003 (May 1999).

Protect Your Family From Lead In Your Home, EPA/CPSC/HUD brochure, EPA publication number EPA 747-K-99-001 (April 1999).

Reducing Lead Hazards When Remodeling Your Home, EPA brochure, EPA publication number EPA 747-K-97-001 (September 1997).

Runs Better Unleaded: How to Protect Your Children from Lead Poisoning, EPA brochure, EPA publication number EPA 747-F-99-005A (August 1999).

Selecting a Laboratory for Lead Analysis: The EPA National Lead Laboratory Accreditation Program, EPA brochure, EPA publication number EPA 747-F-99-002 (April 1999).

The Lead-Based Paint Pre-Renovation Education Rule, EPA handbook, EPA publication number EPA 747-B-99-004 (September 1999).

Disclosure of Lead-Based Paint Hazards in Housing, EPA/HUD fact sheet, EPA publication number EPA 747-F-96-002 (March 1996).

United States
Environmental Protection Agency
(7404)
Washington, DC 20460

Official Business
Penalty for Private Use $300

First Class Mail
Postage and Fees Paid
EPA
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United States
Environmental Protection
Agency

EPA 747-B-99-004
September 1999

Pollution Prevention and Toxics (7404)

EPA

The Lead-Based Paint Pre-Renovation Education Rule

a handbook for contractors, property managers, and maintenance personnel

LEAD Awareness Program

What Is The Lead-Based Paint Pre-Renovation Education Rule (Lead PRE)?

- The Lead PRE Rule is a Federal regulation affecting construction contractors, property managers, and others who perform **renovations** for **compensation** in residential housing that may contain lead-based paint.
- It applies to residential houses and apartments built before 1978.
- It requires distribution of the **lead pamphlet**, *Protect Your Family from Lead in Your Home*, to the owners and occupants before starting **renovation** work.
- **Renovation** includes most repair, remodeling, and maintenance activities that disturb painted surfaces.
- Lead PRE implements Section 406(b) of the Toxic Substances Control Act (TCSA).

About This Handbook

- This handbook summarizes Lead PRE and how to comply with it. To ensure compliance, you should also read the rule.
- Key terms are highlighted in **bold** and are explained on pages 8-10.

Who Should Read This Handbook?

- Anyone who owns or manages housing built before 1978.
- Contractors who perform **renovations** (including certain repairs and maintenance) which disturb paint in homes built before 1978.

How Can This Handbook Help Me?

- This handbook presents simple steps to follow to comply with Lead PRE. It also lists ways these steps can be easily incorporated into your work.
- Having demonstrated knowledge of lead requirements and safety practices can mean more business for you.
- Distributing the **lead pamphlet** to your customers and tenants can help them protect themselves and their children from the hazards of lead-based paint.
- This handbook describes the law. It also explains the proper steps to take to avoid potentially significant civil (monetary) and criminal fines and penalties.

What Does Lead PRE Require Me To Do?

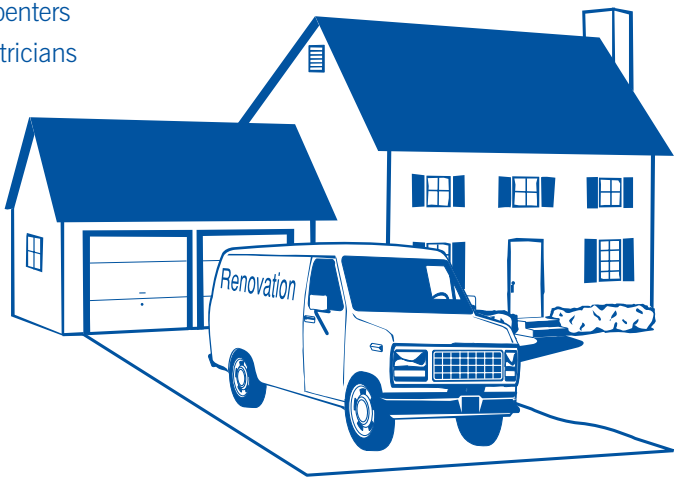
1. Distribute a **lead pamphlet** to the housing **owner** and occupants before **renovation** starts.
2. Obtain **confirmation of receipt of lead pamphlet** (see page 11) from owner and occupants or a **certificate of mailing** from the post office.
3. For work in **common areas** of **multi-family housing**, distribute **renovation notices** to tenants.
4. Retain records for 3 years.

