King County Housing Authority

CAPITAL CONSTRUCTION DEPARTMENT
700 ANDOVER PARK WEST
TUKWILA, WA 98188

CONSTRUCTION ADDENDUM: 1

12/31/2025

PROJECT NAME: Eastridge House HVAC Improvements

PROJECT MANAGER: **Carl Frankel**

PHONE NUMBER: 425-891-3317 **EMAIL ADDRESS:** Carlf@kcha.org

This Addendum is used to Identify Items in the Original Documents with Action as Follows:

☒ **CLARIFY** ☐ **CHANGE** ☐ **DELETE**

☒ **ADD** ☐ **SUBSTITUTE**

Page(s) Total for this Addenda including this page **69**

1. *ADD: See Exhibit H for Hazardous Materials report. Contractor will be responsible for all necessary abatement of hazardous materials. Contractor to follow all abatement protocols, codes and procedures when handling hazardous materials.*

2. *ADD: Prior to contract award, there will be a vetting meeting with the apparent low bidder. Contractor will be required to submit a detailed Schedule of Values (SOV) for review and approval at the vetting meeting. See Exhibit S for sample SOV.*

3. *CLARIFY: Contractor will be responsible to coordinate with Owner's Commissioning Agent. Contractor will supply commissioning agent all information necessary for complete commissioning report.*

END OF CONSTRUCTION ADDENDUM: **1**

EXHIBIT H

RGA ENVIRONMENTAL

February 28, 2013

Alton Leung
King County Housing Authority
600 Andover Park West
Tukwila, Washington 98188

RE: Limited Asbestos and Lead Containing Materials Survey Report – Piping Renovation Pathway
Areas Surveyed Include all Common Areas and Units 111, 113, 211, 213, 311 and 313

Eastridge House
120 West Sunset Way
Issaquah, Washington 98027
(Project # KCHA32114)

Dear Mr. Leung,

Attached is the RGA Environmental limited asbestos and lead containing materials survey report for the piping renovation pathway throughout the Eastridge House located at 120 West Sunset Way in Issaquah, Washington. The areas surveyed include all common areas and units 111, 113, 211, 213, 311 and 313.

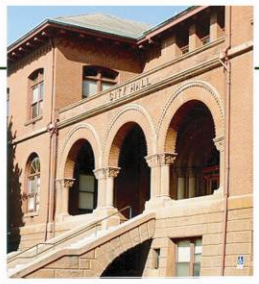
We appreciate the opportunity to have been of service to you. If you have any questions regarding this report feel free to contact me at (206) 281-8858.

Sincerely,

Angela Harkins
Project Manager
RGA Environmental, Inc.

RGA ENVIRONMENTAL

Improving Lives, Reducing Risks



Limited Asbestos and Lead Containing Materials Survey Report – Piping Renovation Pathway

Eastridge House
120 West Sunset Way
Issaquah, Washington 98027

Project No. KCHA32114

Prepared for:

Alton Leung
King County Housing Authority
600 Andover Park West
Tukwila, Washington 98188

Prepared by:

RGA Environmental, Inc.
1730 Minor Avenue, Suite 900
Seattle, WA 98101
206-281-8858

February 28, 2013

Report prepared and reviewed by: _____ Angela Harkins
Project Manager

Table of Contents

Attachments:

- Laboratory Results
- Field Notes
- Sample Location Drawings
- RGA Certifications

1.0 EXECUTIVE SUMMARY

On February 15, 2013, Mr. John McCaslin and Mr. Russell Browne of RGA Environmental, Inc. (RGA) conducted a limited asbestos and lead containing materials survey for suspect asbestos-containing building materials and lead containing coatings throughout the plumbing renovation pathway, including all common areas and units 111, 113, 211, 213, 311 and 313 of the Eastridge House located at 120 West Sunset Way in Issaquah, Washington as outlined by the Client. This survey was conducted at the request of Mr. Alton Leung of the King County Housing Authority in preparation for the planned renovation at this location.

1.1 Asbestos

See Table 1 below for a summary of the asbestos containing materials found in the survey.

Table 1 - Summary of Asbestos-Containing Materials found Throughout the Plumbing Renovation Pathway, including all common areas and units 111, 113, 211, 213, 311 and 313 in the Eastridge House located at 120 West Sunset Way in Issaquah, Washington

Material Description (Homogeneous Material)	Location	Asbestos Content	Approximate Quantity*
Texturing on gypsum wallboard walls and ceilings	Throughout the building	2% Chrysotile	7,200 SF
Wallboard and joint compound	Throughout the building	Layers 2 and 4: Joint compound – 2% Chrysotile Wall unit as a whole - <1% Chrysotile	7,200 SF
Brown mastic associated with 4" tan, beige and olive green cove base	Throughout the building	<1% Tremolite	500 LF
Black sink undercoating	Throughout the building in both common areas and units	2% Chrysotile	Up to 40 EA
Gray sink undercoating	1st floor community area	5% Chrysotile	1 EA
Beige/Tan speckled vinyl sheet flooring and mastic	1st floor common restrooms, common kitchen and 3rd floor laundry rooms	Layer 2: Black mastic – 3% Chrysotile	530 SF
Beige/Gray tile pattern vinyl sheet flooring/mastic over green mosaic pattern vinyl sheet flooring and mastic	Throughout 1st, 2nd and 3rd floor units bedroom closets, bathrooms and kitchens	30% Chrysotile	4,500 SF
12"X12" Beige/Tan streaks vinyl floor tile and mastic	1st floor chair storage, 2nd floor janitor's closet and 3rd floor janitor's closet	Vinyl tile – 2% Chrysotile Black mastic – 2% Chrysotile	250 SF
Mudded pipe fittings	Throughout building	3% Amosite	160 EA

*SF – Square Feet, LF – Linear Feet, EA - Each

Table 2 - Summary of Assumed Asbestos-Containing Materials found Throughout the Plumbing Renovation Pathway, including all common areas and units 111, 113, 211, 213, 311 and 313 in the Eastridge House located at 120 West Sunset Way in Issaquah, Washington

Material Description (Homogeneous Material)	Location	Asbestos Content	Approximate Quantity*
Piping gaskets	Piping	Assumed	Unknown
Hidden piping insulation not sampled	Throughout	Assumed	Unknown
4" Beige ceramic wall tile, grout and mortar or mastic	Common men's restroom	Assumed	130 SF
Mastic behind white fiberglass reinforced poly on walls	Garbage room	Assumed	140 SF
Ceramic wall tile, grout and mastic or mortar	Unit 111 bathroom – assumed in all bathrooms	Assumed	30 SF each unit
Mastic behind shower surround	Unit 113 bathroom – assumed in all bathrooms	Assumed	30 SF each unit

*SF – Square Feet

The full scope of sampling is presented in Section 5.

1.2 Lead

Based on XRF paint testing, 3 homogeneous painted components tested were found to have detectable quantities of lead; 2 of them were classifiable as lead-based paint[1]. A complete table of paint coatings tested can be found in section 5.2 below.

2.0 INTRODUCTION

On February 15, 2013, Mr. John McCaslin and Mr. Russell Browne of RGA Environmental, Inc. (RGA) conducted a limited asbestos and lead containing materials survey for suspect asbestos-containing building materials and lead containing coatings throughout the plumbing renovation pathway including all common areas and units 111, 113, 211, 213, 311 and 313 of the Eastridge House located at 120 West Sunset Way in Issaquah, Washington as outlined by the Client. Both Mr. McCaslin and Mr. Browne are Asbestos Hazard Emergency Response Act (AHERA) certified building inspectors (Certificate # 12-0923, Expiration Date 05/10/2013 and Certificate #12-1560, Expiration Date 08/10/13). Mr. McCaslin is a Washington State Department of Commerce certified lead risk assessor/inspector (Certificate # 6039, Expiration Date 06/09/15). A copy of their certificates can be found in the enclosed attachments.

This survey was conducted to document the presence of and locations of both asbestos containing materials and lead containing paints or coatings within the plumbing renovation pathway including all common areas and units 111, 113, 211, 213, 311 and 313 of the Eastridge House located at 120 West Sunset Way in Issaquah, Washington. All applicable and accessible building areas were visited and samples were collected of building materials suspected to contain asbestos (wallboard, flooring materials, and other miscellaneous materials). Paint coatings were non-destructively tested for lead content using an XRF analyzer. See Table 3 for a list of materials sampled for asbestos and table 4 for a list of paint coatings tested.