(See page 4 for more details)

Who Must Follow These Requirements?

In general, anyone whose compensated work disturbs paint in housing built before 1978, including:

- Residential rental property owners/managers
- **General contractors**
- **Special trade contractors**, including
  - Painters
  - Plumbers
  - Carpenters
  - Electricians



What Types Of Activities Are Subject To Lead PRE?

In general, any activity that disturbs paint in pre-1978 housing, including:

- Remodeling and repair/maintenance
- Plumbing
- Carpentry
- Electrical work
- Painting
- Window replacement

What Housing Or Activities Are Excluded From Lead PRE?

- Housing built in 1978 or later
- **Housing for the elderly** or disabled persons (unless children will reside there)
- **Zero-bedroom dwellings** (studio apartment, dormitories, etc.)
- Housing or **components** declared lead-free by a **certified inspector** or **risk assessor**
- **Emergency renovations** and repairs
- **Minor repairs and maintenance** that disturb two square feet or less of paint per **component**

Lead PRE At-A-Glance

If you will be working for **compensation** in a pre-1978 home or apartment building, answer the questions below to determine if Lead PRE requires you to give the **lead pamphlet** to the **owner** and occupants.

Does this job involve **renovations** which disturb painted surfaces?

NO → **Lead PRE Does Not Apply**

YES

Are ANY of the following conditions present?

- The work is an **emergency renovation**
- The work is a **lead abatement** project
- The work consists of **minor repairs or maintenance** that disturbs 2 square feet or less of painted surfaces
- The housing or its **components** have been determined to be lead-based paint free by a **certified inspector** or **risk assessor**
- The housing is a **zero-bedroom dwelling** (studio apartments, dormitories, etc.)
- The housing is **housing for the elderly** or disabled AND children are not expected to reside there

YES → **Lead PRE Does Not Apply**

If Any Yes

NO

If All No

If no, then you need to provide the lead pamphlet (see page 4).

How Do I Meet The Lead PRE Requirements?

Renovation Location	Procedures to Follow
Renovations in Owner-Occupied Dwelling Units	Box 1 Deliver **lead pamphlet** to **owner** before **renovation** begins and obtain **confirmation of receipt**. **OR** Mail lead pamphlet to owner 7 days before renovation begins and document with **certificate of mailing**
Renovations in Tenant-Occupied Dwelling Units	Box 2 1. Provide **lead pamphlet** to **owner** using either procedure described in Box 1 above. 2. Provide lead pamphlet to tenant by either method below: (a) Deliver pamphlet to dwelling unit before **renovation** begins and document delivery with either a **confirmation of receipt** of lead pamphlet or a **self-certification of delivery**. **OR** (b) Mail lead pamphlet to tenant at least 7 days prior to renovation and document with a **certificate of mailing**
Renovations in Common Areas of Multi-Family Housing Units	Box 3 1. Provide **owner** with **lead pamphlet** using either procedure described in Box 1 above. 2. Notify tenants and make pamphlet available. 3. Maintain written documentation describing notification procedures. 4. Provide **supplemental renovation notice** if changes occur in location, timing, or scope of renovation occurring.

For all options keep records for 3 years after renovation is completed.
(Sample Forms on pages 11 and 12.)

Special Circumstances

Is painting considered renovation, even if no surface preparation activity occurs?

No. If the surface to be painted is not disturbed by sanding, scraping, or other activities that may cause dust, the work is not considered renovation and Lead PRE does *not* apply.

What if I renovate my own home?

Lead PRE applies only to **renovations** performed for **compensation**; therefore, if you work on your own home Lead PRE does not apply.

Is a renovation performed by a landlord or employees of a property management firm considered a compensated renovation under Lead PRE?