Efforts were made during the inspection to find all asbestos containing materials in the plumbing renovation pathway, including all common areas and units 111, 113, 211, 213, 311 and 313 of the

[1] As defined by EPA/HUD, See Section 3.2 below

Eastridge House. Limited penetrations were made through walls, floors, and ceilings to identify concealed materials. If additional suspect materials are identified in wall cavities or under the building that were not included in this survey, the renovation work should halt and an accredited AHERA inspector should sample untested suspect materials for the presence of asbestos. Any materials not sampled and properly identified must be sampled by an AHERA inspector prior to disturbance.

The Eastridge House located at 120 West Sunset Way in Issaquah, Washington is a 3-story multi-family residential structure with 40 units and approximately 6,000 square feet of interior space that consists of a stick-built structure with wood siding. Interior finishes include the following: walls are gypsum wallboard and ceilings are a mixture of gypsum wallboard and suspended ceiling tiles; flooring materials include carpet, vinyl sheeting and vinyl tiles.

All contractors working on the building site must review this inspection report prior to participating in the renovation, per WAC 296-62-07721 “Communication of Hazards to Employees.”

3.0 REGULATORY COMPLIANCE

3.1 Asbestos

The intent of the asbestos survey is to comply with governing asbestos regulations required by the State of Washington and Puget Sound Clean Air Agency (PSCAA). The State of Washington requires a written "good faith inspection" for identification of asbestos-containing materials prior to any remodeling, maintenance, or demolition work. During demolition and construction work, it is the responsibility of the owner and the contractors to make this survey document available to all concerned parties who may be handling the building materials.

Additionally, PSCAA requires that a copy of the written asbestos survey be made available on-site for inspection by a PSCAA Control Officer during construction and demolition work. The survey is required to be performed in accordance with 40 CFR 763.86. These federal standards require inspections to be conducted by an EPA/AHERA accredited building inspector with analysis to be provided by an asbestos laboratory accredited by the National Bureau of Standards. The requirements are described in Article 1 and Article 4 of PSCAA’s Asbestos Control Standards. All survey work was conducted in compliance with the above mentioned standards.

3.2 Lead

The Washington State Department of Labor and Industries defines a lead-based paint to be a coating with any detectable lead. The United States Environmental Protection Agency (EPA) and US Department of Housing and Urban Development (HUD) have defined a lead-based paint as any coating containing greater than 0.5% lead or 1.0 mg/cm^2 of lead.

In Washington, workers disturbing lead-containing coatings are covered under the lead standard (WAC 296-155-176) until shown they are not being exposed above the action limit of 30 µg/m^3 and the permissible exposure limit of 50 µg/m^3. The requirements of this standard include, but are not limited to, air monitoring, respiratory protection, medical surveillance, lead work plan, warning signs, and wash stations.

When lead is discovered in a paint coating, worker protection and environmental protection requirements apply to all construction activities that may disturb these coatings. The issues surrounding the demolition of materials that have lead-containing coatings include worker exposure, public health, and waste characterization.

3.2.1 Worker Exposure to Lead

WAC 296-155-176, Lead, applies to all construction work where an employee may be occupationally exposed to lead. Construction work includes activities such as demolition or salvage, removal or encapsulation, and renovation of materials that contain lead. When a worker may be exposed to lead, the employer must take the following actions according to WAC 296-155-176:

1. Perform an exposure assessment for each operation where the employee may be exposed to lead at or above 30 micrograms per cubic meter ($\mu g/m^3$). The exposure assessment consists of personal air monitoring to determine representative lead exposure levels for the work being performed.

2. During the exposure assessment for demolition operations, the employer must provide and require to be worn half-mask air-purifying respirators equipped with high efficiency particulate air (HEPA) filters and disposable clothing.

3. A designated change area which allows for separate storage areas for work and street clothing to prevent cross contamination.

4. Hand washing facilities to allow employees to wash their hands and faces.

5. Biological monitoring in the form of blood sampling and analysis for lead and zinc protoporphyrin levels.

6. Training to include hazard communication, safety, and the limitations, proper use, and maintenance of respirators.

In addition to the protective equipment and hygiene requirements, the employer must attempt to reduce the levels of airborne lead through the use of engineering controls such as ventilation and wet methods.

3.2.2 Public Health

The owner should ensure that the general public will not have access to the site during renovation activities. In addition, controlling visible emissions (dust) will decrease the airborne concentration of lead, thus decreasing the airborne exposure levels of the general public and potential contamination of surrounding areas from dust migration.

<u>Lead-Based Paint Renovation</u>

The requirements of WAC 365-230-270, Lead-Based Paint Renovation, apply to "Target Housing or child-occupied facilities" that have paint or other surface coatings that contain lead equal to or in excess of 1.0 mg/cm^2 or 0.5% by weight as determined by an inspector or risk assessor or by a certified renovator using an EPA approved test kit. Requirements of WAC 365-230-270 for performing work in target housing include the following:

1. Distribution of information on lead paint hazards to housing occupants
2. Certification of the (Contractor) as a Lead Renovator
3. Certification of the firm as a lead renovation firm
4. Documented training of project workers, and working supervisor, in Lead Safe Work Practices
5. Utilize Lead Safe Work Practices in execution of the project
6. Documentation of cleaning verification or clearance testing, as required, at the completion of the project

7. Recordkeeping packet to be kept for 3 years by contractor, with a copy supplied to client at close of project.

4.0 SAMPLING PLAN AND LABORATORY ANALYSIS

4.1 Asbestos

4.1.1 Objectives

The objective of the survey was to determine the quantity and location of building materials (wallboard, flooring materials, etc.) that contain asbestos.

4.1.2 Asbestos Sampling Protocol

This survey was conducted using a protocol adapted from the Asbestos Hazard Emergency Response Act (AHERA). The protocol is as follows:

1. Group materials into homogeneous sampling areas based on visual observations and information provided about building renovations.

2. Quantify each homogeneous sampling area and collect samples from each area using the "3-5-7" criteria for surfacing material to determine the number of samples needed. Quantify and collect a minimum of three samples of each thermal system insulation. The number of samples collected of miscellaneous materials was determined by the inspector.

3. Samples were collected from areas of easy access and minimum disturbance to building occupants.

4. Samples of each material were taken to the substrate, ensuring that all components of the material were included.

5. Sampling was performed by an AHERA accredited building inspector.

4.1.3 Asbestos Sampling Procedure

1. Label sample container with unique identification number. Record sample number, sample location, type of material, and approximate material quantity on data form.

2. Extract sample using a clean knife or other tool to collect approximately one tablespoon of the material. Penetrate all layers of material.

3. Place sample in a container and tightly seal it.

4. Clean tools with wet wipes. Clean any material debris from sampling area.

4.1.3 Asbestos Laboratory Analysis

The bulk samples were analyzed by RGA Laboratory using polarized light microscopy (PLM) with dispersion staining in accordance with US EPA method 600/R-93/116 as specified in 40 CFR Chapter I (7-1-93 edition) Part 763, Subpart F, Appendix A, pages 499-504. Polarizing light microscopy quantifies asbestos concentrations at between 100% and 1% detection levels. Levels below 1% can only be stated as "trace" or “less than 1% (< 1%)”. RGA Laboratory is a member of the National Voluntary Laboratory

Accreditation Program (NVLAP), NVLAP Code #200613-0. Samples were not analyzed by point count to determine asbestos concentrations.

For samples containing more than one separable layer of materials, the laboratory report will include findings for each layer (labeled L-1 for layer one and L-2 for layer two, etc.) and a total percentage for the entire sample, if applicable. The asbestos concentration in the sample is determined by visual estimation.

4.2 XRF (Lead Painted Coatings) Testing

4.2.1 Objectives

The objective of the testing was to determine locations of coatings that are lead containing and the percentage of lead in these coatings.

4.2.2 XRF Testing Procedure

Each painted component type was tested for the presence of LBP and one bulk paint chip sample was collected for quality control purposes. All building components to be impacted during renovations were tested. The results were recorded on data sheets (see attached documents).

After completing the testing of the building, components were identified as LBP or non-LBP based on presence of detectable lead. Painted components, which resulted in positive results, were classified as positive. Painted components testing as negative were classified as negative. No destructive QC samples (paint samples) were taken, as typically done when inconclusive results are found, as there were no inconclusive results.