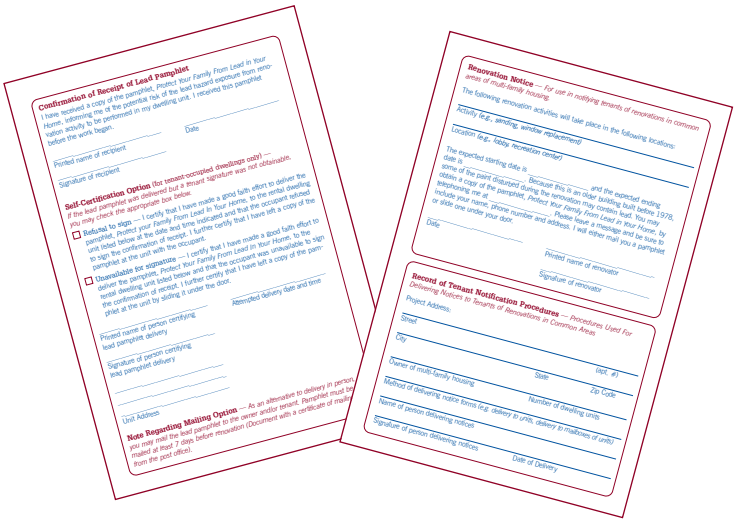
Yes. The receipt of rent payments or salaries derived from rent payments is considered **compensation** under Lead PRE. Therefore, **renovation** activities performed by landlords or employees of landlords are covered.

Do I have to give out the lead pamphlet 7 days prior to beginning renovation activities?

The 7-day advance delivery requirement applies only when you deliver the **lead pamphlet** via mail; otherwise, you may deliver the pamphlet *anytime* before the **renovation** begins. Note, however, that the renovation must begin within 60 days of the date that the pamphlet is delivered. So for example, if your renovation is to begin May 30, you may deliver the pamphlet in person anytime between April 1 and start of the project on May 30, or you may deliver the pamphlet via mail anytime between April 1 and May 23.

Tips For Easy Compliance

1. Copy and use the sample forms on pages 11 and 12 of this handbook.
2. Attach the forms to the back of your customer **renovation** or repair contracts. The completed forms can be filed along with your regular paperwork.
3. If a tenant is not home or refuses to sign the form, you may use the "self-certification" section of the form *(on page 11)* to prove delivery. This will reduce your paperwork.
4. Plan ahead to obtain enough copies of the **lead pamphlet**.



Where Can I Obtain More Information on Lead PRE?

Further information is available from the National Lead Information Clearinghouse (800-424-LEAD) or through the Internet (www.epa.gov/lead). Available resources include:

- Full text version of Lead PRE
- Interactive software which guides the users through the Lead PRE requirements on a step-by-step basis *(available in late June)*
- Interpretive guidance which provides more detailed information on Lead PRE requirements

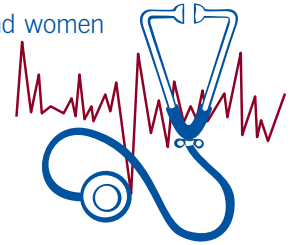
Why is Lead Paint Dangerous?

People can ingest lead by breathing or swallowing lead-based paint dust or by eating lead-contaminated soil or lead-based paint chips. Household animals are also at risk.

If not detected early, high levels of lead in a child can cause serious effects, including:

- Damage to the brain and nervous system
- Behavior and learning problems
- Slowed growth
- Hearing problems
- Headaches

Lead is also harmful to adults and can, among other effects, cause:



- Difficulties during pregnancy
- Other reproductive problems for men and women
- High blood pressure
- Digestive problems
- Nerve disorders
- Memory and concentration problems
- Muscle and joint pain

Lead can be dangerous to workers and their families if the worker brings equipment and clothing home after a job.

Other Resources

For additional information on how to protect yourself and your customers from lead paint hazards, call the National Lead Information Clearinghouse at 1-800-424-LEAD. Available documents include:

- *Lead-Based Paint: Operations and Maintenance Work Practices Manual for Homes and Buildings*
- *Lead Safety for Property Owners, Developers, and Managers*
- *Reducing Lead Hazards When Remodeling Your Home*
- *Lead in Your Home: A Parents' Reference Guide*
- *Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work*

Key Terms

Certificate of Mailing — written verification from the Postal Service that you mailed the lead pamphlet to an owner or a tenant. This is less expensive than certified mail, which is also acceptable for meeting Lead PRE requirements. *(**Note:** If using this delivery option, you must mail the pamphlet at least 7 days prior to the start of renovation.)*

Certified Inspector or Risk Assessor — an individual who has been trained and is certified by EPA or an authorized state or Indian Tribe to conduct lead-based paint inspections or risk assessments.