4.2.3 X-Ray Fluorescence (XRF)

An XRF Lead Analyzer is a portable, in-situ measuring instrument that uses x-ray fluorescence to test for lead in paint. The XRF sends energy in the form of a gamma ray photon into the paint or coating on a wall. Some of the gamma rays strike the inner shells of atoms, resulting in the electron being dislodged from their orbit. The atom then becomes unstable. To regain stability, the atom fills the gap left by the lost electron with an electron from one of its outer shells. This causes the release of an x-ray photon (fluorescence). This photon has an energy level "characteristic" of the type of element (like lead) that it came from. The XRF then measures the energy level and quantity of returning x-ray photons to determine the quantity of lead (or other element of interest) present at the sample point.

The instrument used for this inspection was an Innov-X Inspector XRF Lead Analyzer, serial # M11820. Samples were collected in "Lead Paint Analysis" mode requiring no substrate correction sampling (paint chip sampling).

Calibration checks of the instrument were performed using NIST Standard Reference Material (SRM) 2573 (1.040 mg/cm^2 ± 0.064) and 2570 (0.0 mg/cm^2) before each sampling activity, every 4 hours during sampling, and after each sampling activity. Calibration checks were satisfactory, indicating the instrument was functioning properly and in calibration.

5.0 SURVEY RESULTS

5.1 Asbestos

Table 3 (below) contains an inventory of the building materials sampled for asbestos throughout the plumbing renovation pathway, including all common areas and units 111, 113, 211, 213, 311 and 313in the Eastridge House located at 120 West Sunset Way in Issaquah, Washington. The location column

identifies all locations in the building where the homogenous materials were identified. Actual sample locations are identified in the attached site maps.

Table 3 - Building Materials Sampled for Asbestos by RGA throughout the Plumbing Renovation Pathway,including all common areas and units 111, 113, 211, 213, 311 and 313 in the Eastridge House located at 120 West Sunset Way in Issaquah, Washington.

Sample ID	Material Description	Location	Asbestos Content	Friability
EH-01A, 01B, 01C	**Texturing on gypsum wallboard walls and ceilings**	**Throughout building hallways and common areas**	**2% Chrysotile**	**Friable**
EH-02A, 02B, 02C	**Gypsum wallboard walls and ceilings with joint compound**	**Throughout building hallways and common areas**	**Layer 2 and 4: Joint compound – 2% Chrysotile Wall unit as a whole – <1% Chrysotile**	**Friable**
EH-03A	Light green wallpaper and adhesive on gypsum wallboard	1st floor hallway	No Asbestos Detected	Friable
EH-04A, 04C	Beige mastic associated with 4" tan cove base	Throughout building	No Asbestos Detected	Non-Friable
EH-05A, 05B	Mastic under blue/tan carpet	Throughout building	No Asbestos Detected	Non-Friable
EH-06A, 06B	2'X4' Fissure suspended ceiling tiles	Throughout hallways in building	No Asbestos Detected	Friable
EH-07A, 07B	**Brown mastic associated with 4" tan cove base**	**1st floor men's and women's restroom, common kitchen and throughout 2nd floor common areas**	**Layer 1: Brown adhesive -– <1% Tremolite**	**Non-Friable**
EH-08B, 08C	**Beige/tan speckled vinyl sheet flooring and mastic**	**1st floor men's and women's restroom, common kitchen, 2nd and 3rd floor laundry rooms**	**Layer 2: Black mastic – 3% Chrysotile**	**Non-Friable**
EH-09A	White caulking	1st floor men's restroom	No Asbestos Detected	Non-Friable
EH-10A, 10C	Fiberglass piping insulation with cloth wrap and bridging	Throughout building	No Asbestos Detected	Friable
EH-11A, 11B	**Mudded piping elbows**	**Throughout building**	**3% Amosite**	**Friable**
EH-12A	Black fiberglass batting insulation	Throughout building – interior walls	No Asbestos Detected	Friable
EH-13A	Black gaskets at sink drain	1st floor men's restroom	No Asbestos Detected	Non-Friable
EH-14A	**Black sink undercoating with gasket and putty**	**1st floor Common Kitchen**	**2% Chrysotile**	**Non-Friable**
EH-15A	**Gray sink undercoating with gasket and putty**	**1st floor Community Area**	**5% Chrysotile**	**Non-Friable**
EH-16A, 16B	**12"X12" Beige/tan streaks vinyl floor tile and mastic**	**1st floor chair storage, 2nd floor janitor's closet and 3rd floor janitor's closet**	**Tile – 2% Chrysotile Black mastic – 2% Chrysotile**	**Non-Friable**

Sample ID	Material Description	Location	Asbestos Content	Friability
EH-17A	**Gypsum wallboard and joint compound**	**Throughout 1st floor**	**Layer 2 and 4: Joint compound – 2% Chrysotile Wall unit as a whole – <1% Chrysotile Layer 7: Brown adhesive – <1% Tremolite**	**Friable Non-Friable**
EH-17C	**Gypsum wallboard and joint compound**	**Throughout 1st floor**	**Layer 2 and 4: Joint compound – 2% Chrysotile Wall unit as a whole – <1% Chrysotile**	**Friable**
EH-18A	Mastic associated with 4" brown cove base	1st floor garbage room	No Asbestos Detected	Non-Friable
EH-19A, 19B	**Texturing on gypsum wallboard walls and ceilings**	**Throughout 1st floor**	**2% Chrysotile**	**Friable**
EH-20A	Gasket at sink drain	1st and 2nd floor janitor's closet	No Asbestos Detected	Non-Friable
EH-21A, 21B	**Mastic associated with 4" tan cove base**	**1st floor – Units 111 and 113 (assumed in all units on floor)**	**Layer 2: Brown adhesive – <1% Tremolite Layer 3: Joint compound – 2% Chrysotile**	**Non-Friable Friable**
EH-22A, 22B	Beige/gray tile pattern vinyl sheet flooring and mastic	1st floor – Units 111 and 113 bathroom and kitchen (assumed in all units on floor)	No Asbestos Detected	Friable
EH-23A, 23B	**Gypsum wallboard and joint compound**	**1st floor – Units 111 and 113 (assumed in all units on floor)**	**Layer 2 and 4: Joint compound – 2% Chrysotile Wall unit as a whole – <1% Chrysotile**	**Friable**
EH-24A, 24B	**Texturing on gypsum wallboard walls and ceilings**	**1st floor – Unit 111 bedroom closet and 113 bathroom (assumed in all units on floor)**	**2% Chrysotile**	**Friable**
EH-25A, 25B	Gray sink undercoating with gasket and putty	1st floor – Units 111 and 113 kitchen (assumed in all units on floor)	No Asbestos Detected	Non-Friable
EH-26A	Pink wallpaper and adhesive on gypsum wallboard	2nd floor hallway	No Asbestos Detected	Friable
EH-27A, 27B	**Gypsum wallboard and joint compound**	**2nd and 3rd floor laundry rooms**	**Layer 2 and 4: Joint compound – 2% Chrysotile Wall unit as a whole – <1% Chrysotile**	**Friable**

Sample ID	Material Description	Location	Asbestos Content	Friability
EH-28A, 28B	**Texturing on gypsum wallboard walls and ceilings**	**2nd and 3rd floor laundry rooms**	**Layers 2 and 4 – 2% Chrysotile**	**Friable**
EH-29A	**Mastic associated with 4" beige cove base**	**2nd floor – Unit 211 bathroom (assumed in all units on floor)**	**Layer 1: Brown adhesive – <1% Tremolite Layer 3: Joint compound – 2% Chrysotile**	**Non-Friable Friable**
EH-30A	**Beige/gray tile pattern vinyl sheet flooring and mastic over pebble pattern vinyl sheet flooring and mastic**	**2nd floor – Unit 211 bathroom (assumed in all units on floor)**	**30% Chrysotile**	**Friable**
EH-31A, 31B	**Gypsum wallboard and joint compound**	**2nd floor – Units 211 and 213 bedroom closet (assumed in all units on floor)**	**Layer 2 and 4: Joint compound – 2% Chrysotile Wall unit as a whole – <1% Chrysotile**	**Friable**
EH-32A, 32B	**Texturing on gypsum wallboard walls and ceilings**	**2nd floor – Units 211 and 213 bedroom closet (assumed in all units on floor)**	**2% Chrysotile**	**Friable**
EH-33A	Gray sink undercoating with gasket and putty	2nd floor – Unit 211 kitchen (assumed in all units on floor)	No Asbestos Detected	Non-Friable
EH-34A, 34B	**Mastic associated with 4" olive green cove base**	**2nd and 3rd floors – Units 213 and 311 bathroom (assumed in all units on floors)**	**Layer 1: Brown adhesive – <1% Tremolite**	**Non-Friable**
EH-35A, 35B	**Green mosaic pattern vinyl sheet flooring and mastic**	**2nd and 3rd floors – Units 213 and 311 bathroom (assumed in all units on floors)**	**30% Chrysotile**	**Friable**
EH-36A	**Black sink undercoating with gasket and putty**	**2nd floor – Unit 213 kitchen (assumed in all units on floor)**	**2% Chrysotile**	**Non-Friable**
EH-37A, 37B	**Gypsum wallboard and joint compound**	**3rd floor – Units 311 and 313 bedroom closet (assumed in all units on floors)**	**Layer 2 and 4: Joint compound – 2% Chrysotile Wall unit as a whole – <1% Chrysotile**	**Friable**
EH-38A, 38B	**Texturing on gypsum wallboard walls and ceilings**	**3rd floor – Units 311 and 313 bedroom closet (assumed in all units on floors)**	**2% Chrysotile**	**Friable**
EH-39A	**Mastic associated with 4" tan cove base**	**3rd floor – Unit 313 bathroom (assumed in all units on floors)**	**Layer 2: Brown adhesive – <1% Tremolite**	**Non-Friable**

Sample ID	Material Description	Location	Asbestos Content	Friability
EH-40A	**Beige/gray vinyl sheet flooring and mastic over pebble pattern vinyl sheet flooring and mastic**	**3rd floor – Unit 313 bathroom (assumed in all units on floors)**	**30% Chrysotile**	**Friable**
EH-41A, 41B	**Black sink undercoating with gasket and putty**	**3rd floor – Unit 313 kitchen (assumed in all units on floors)**	**2% Chrysotile**	**Non-Friable**
EH-42A	Blue wallpaper and adhesive on gypsum wallboard	Throughout 3rd floor	No Asbestos Detected	Friable

5.2 XRF Testing Results

Table 4 contains the XRF testing results found throughout the plumbing renovation pathway, including all common areas and units 111, 113, 211, 213, 311 and 313 in the Eastridge House located at 120 West Sunset Way in Issaquah, Washington. Bolded readings indicate lead-based paint or coating and ***Italicized bold*** readings indicate lead-containing paint or coating.

Table 4 – XRF Results

Date	Reading	Lead Based	Lead Containing	*Pb	Pb +/-	Unit / Bldg.	Room Type	Side	Component	Substrate	Color	Condition
15-Feb-13	1	NA	NA					Standard				
15-Feb-13	2	NA	NA	0	0	Eastside House	Calibration	Calibration		Calibration	White	Calibration
15-Feb-13	3	NA	NA	1.01	0.03	Eastside House	Calibration	Calibration		Calibration	Red	Calibration
15-Feb-13	4	NA	NA	1.15	0.08	Eastside House	Calibration	Calibration		Calibration	Red	Calibration
15-Feb-13	5	NA	NA	1.01	0.03	Eastside House	Calibration	Calibration		Calibration	Red	Calibration
15-Feb-13	6	Negative	Negative	0	0	Eastside	Floor 1 - Hallway	East	Wall	Drywall	Off White	Intact
15-Feb-13	7	Negative	Negative	0	0	Eastside House	Floor 1 - Hallway	East	Wall	Drywall	Off White	Intact
15-Feb-13	8	Negative	Negative	0	0	Eastside House	Floor 1 - Hallway	Ceiling	Ceiling	Drywall	White	Intact
15-Feb-13	***9***	***Negative***	***Positive***	***0.04***	***0.02***	***Eastside House***	***Common Men's Restroom***	***West***	***Wall***	***Drywall***	***White***	***Intact***
15-Feb-13	10	Negative	Negative	0	0	Eastside House	Common Men's Restroom	Ceiling	Ceiling	Drywall	White	Intact
15-Feb-13	***11***	***Negative***	***Positive***	***0.02***	***0.02***	***Eastside House***	***Common Kitchen***	***South***	***Wall***	***Drywall***	***White***	***Intact***
15-Feb-13	***12***	***Negative***	***Positive***	***0.03***	***0.02***	***Eastside House***	***Common Kitchen***	***South***	***Wall***	***Drywall***	***White***	***Intact***
15-Feb-13	13	Negative	Negative	0	0	Eastside House	Chair Storage	East	Wall	Drywall	White	Intact

Date	Reading	Lead Based	Lead Containing	*Pb	Pb +/-	Unit / Bldg.	Room Type	Side	Component	Substrate	Color	Condition
15-Feb-13	14	NA	NA					Standard				
15-Feb-13	15	Negative	Negative	0	0	Eastside House	Garbage Room	Ceiling	Ceiling	Drywall	White	Intact
15-Feb-13	16	Negative	Negative	0	0	Eastside House	Floor 1 - Janitor's Closet	Ceiling	Ceiling	Drywall	White	Intact
15-Feb-13	17	NA	NA					Standard				
15-Feb-13	***18***	***Negative***	***Positive***	***0.1***	***0.08***	***Eastside House***	***Unit 111 - Kitchen***	***East***	***Wall***	***Drywall***	***White***	***Intact***
15-Feb-13	19	Negative	Negative	0	0	Eastside House	Unit 111 - Bathroom	North	Wall	Drywall	White	Intact
15-Feb-13	20	Negative	Negative	0	0	Eastside House	Unit 113 - Bathroom	North	Wall	Drywall	White	Intact
15-Feb-13	21	Negative	Negative	0	0	Eastside House	Unit 113 - Bathroom	North	Wall	Drywall	White	Intact
15-Feb-13	22	Negative	Negative	0	0	Eastside House	Unit 113 - Kitchen	West	Wall	Drywall	White	Intact
15-Feb-13	23	Negative	Negative	0	0.01	Eastside House	Floor 2 - Laundry Room	East	Wall	Drywall	White	Intact
15-Feb-13	***24***	***Negative***	***Positive***	***0.01***	***0.01***	***Eastside House***	***Floor 2 - Laundry Room***	***Ceiling***	***Ceiling***	***Drywall***	***White***	***Intact***
15-Feb-13	25	Negative	Negative	0	0	Eastside House	Floor 2 - Hallway	East	Wall	Drywall	Off White	Intact
15-Feb-13	26	Negative	Negative	0	0	Eastside House	Floor 2 - Hallway	East	Wall	Drywall	Off White	Intact
15-Feb-13	27	Negative	Negative	0	0	Eastside House	Floor 2 - Hallway	Ceiling	Ceiling	Drywall	White	Intact
15-Feb-13	***28***	***Negative***	***Positive***	***0.02***	***0.02***	***Eastside House***	***Floor 2 - Janitor's Closet***	***Ceiling***	***Ceiling***	***Drywall***	***White***	***Intact***
15-Feb-13	***29***	***Negative***	***Positive***	***0.01***	***0.01***	***Eastside House***	***Floor 2 - Janitor's Closet***	***West***	***Wall***	***Drywall***	***White***	***Intact***