Common Area — a portion of a building that is generally accessible to all residents or users. Common areas include (but are not limited to) hallways, stairways, laundry rooms, recreational rooms, playgrounds, community centers, and fenced areas. The term applies to both interiors and exteriors of the building. *(**Note:** Lead PRE requirements related to common areas apply only to multi-family housing.)*

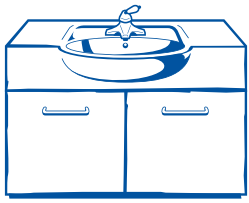
Compensation — payment or goods for services rendered. Payment can be in the form of money, goods, or services (bartering).

Component — specific design or structural element or fixture distinguished by its form, function, and location. A component can be located inside or outside the dwelling.

Examples

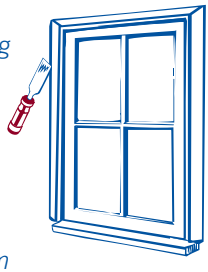
Interiors

Ceilings
Crown molding
Walls
Doors and trim
Floors
Fireplaces
Radiators
Shelves
Stair treads
Windows and trim
Built-in cabinets
Beams
Bathroom vanities
Counter tops
Air conditioners



Exterior

Painted roofing
Chimneys
Flashing
Gutters and downspouts
Ceilings
Soffits
Doors and trim
Fences
Floors
Joists
Handrails
Window sills and sashes
Air conditioners



Confirmation of Receipt of Lead Pamphlet — a form that is signed by the owner or tenant of the housing confirming that they received a copy of the lead pamphlet before the renovation began. *(See sample on page 11.)*

Key Terms (continued)

Emergency Renovation — unplanned renovation activities done in response to a sudden, unexpected event which, if not immediately attended to presents a safety or public health hazard, or threatens property with significant damage.

Examples 1: *Renovation to repair damage from a tree that fell on a house*
2: *Renovation to repair a water pipe break in an apartment complex*

General Contractor — one who contracts for the construction of an entire building or project, rather than for a portion of the work. The general contractor hires subcontractors (e.g. plumbing, electrical, etc.), coordinates all work, and is responsible for payment to subcontractors.

Housing for the Elderly — retirement communities or similar types of housing specifically reserved for households of one or more persons 62 years of age or older at the time the unit is first occupied.

Lead Abatement — work designed to permanently eliminate lead-based paint hazards. If you are hired to do lead-abatement work only, Lead PRE does not apply. Abatement does not include renovation, remodeling, landscaping, or other activities done to repair, restore, or redesign a given building — even if these activities incidentally reduce lead-based paint hazards. *(**Note:** Some states define this term differently than described above. Consult your state officials if you are not sure how "lead abatement" is defined in your state.)*

Lead Pamphlet — the pamphlet *Protecting Your Family From Lead in Your Home,* or an EPA-approved alternative pamphlet. *(See page 13 for information on obtaining copies.)*

Minor Repair and Maintenance — minor repair and maintenance activities, such as minor electrical work or plumbing, that disturb two square feet or less of painted surface per component.

Examples 1: *Drilling holes in the wall to run an electrical line*
2: *Replacing a piece of window trim*
3: *Replacing a light fixture*

Multi-family Housing — housing property consisting of more than four dwelling units.

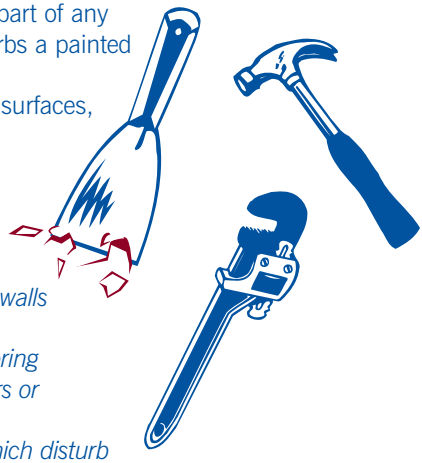
Owner — any person or entity that has legal title to housing, including individuals, partnerships, corporations, government agencies, Indian Tribes, and nonprofit organizations.

Record of Notification — written statement documenting the steps taken to notify occupants of renovation activities in common areas of multi-family housing. *(See page 12 for sample.)*

Key Terms (continued)

Renovation — modification of all or part of any existing structure in housing that disturbs a painted surface. Includes:

- Removal/modification of painted surfaces, components, or structures
- Surface preparation activities (sanding/scraping/other activities that may create paint dust)
- Window replacement



Examples 1: *Demolition of painted walls or ceilings*

2: *Large surface replastering*

3: *Major plumbing repairs or improvements*

4: *Any other activities which disturb painted surfaces*

Renovation Notice — notice to tenants of renovations in common areas of multifamily housing. *(See sample form on page 12.)* Notice must describe nature, location, and expected timing of renovation activity; and must explain how the lead pamphlet may be obtained free of charge.