Date	Reading	Lead Based	Lead Containing	*Pb	Pb +/-	Unit / Bldg.	Room Type	Side	Component	Substrate	Color	Condition
15-Feb-13	30	Negative	Negative	0	0	Eastside House	Unit 211 - Bathroom	North	Wall	Drywall	White	Intact
15-Feb-13	***31***	***Negative***	***Positive***	***0.02***	***0.03***	***Eastside House***	***Unit 211 - Kitchen***	***Ceiling***	***Ceiling***	***Drywall***	***White***	***Intact***
15-Feb-13	***32***	***Negative***	***Positive***	***0.01***	***0.02***	***Eastside House***	***Unit 211 - Kitchen***	***North***	***Wall***	***Drywall***	***White***	***Intact***
15-Feb-13	33	Negative	Negative	0	0	Eastside House	Unit 213 - Kitchen	South	Wall	Drywall	White	Intact
15-Feb-13	34	Negative	Negative	0	0	Eastside House	Unit 213 - Bathroom	North	Wall	Drywall	White	Intact
15-Feb-13	35	Negative	Negative	0	0	Eastside House	Unit 213 - Bedroom Closet	North	Wall	Drywall	White	Intact
15-Feb-13	36	NA	NA					Standard				
15-Feb-13	37	Negative	Negative	0	0	Eastside House	Unit 313 - Bedroom Closet	North	Wall	Drywall	White	Peeling
15-Feb-13	38	Negative	Negative	0	0	Eastside House	Unit 313 - Bathroom	North	Wall	Drywall	White	Peeling
15-Feb-13	***39***	***Negative***	***Positive***	***0.02***	***0.04***	***Eastside House***	***Unit 313 - Kitchen***	***South***	***Wall***	***Drywall***	***White***	***Intact***
15-Feb-13	***40***	***Negative***	***Positive***	***0.03***	***0.03***	***Eastside House***	***Unit 311 - Kitchen***	***South***	***Wall***	***Drywall***	***White***	***Intact***
15-Feb-13	41	Negative	Negative	0	0	Eastside House	Unit 311 - Bedroom Closet	North	Wall	Drywall	White	Intact
15-Feb-13	***42***	***Negative***	***Positive***	***0.02***	***0.02***	***Eastside House***	***Unit 311 - Bathroom***	***North***	***Wall***	***Drywall***	***White***	***Intact***
15-Feb-13	**43**	**Positive**	**Positive**	**1**	**0.02**	**Eastside House**	**Floor 3 - Laundry Room**	**West**	**Wall**	**Drywall**	**White**	**Intact**
15-Feb-13	**44**	**Positive**	**Positive**	**1**	**0.14**	**Eastside House**	**Floor 3 - Laundry Room**	**West**	**Wall**	**Drywall**	**White**	**Intact**
15-Feb-13	**45**	**Positive**	**Positive**	**1**	**0.02**	**Eastside House**	**Floor 3 - Laundry Room**	**Ceiling**	**Ceiling**	**Drywall**	**White**	**Intact**

Date	Reading	Lead Based	Lead Containing	*Pb	Pb +/-	Unit / Bldg.	Room Type	Side	Component	Substrate	Color	Condition
15-Feb-13	46	Negative	Negative	0	0	Eastside House	Floor 3 - Hallway	Ceiling	Ceiling	Drywall	White	Intact
15-Feb-13	47	Negative	Negative	0	0	Eastside House	Floor 3 - Hallway	East	Wall	Drywall	White	Intact
15-Feb-13	***48***	***Negative***	***Positive***	***0.03***	***0.02***	***Eastside House***	***Floor 3 - Janitor's Closet***	***West***	***Wall***	***Drywall***	***White***	***Intact***
15-Feb-13	***49***	***Negative***	***Positive***	***0.02***	***0.02***	***Eastside House***	***Floor 3 - Janitor's Closet***	***Ceiling***	***Ceiling***	***Drywall***	***White***	***Intact***
15-Feb-13	50	NA	NA					Standard				
15-Feb-13	***51***	***Negative***	***Positive***	***0.07***	***0.03***	***Eastside House***	***Exterior***	***East***	***Wall***	***Wood***	***Brown***	***Intact***
15-Feb-13	***52***	***Negative***	***Positive***	***0.09***	***0.03***	***Eastside House***	***Exterior***	***East***	***Wall***	***Wood***	***Brown***	***Intact***
15-Feb-13	53	NA	NA	1.09	0.05	Eastside House	Calibration	Calibration		Calibration	Red	Calibration
15-Feb-13	54	NA	NA	1.14	0.06	Eastside House	Calibration	Calibration		Calibration	Red	Calibration
15-Feb-13	55	NA	NA	1.03	0.03	Eastside House	Calibration	Calibration		Calibration	Red	Calibration
15-Feb-13	56	NA	NA	0	0	Eastside House	Calibration	Calibration		Calibration	White	Calibration

6.0 CONCLUSIONS AND RECOMENDATIONS

Extreme caution should be used during any renovation activities to ensure that additional materials are not uncovered. This report should be presented to any contractor or subcontractor participating in the plumbing renovation at the Eastridge House located at 120 West Sunset Way in Issaquah, Washington. In the event that additional materials are discovered, the material should be sampled and analyzed to determine if it contains asbestos prior to disturbance.

6.1 Asbestos

Asbestos-containing materials are required to be removed and disposed of in accordance with Washington State Regulations prior to any demolition, renovation, or remodeling that would disturb these materials. Washington State Department of Labor and Industries and PSCAA require that the abatement be performed using Certified Asbestos Workers under the direct on-site supervision of a Certified Asbestos Supervisor.

Materials that contain <1% asbestos (i.e. gypsum wall board and joint compound materials) are not regulated for disposal purposes. However, removal of materials containing <1% asbestos is considered an unclassified asbestos operation by OSHA and WISHA. Unclassified asbestos operations cover employees likely to be exposed in excess of the airborne asbestos permissible exposure limit (PEL), and who are performing operations not covered by Class I through IV. For construction work involving unclassified asbestos operations, the applicable requirements will include: an airborne exposure assessment, use of vacuum cleaners equipped with HEPA filters, use of wet methods and prompt cleanup of debris, use of respirators and protective clothing, training, and record keeping. The requirements for the removal of <1% wallboard systems are addressed in WRD 23.30, which is attached for your convenience.

RGA recommends that a Certified Asbestos Project Designer design any asbestos abatement job to ensure that the job is completed according to regulation standards.

6.2 Lead

Based on XRF testing, 3 of the 4 paint coatings tested by RGA contained detectable and reportable quantities of lead and 2 of them contained lead-based paint throughout the plumbing renovation pathway in the Eastridge House located at 120 West Sunset Way in Issaquah, Washington. The presence of lead in coatings raises concerns about worker and environmental protection. Special precautions will need to be taken to renovate the building. The recommendations are addressed in the Regulatory Compliance Section above.

7.0 LIMITS OF SURVEY

This report does not represent all conditions at the subject site as it only reflects the information gathered from the applicable and accessible plumbing renovation pathway, including common areas and units 111, 111, 113, 211, 213, 311 and 313 in the Eastridge House as outlined by the client. RGA's observations and sampling included all accessible interior areas and observation or sampling of inaccessible areas such as behind closed walls or within ductwork was not within the scope of RGA's work and was not performed.

This report was prepared pursuant to the contract RGA has with the client. Unauthorized reliance on or use of this report, including any of its information or conclusions, will be at third party's risk. For the same reasons, no warranties or representations, expressed or implied in this report, are made to any such third party. Contact us at 206-281-8858 with any questions.

RGA ENVIRONMENTAL

Attachment 1

RGA Asbestos Laboratory Results

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key				
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-01A 13004153	L-1 Beige paint	**No Asbestos Detected**		100% Paint
	L-2 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: First positive stop.			
	L-3 Tan fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-4 White blocky crystalline material	**No Asbestos Detected**		80% Gypsum Filler and Binder 20% Mineral Particles

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key

Client Sample ID / RGA Lab ID	Layer ID (if applicable) / Layer Description / **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-02A 13004156	L-1 Beige paint	**No Asbestos Detected**		100% Paint
	L-2 White crystalline material	**2% Chrysotile**	13% Mineral Wool	85% Calcite Filler and Binder
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-3 White fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-4 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-5 Tan fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-6 White blocky crystalline material	**No Asbestos Detected**		80% Gypsum Filler and Binder 20% Mineral Particles

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key

Client Sample ID / RGA Lab ID	Layer ID (if applicable) / Layer Description / **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-02B 13004157	L-1 Beige paint	**No Asbestos Detected**		100% Paint
	L-2 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-3 White fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-4 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-5 Tan fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-6 White blocky crystalline material	**No Asbestos Detected**		80% Gypsum Filler and Binder 20% Mineral Particles

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key

Client Sample ID / RGA Lab ID	Layer ID (if applicable) / Layer Description / **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-02C 13004158	L-1 Beige paint	**No Asbestos Detected**		100% Paint
	L-2 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-3 White fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-4 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-5 Tan fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-6 Brown blocky crystalline material	**No Asbestos Detected**		80% Gypsum Filler and Binder 20% Mineral Particles
EH-03A 13004159	White fibrous material	**No Asbestos Detected**	35% Cellulose	50% Resin and Binder 15% Filler and Binder
EH-04A 13004160	L-1 Beige adhesive	**No Asbestos Detected**		80% Resin and Binder 20% Mineral Particles
	L-2 White fibrous material	**No Asbestos Detected**	35% Cellulose	50% Resin and Binder 15% Filler and Binder

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key

Client Sample ID / RGA Lab ID	Layer ID (if applicable) / Layer Description / **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-04C 13004162	Beige adhesive	**No Asbestos Detected**		80% Resin and Binder 20% Mineral Particles
EH-05A 13004163	L-1 Multi-color fibrous material	**No Asbestos Detected**	100% Synthetic	
	L-2 White plasticy weave	**No Asbestos Detected**		100% Plastic Particles
	L-3 Yellow adhesive	**No Asbestos Detected**		90% Resin and Binder 10% Mineral Particles
EH-05B 13004164	L-1 Multi-color fibrous material	**No Asbestos Detected**	100% Synthetic	
	L-2 White plasticy weave	**No Asbestos Detected**		100% Plastic Particles
	L-3 White adhesive	**No Asbestos Detected**		90% Resin and Binder 10% Mineral Particles
EH-06A 13004166	L-1 White paint	**No Asbestos Detected**		100% Paint
	L-2 Tan fibrous material	**No Asbestos Detected**	50% Mineral Wool 30% Cellulose	20% Filler and Binder

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key

Client Sample ID / RGA Lab ID	Layer ID (if applicable) / Layer Description / **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-06B 13004167	L-1 White paint	**No Asbestos Detected**		100% Paint
	L-2 Tan fibrous material	**No Asbestos Detected**	50% Mineral Wool 30% Cellulose	20% Filler and Binder
EH-07A 13004168	L-1 Brown adhesive	**<1% Tremolite**		85% Resin and Binder >14% Mineral Particles
	L-2 Beige adhesive	**No Asbestos Detected**		90% Resin and Binder 10% Mineral Particles
EH-07B 13004169	Brown adhesive	**<1% Tremolite**		85% Resin and Binder >14% Mineral Particles
EH-08B 13004171	L-1 Beige vinyl tile	**No Asbestos Detected**		50% Vinyl Filler and Binder 40% Calcite Filler and Binder 10% Mineral Particles
	L-2 Black asphaltic material	**3% Chrysotile**		90% Asphalt Filler and Binder 7% Mineral Particles
	Layer Comments: First positive stop.			
EH-09A 13004173	White resinous material	**No Asbestos Detected**		85% Resin and Binder 15% Mineral Particles

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key

Client Sample ID / RGA Lab ID	Layer ID (if applicable) / Layer Description / **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-10A 13004174	L-1 White fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-2 White fibrous weave	**No Asbestos Detected**	100% Glass Fiber	
	L-3 Silver foil	**No Asbestos Detected**		100% Foil
	L-4 Yellow adhesive	**No Asbestos Detected**		95% Resin and Binder 5% Filler and Binder
	L-5 Yellow fibrous material	**No Asbestos Detected**	100% Fiberglass	
EH-10C 13004176	L-1 White fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-2 White fibrous weave	**No Asbestos Detected**	100% Glass Fiber	
	L-3 Silver foil	**No Asbestos Detected**		100% Foil
	L-4 Yellow adhesive	**No Asbestos Detected**		95% Resin and Binder 5% Filler and Binder
	L-5 Yellow fibrous material	**No Asbestos Detected**	100% Fiberglass	

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key

Client Sample ID / RGA Lab ID	Layer ID (if applicable) / Layer Description / **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-11A 13004177	L-1 White fibrous weave	**No Asbestos Detected**	100% Cellulose	
	L-2 White powdery material	**3% Amosite**		75% Calcite Filler and Binder 22% Mineral Particles
	Layer Comments: First positive stop.			
EH-12A 13004179	L-1 Black/tan fibrous asphaltic material	**No Asbestos Detected**	60% Cellulose	40% Asphalt Filler and Binder
	L-2 Black fibrous material	**No Asbestos Detected**	100% Fiberglass	
EH-13A 13004180	Black hard rubbery material	**No Asbestos Detected**		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles
EH-14A 13004181	L-1 Black asphaltic material	**2% Chrysotile**		85% Asphalt Filler and Binder 13% Mineral Particles
	L-2 Beige resinous material	**No Asbestos Detected**		85% Resin and Binder 15% Mineral Particles
	L-3 Black fibrous material	**No Asbestos Detected**	100% Cellulose	

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key

Client Sample ID / RGA Lab ID	Layer ID (if applicable) / Layer Description / **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-15A 13004182	L-1 Gray resinous material	**No Asbestos Detected**		85% Resin and Binder 15% Mineral Particles
	L-2 Beige resinous mateiral	**No Asbestos Detected**		85% Resin and Binder 15% Mineral Particles
	L-3 Gray resinous fibrous material	**5% Chrysotile**		85% Resin and Binder 10% Mineral Particles
EH-16A 13004183	L-1 Beige vinyl tile	**2% Chrysotile**		50% Vinyl Filler and Binder 40% Calcite Filler and Binder 8% Mineral Particles
	Layer Comments: First positive stop.			
	L-2 Black asphaltic material	**2% Chrysotile**		90% Asphalt Filler and Binder 8% Mineral Particles
	Layer Comments: First positive stop.			

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key

Client Sample ID / RGA Lab ID	Layer ID (if applicable) / Layer Description / **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-17A 13004186	L-1 Beige paint	**No Asbestos Detected**		100% Paint
	L-2 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-3 White fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-4 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-5 Tan fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-6 White blocky crystalline material	**No Asbestos Detected**		80% Gypsum Filler and Binder 20% Mineral Particles
	L-7 Brown adhesive	**<1% Tremolite**		85% Resin and Binder >14% Mineral Particles

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key

Client Sample ID / RGA Lab ID	Layer ID (if applicable) / Layer Description / **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-17C 13004188	L-1 Beige paint	**No Asbestos Detected**		100% Paint
	L-2 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-3 White fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-4 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	L-5 Tan fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-6 White blocky crystalline material	**No Asbestos Detected**		80% Gypsum Filler and Binder 20% Mineral Particles
EH-18A 13004189	Beige adhesive	**No Asbestos Detected**		85% Resin and Binder 15% Mineral Particles

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013
Analyzed By: Allison Reagan 2/27/2013

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key

Client Sample ID / RGA Lab ID	Layer ID (if applicable) / Layer Description / **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-19A 13004190	L-1 White paint	**No Asbestos Detected**		100% Paint
	L-2 Beige crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: First positive stop.			
	L-3 Tan fibrous material	**No Asbestos Detected**	100% Cellulose	
EH-20A 13004192	Black hard rubbery material	**No Asbestos Detected**		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles
EH-21A 13004193	L-1 Yellow adhesive	**No Asbestos Detected**		85% Resin and Binder 15% Mineral Particles
	L-2 Brown adhesive	**<1% Tremolite**		85% Resin and Binder >14% Mineral Particles
	L-3 Beige crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
EH-21B 13004194	L-1 White adhesive	**No Asbestos Detected**		80% Resin and Binder 20% Mineral Particles
	L-2 Beige crystalline material	**No Asbestos Detected**		85% Calcite Filler and Binder 15% Mineral Particles

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key

Client Sample ID / RGA Lab ID	Layer ID (if applicable) / Layer Description / **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-22A 13004195	L-1 Beige vinyl sheeting	**No Asbestos Detected**		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles
	L-2 Gray fibrous backing	**No Asbestos Detected**	60% Cellulose	40% Filler and Binder
	L-3 White adhesive	**No Asbestos Detected**		90% Resin and Binder 10% Mineral Particles
EH-22B 13004196	L-1 Gray vinyl sheeting	**No Asbestos Detected**		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles
	L-2 Gray fibrous backing	**No Asbestos Detected**	60% Cellulose	40% Filler and Binder
	L-3 Yellow adhesive	**No Asbestos Detected**		90% Resin and Binder 10% Mineral Particles

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key

Client Sample ID / RGA Lab ID	Layer ID (if applicable) / Layer Description / **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-23A 13004197	L-1 White paint	**No Asbestos Detected**		100% Paint
	L-2 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-3 White fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-4 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-5 Tan fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-6 White blocky crystalline material	**No Asbestos Detected**		80% Gypsum Filler and Binder 20% Mineral Particles
EH-23B 13004198	L-1 White crystalline material	**No Asbestos Detected**		85% Calcite Filler and Binder 15% Mineral Particles
	L-2 Tan fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-3 White blocky crystalline material	**No Asbestos Detected**		80% Gypsum Filler and Binder 20% Mineral Particles