Renovator — a person who performs for compensation a renovation, as defined above. *(**Note:** Because the term "renovation" is defined broadly by Lead PRE, many contractors who are not generally considered to "renovators," as that term is commonly used, are considered to be "renovators" under Lead PRE, and must follow Lead PRE requirements.)*

Self-Certification of Delivery — an alternative method of documenting delivery of the lead pamphlet to a tenant. This method may be used whenever the tenant is unavailable or unwilling to sign a confirmation of receipt of lead pamphlet. *(See sample form on page 11.)* (***Note:** This method is not a permissible substitute for delivery of the lead pamphlet to an owner.)*

Special Trade Contractors — individuals or companies performing work in specialized occupations such as painting, electrical work, plumbing, or carpentry.

Supplemental Renovation Notice — additional notification that is required when the scope, location, or timing of project changes.

Zero-Bedroom Dwelling — any residential dwelling where the living area is not separated from the sleeping area. This term includes efficiency and studio apartments, dormitory housing, and military barracks.

Sample Forms

The forms on the next two pages are sample forms you can use to make documentation of compliance easier.

Confirmation of Receipt of Lead Pamphlet

I have received a copy of the pamphlet, *Protect Your Family From Lead in Your Home*, informing me of the potential risk of the lead hazard exposure from renovation activity to be performed in my dwelling unit. I received this pamphlet before the work began.

_____ _____

Printed name of recipient Date

_____

Signature of recipient

Self-Certification Option (for tenant-occupied dwellings only) — *If the lead pamphlet was delivered but a tenant signature was not obtainable, you may check the appropriate box below.*

☐ Refusal to sign — I certify that I have made a good faith effort to deliver the pamphlet, *Protect your Family From Lead In Your Home,* to the rental dwelling unit listed below at the date and time indicated and that the occupant refused to sign the confirmation of receipt. I further certify that I have left a copy of the pamphlet at the unit with the occupant.

☐ Unavailable for signature — I certify that I have made a good faith effort to deliver the pamphlet, *Protect Your Family From Lead In Your Home,* to the rental dwelling unit listed below and that the occupant was unavailable to sign the confirmation of receipt. I further certify that I have left a copy of the pamphlet at the unit by sliding it under the door.

_____ _____

Printed name of person certifying lead pamphlet delivery Attempted delivery date and time

_____

Signature of person certifying lead pamphlet delivery

_____

_____

_____

Unit Address

Note Regarding Mailing Option — *As an alternative to delivery in person, you may mail the lead pamphlet to the owner and/or tenant. Pamphlet must be mailed at least 7 days before renovation (Document with a certificate of mailing from the post office).*

Sample Forms (continued)

Renovation Notice — *For use in notifying tenants of renovations in common areas of multi-family housing.*

The following renovation activities will take place in the following locations:

_____

Activity *(e.g., sanding, window replacement)*

_____

Location *(e.g., lobby, recreation center)*

The expected starting date is _____ and the expected ending date is _____. Because this is an older building built before 1978, some of the paint disturbed during the renovation may contain lead. You may obtain a copy of the pamphlet, *Protect Your Family From Lead in Your Home*, by telephoning me at _____. Please leave a message and be sure to include your name, phone number and address. I will either mail you a pamphlet or slide one under your door.

_____ _____

Date Printed name of renovator

_____

Signature of renovator

Record of Tenant Notification Procedures — *Procedures Used For Delivering Notices to Tenants of Renovations in Common Areas*

Project Address:

_____

Street (apt. #)

_____

City State Zip Code

_____

Owner of multi-family housing Number of dwelling units

_____

Method of delivering notice forms *(e.g. delivery to units, delivery to mailboxes of units)*

_____

Name of person delivering notices

_____

Signature of person delivering notices Date of Delivery

Where Can I Get Copies of the **Lead Pamphlet**?

For single copies of *Protect Your Family From Lead in Your Home* (in Spanish or English), call the National Lead Information Clearinghouse (NLIC) at 1-800-424-LEAD. For any orders, be sure to use the stock reference number **EPA747-K-99-001**.