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key

Client Sample ID / RGA Lab ID	Layer ID (if applicable) / Layer Description / **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-24A 13004199	L-1 White paint	**No Asbestos Detected**		100% Paint
	L-2 Beige crystalline material **Layer Comments:** First positive stop.	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	L-3 Tan fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-4 White blocky crystalline material	**No Asbestos Detected**		80% Gypsum Filler and Binder 20% Mineral Particles
EH-25A 13004201	L-1 Gray resinous material	**No Asbestos Detected**		85% Resin and Binder 15% Mineral Particles
	L-2 Brown fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-3 Beige resinous material	**No Asbestos Detected**		85% Resin and Binder 15% Mineral Particles
EH-25B 13004202	L-1 Gray resinous material	**No Asbestos Detected**		85% Resin and Binder 15% Mineral Particles
	L-2 Black hard rubbery material	**No Asbestos Detected**		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key

Client Sample ID / RGA Lab ID	Layer ID (if applicable) / Layer Description / **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-26A 13004203	L-1 White fibrous material	**No Asbestos Detected**	35% Cellulose	50% Resin and Binder 15% Filler and Binder
	L-2 Beige adhesive	**No Asbestos Detected**		90% Resin and Binder 10% Mineral Particles
EH-27A 13004204	L-1 White paint	**No Asbestos Detected**		100% Paint
	L-2 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-3 White fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-4 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-5 Tan fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-6 White blocky crystalline material	**No Asbestos Detected**		80% Gypsum Filler and Binder 20% Mineral Particles

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key

Client Sample ID / RGA Lab ID	Layer ID (if applicable) / Layer Description / **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-27B 13004205	L-1 White paint	**No Asbestos Detected**		100% Paint
	L-2 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-3 White fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-4 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-5 Tan fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-6 White blocky crystalline material	**No Asbestos Detected**		80% Gypsum Filler and Binder 20% Mineral Particles

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key

Client Sample ID / RGA Lab ID	Layer ID (if applicable) / Layer Description / **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-28A 13004206	L-1 White paint	**No Asbestos Detected**		100% Paint
	L-2 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	L-3 White fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-4 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
EH-28B 13004207	L-1 White paint	**No Asbestos Detected**		100% Paint
	L-2 Beige crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
EH-29A 13004208	L-1 Brown adhesive	**<1% Tremolite**		85% Resin and Binder >14% Mineral Particles
	L-2 Beige adhesive	**No Asbestos Detected**		80% Resin and Binder 20% Mineral Particles
	L-3 Beige crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key

Client Sample ID / RGA Lab ID	Layer ID (if applicable) / Layer Description / **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-30A 13004209	L-1 Beige vinyl sheeting	**No Asbestos Detected**		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles
	L-2 Gray fibrous backing	**No Asbestos Detected**	60% Cellulose	40% Filler and Binder
	L-3 Beige adhesive	**No Asbestos Detected**		85% Resin and Binder 15% Mineral Particles
	L-4 Green vinyl sheeting	**No Asbestos Detected**		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles
	L-5 Gray fibrous backing	**30% Chrysotile**	30% Cellulose	40% Filler and Binder
	L-6 Beige adhesive	**No Asbestos Detected**		85% Resin and Binder 15% Mineral Particles

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key				
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-31A 13004210	L-1 White paint	**No Asbestos Detected**		100% Paint
	L-2 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-3 White fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-4 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-5 Tan fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-6 White blocky crystalline material	**No Asbestos Detected**		80% Gypsum Filler and Binder 20% Mineral Particles

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key

Client Sample ID / RGA Lab ID	Layer ID (if applicable) / Layer Description / **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-31B 13004211	L-1 White paint	**No Asbestos Detected**		100% Paint
	L-2 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-3 White fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-4 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-5 Tan fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-6 White blocky crystalline material	**No Asbestos Detected**		80% Gypsum Filler and Binder 20% Mineral Particles
EH-32A 13004212	L-1 White paint	**No Asbestos Detected**		100% Paint
	L-2 Beige crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: First positive stop.			
	L-3 Tan fibrous material	**No Asbestos Detected**	100% Cellulose	

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key

Client Sample ID / RGA Lab ID	Layer ID (if applicable) / Layer Description / **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-33A 13004214	L-1 White resinous fibrous material	**No Asbestos Detected**	20% Cellulose	65% Resin and Binder 15% Mineral Particles
	L-2 Beige resinous material	**No Asbestos Detected**		85% Resin and Binder 15% Mineral Particles
	L-3 Brown fibrous material	**No Asbestos Detected**	100% Cellulose	
EH-34A 13004215	Brown adhesive	**<1% Tremolite**		85% Resin and Binder >14% Mineral Particles
EH-34B 13004216	Brown adhesive	**<1% Tremolite**		85% Resin and Binder >14% Mineral Particles
EH-35A 13004217	L-1 Green vinyl sheeting	**No Asbestos Detected**		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles
	L-2 Gray fibrous backing	**30% Chrysotile**	30% Cellulose	40% Filler and Binder
	Layer Comments: First positive stop.			
	L-3 Yellow adhesive	**No Asbestos Detected**		90% Resin and Binder 10% Mineral Particles

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key

Client Sample ID / RGA Lab ID	Layer ID (if applicable) / Layer Description / **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-36A 13004219	L-1 Black asphaltic material	**2% Chrysotile**		90% Asphalt Filler and Binder 8% Mineral Particles
	L-2 Black fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-3 Beige resinous material	**No Asbestos Detected**		85% Resin and Binder 15% Mineral Particles
EH-37A 13004220	L-1 White paint	**No Asbestos Detected**		100% Paint
	L-2 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-3 White fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-4 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-5 Tan fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-6 White blocky crystalline material	**No Asbestos Detected**		80% Gypsum Filler and Binder 20% Mineral Particles

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key

Client Sample ID / RGA Lab ID	Layer ID (if applicable) / Layer Description / **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-37B 13004221	L-1 White paint	**No Asbestos Detected**		100% Paint
	L-2 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-3 White fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-4 White crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-5 Tan fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-6 White blocky crystalline material	**No Asbestos Detected**		80% Gypsum Filler and Binder 20% Mineral Particles
EH-38A 13004222	L-1 White paint	**No Asbestos Detected**		100% Paint
	L-2 Beige crystalline material	**2% Chrysotile**		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: First positive stop.			
	L-3 Tan fibrous material	**No Asbestos Detected**	100% Cellulose	

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key

Client Sample ID / RGA Lab ID	Layer ID (if applicable) / Layer Description / **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-39A 13004224	L-1 Beige adhesive	**No Asbestos Detected**		85% Resin and Binder 15% Mineral Particles
	L-2 Brown adhesive	**<1% Tremolite**		85% Resin and Binder >14% Mineral Particles
EH-40A 13004225	L-1 Beige vinyl sheeting	**No Asbestos Detected**		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles
	L-2 Gray fibrous backing	**No Asbestos Detected**	60% Cellulose	40% Filler and Binder
	L-3 Yellow adhesive	**No Asbestos Detected**		90% Resin and Binder 10% Mineral Particles
	L-4 Green vinyl sheeting	**No Asbestos Detected**		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles
	L-5 Gray fibrous backing	**30% Chrysotile**	30% Cellulose	40% Filler and Binder
	L-6 Yellow adhesive	**No Asbestos Detected**		90% Resin and Binder 10% Mineral Particles

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013

RGA ENVIRONMENTAL
1730 Minor Avenue, Suite 900, Seattle, WA 98101
OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
(EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

King County Housing Authority
Project Location: 120 West Sunset Way
Issaquah, WA

RGA Batch Number: **13-0423**
RGA Project Number: **KCHA32114**
Number of Samples: **59**

Report Key

Client Sample ID / RGA Lab ID	Layer ID (if applicable) / Layer Description / **Layer Comments (if applicable)**	**Asbestos Components**	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-41A 13004226	L-1 Black asphaltic material	**2% Chrysotile**		90% Asphalt Filler and Binder 8% Mineral Particles
	Layer Comments: First positive stop.			
	L-2 Brown fibrous material	**No Asbestos Detected**	100% Cellulose	
	L-3 Beige resinous material	**No Asbestos Detected**		85% Resin and Binder 15% Mineral Particles
EH-42A 13004228	L-1 White fibrous material	**No Asbestos Detected**	35% Cellulose	50% Resin and Binder 15% Filler and Binder
	L-2 Beige adhesive	**No Asbestos Detected**		85% Resin and Binder 15% Mineral Particles