There are four ways to get multiple copies:

1. **Call the Government Printing Office order desk at (202) 512-1800.**
2. **Send fax requests to (202) 512-2233.**
3. Request copies in writing from:

   Superintendent of Documents
   P.O. Box 371954
   Pittsburgh, PA 15250-7954
4. **Obtain via the Internet at www.epa.gov/lead**

Single copies are available at no charge. Bulk copies available in packs of 50.

The pamphlet may be photocopied for distribution as long as the text and graphics are readable. Camera-ready copies are available from NLIC or via the Internet.

The Lead Pre-Renovation Education Rule (Lead PRE) At-A-Glance

If you will be working for **compensation** in a pre-1978 home or apartment building, answer the questions below to determine if Lead PRE requires you to give the **lead pamphlet** to the **owner** and occupants.

Does this job involve **renovations** which disturb painted surfaces?

NO → **Lead PRE Does Not Apply**

YES

Are ANY of the following conditions present?

- The work is an **emergency renovation**
- The work is a **lead abatement** project
- The work consists of **minor repairs or maintenance** that disturbs 2 square feet or less of painted surfaces
- The housing or its **components** have been determined to be lead-based paint free by a **certified inspector** or **risk assessor**
- The housing is a **zero-bedroom dwelling** (studio apartments, dormitories, etc.)
- The housing is **housing for the elderly** or disabled AND children are not expected to reside there

YES → **Lead PRE Does Not Apply**

If Any Yes

NO

If All No

If no, then you need to read this book! Rental property owners and managers, renovators, and maintenance personnel are affected by Lead PRE.

Bold Type = Key Terms (see pages 8–10 inside)

TAB 3

Certifications
Risk Assessor
PBS Engineering + Environmental
Analytical Laboratory

STATE OF WASHINGTON

Department of Commerce

Lead-Based Paint Program

Janet J. Murphy

Has fulfilled the certification requirements of Washington Administrative code (WAC) 365-230 and has been certified to conduct lead-based paint activities pursuant to WAC 365-230-200 as a:

Risk Assessor

Certification #	Issuance Date	Expiration Date
0258	3/8/2010	3/8/2013

STATE OF WASHINGTON

Department of Community, Trade and Economic Development
Lead-Based Paint Program

PBS Environmental Building Consultants Inc.

Has fulfilled the certification requirements of Washington Administrative code (WAC) 365-230 and has been certified to conduct lead-based paint activities pursuant to WAC 365-230-200.

Certification #	Issuance Date	Expiration Date
0178	8/2/2007	9/3/2010

AIHA

Protecting Worker Health

The American Industrial Hygiene Association

acknowledges that

NVL Laboratories, Inc.

4708 Aurora Avenue N., Seattle, WA 98103

Laboratory ID: 101861

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

ACCREDITATION PROGRAMS

✓	**INDUSTRIAL HYGIENE**	Accreditation Expires: 02/01/2011
✓	**ENVIRONMENTAL LEAD**	Accreditation Expires: 02/01/2011
✓	**ENVIRONMENTAL MICROBIOLOGY**	Accreditation Expires: 02/01/2011
☐	**FOOD**	Accreditation Expires:

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

Pamela A. Kostle

Pamela A. Kostle, CIH
Chairperson, Analytical Accreditation Board

Lindsay E. Booher

Lindsay E. Booher, CIH, CSP
President, AIHA

Date Issued: 02/01/2009

CELEBRATING 30 Thirty Years of AIHA Accrediting Labs
SOUND DATA SMART DECISIONS 1974 - 2004

LABORATORY QUALITY ASSURANCE PROGRAMS

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

AIHA Laboratory Quality Assurance Programs
SCOPE OF ACCREDITATION

NVL Laboratories, Inc.
4708 Aurora Avenue N., Seattle, WA 98103

Laboratory ID: **101861**
Issue Date: 02/01/2009

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

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

Environmental Lead Laboratory Accreditation Program (ELLAP)

Initial Accreditation Date: 02/07/1997

Field of Testing (FoT)	Method	Method Description *(for internal methods only)*
Airborne Dust	NIOSH 7082	
Paint	EPA SW-846 3051	
	EPA SW-846 7000B	
Settled Dust By Wipe	EPA SW-846 3051	
	EPA SW-846 7000B	
Soil	EPA SW-846 3051	
	EPA SW-846 7000B	

The laboratory participates in the following AIHA testing programs:

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