Sampled By: John McCaslin
Received By: Abdulrazzak Mansur 2/19/2013
Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013

13-0483

RGA
ENVIRONMENTAL

__X__ PM – Angela Harkins
angela.harkins@rgaenv.com
fax: 206-281-8922

_____Sr. PM-E.Hartman
eric.hartman@rgaenv.com
fax: 206.281.8922

RGA CLIENT: King County Housing Authority_____

ACM BULK SAMPLE DATA SHEET

* PLM Analysis

_X_ Stop Analysis at First Positive

___ Analyze All Samples

___ Point Count Analysis (400-point)

Project Name/Address: 120 West Sunset Way Issaquah, WA. Samples Submitted 46

RGA Project #: KCHA32114 Sampled By: JMc/RB Sample Date: 2/15/2013

Sample(s) Sent To: _X_RGA ___ EMSL ___ Other:_____ TAT: __Rush ___24Hrs __48Hrs X__ 3-5 Days

FAX OR E-MAIL REPORT TO: *SEE ABOVE PROJECT MANAGER (PM)**

***ADDITIONAL REPORT RECIPIENT(S): Angela/JMc/RB ***

HM# 01	Material Description: Texture on GWB Walls/Ceilings - Hallways
Sample ID	Sample Location & Material Location — Quantity:
EH-01A	Floor 1 - E Hallway - E End
-01B	Floor 2 - ↓ ↓
-01C	Floor 3 - ↓ ↓

HM# 02	Material Description: GWB on Walls/Ceilings W/ Joint Compound - Hallways
Sample ID	Sample Location & Material Location — Quantity:
EH-02A	Floor 1 - E Hallway - E End
-02B	Floor 2 ↓ ↓
-02C	Floor 3 ↓ ↓

HM# 03	Material Description: Light Green Wallpaper on GWB
Sample ID	Sample Location & Material Location — Quantity:
EH-03A	Floor 1 - E Hallway - E End
~~EH-03B~~	~~Floor 2~~

HM# 04	Material Description: Mastic Assoc. w/ 4" Tan Coveback (Beige)
Sample ID	Sample Location & Material Location — Quantity:
~~EH-04A~~	Floor 1 - E Hallway - E End
~~EH-04B~~	~~Floor 2~~ ↓ ↓
EH-04C	Floor 3 ↓ ↓

HM# 05	Material Description: Mastic Beneath Blue/Tan Carpet
Sample ID	Sample Location & Material Location — Quantity:
EH-05A	Floor 1 - E Hallway - E End
EH-05B	Floor 2 - ↓ - ↓
~~EH-05C~~	~~Floor 3~~ ↓ - ↓

HM# 06	Material Description: Suspended Ceiling Tile - 2'x4' - White Wormhole
Sample ID	Sample Location & Material Location — Quantity:
EH-06A	Floor 1 - E Hallway - E End
EH-06B	Floor 2 - ↓ ↓

Relinquished By: John McCaslin Signature: [signature] Date/Time: 2/15/2013 1730

Received By: _____ Signature: _____ Date/Time: _____

Relinquished By: _____ Signature: _____ Date/Time: _____

Received By: RAZ MANSURI Signature: [signature] Date/Time: 2/19/13

17-0423

RGA
ENVIRONMENTAL

__X__ PM – Angela Harkins
angela.harkins@rgaenv.com
fax: 206-281-8922

_____Sr. PM-E.Hartman
eric.hartman@rgaenv.com
fax: 206.281.8922

RGA CLIENT: King County Housing Authority_____

ACM BULK SAMPLE DATA SHEET

* PLM Analysis

_X_ Stop Analysis at First Positive **PAGE 2 OF 3**

___ Analyze All Samples

___ Point Count Analysis (400-point)

Project Name/Address: 120 West Sunset Way Issaquah, WA. Samples Submitted 76

RGA Project #: KCHA32114 Sampled By: MM/RB Sample Date: 2/15/2013

Sample(s) Sent To: _X_RGA ___ EMSL ___ Other:_____ TAT: __Rush ___24Hrs __48Hrs X__ 3-5 Days

FAX OR E-MAIL REPORT TO: *SEE ABOVE PROJECT MANAGER (PM)**

***ADDITIONAL REPORT RECIPIENT(S): Angela ***

HM# 07	**Material Description:** Mastic Assoc. W/ 4" Tan Coveebase (Brown)
Sample ID	**Sample Location & Material Location** **Quantity:**
EH-07A	Floor 1 - Mens Restroom - W Side
EH-07B	↓ - Common Kitchen - E Side
HM# 08	**Material Description:** Beige/Tan Speckled Vinyl Floor Sheeting W/ Mastic
Sample ID	**Sample Location & Material Location** **Quantity:**
~~EH-08A~~	~~Floor 1 - Mens Restroom - W Side~~
-08B	↓ - Kitchen - E Side
-08C	Floor 2 - Laundry Room - S Side
HM# 09	**Material Description:** White Caulk @ Toilet
Sample ID	**Sample Location & Material Location** **Quantity:**
EH-09A	Floor 1 - Mens Restroom - W Side
HM# 10	**Material Description:** Fiberglass Pipe Insulation W/ Cloth Wrap + Bridging
Sample ID	**Sample Location & Material Location** **Quantity:**
EH-10A	Floor 1 - Mens Restroom - W Side - Inside Wall
-10B	↓ - ~~Hallway~~ Chair Storage - ~~E~~ Side
-10C	↓ - Unit 113 - Bedroom - N Side - Inside Wall
HM# 11	**Material Description:** Mudded Elbow
Sample ID	**Sample Location & Material Location** **Quantity:**
EH-11A	Floor 1 - Mens Restroom - W Side - Inside Wall
-11B	↓ - Chair Storage - E Side
HM# 12	**Material Description:** Black Fiberglass Insulation W/ Paper Facing in Int. Walls
Sample ID	**Sample Location & Material Location** **Quantity:**
EH-12A	Floor 1 - Mens Restroom - W Side - Inside Wall

Relinquished By: John McCarlie **Signature:** _____ **Date/Time:** 2/15/2013 1730

Received By: _____ **Signature:** _____ **Date/Time:** _____

Relinquished By: _____ **Signature:** _____ **Date/Time:** _____

Received By: RAZ MANSURI **Signature:** _____ **Date/Time:** 2/16/13

13-0423

RGA
ENVIRONMENTAL

__X__ PM – Angela Harkins
angela.harkins@rgaenv.com
fax: 206-281-8922

_____Sr. PM-E.Hartman
eric.hartman@rgaenv.com
fax: 206.281.8922

RGA CLIENT: King County Housing Authority_____

ACM BULK SAMPLE DATA SHEET

* PLM Analysis

_X_ Stop Analysis at First Positive **PAGE 3 OF 3**

___ Analyze All Samples

___ Point Count Analysis (400-point)

Project Name/Address: 120 West Sunset Way Issaquah, WA. Samples Submitted 76

RGA Project #: KCHA32114 Sampled By: JC/RB Sample Date: 2/15/2013

Sample(s) Sent To: _X_RGA ___ EMSL ___ Other:_____ TAT: __Rush ___24Hrs __48Hrs X__ 3-5 Days

FAX OR E-MAIL REPORT TO: *SEE ABOVE PROJECT MANAGER (PM)**

***ADDITIONAL REPORT RECIPIENT(S): Angela ***

HM# 13	Material Description: Black Gasket @ Sink Drain	
Sample ID	Sample Location & Material Location	Quantity:
EH-13A	Floor 1 - Mens Restroom - W Side	

HM# 14	Material Description: Black Sink Undercoat w/ Gasket + Putty	
Sample ID	Sample Location & Material Location	Quantity:
EH-14A	Floor 1 - Common Kitchen - S Side	

~~HM# 15~~	~~Material Description: Black Gasket @ Sink Drain~~	
Sample ID	Sample Location & Material Location	Quantity:
~~EH-15A~~	~~Floor 1 - Comm. Kitchen - S Side~~	

HM# 15	Material Description: Gray Sink Undercoat w/ Gasket + Putty	
Sample ID	Sample Location & Material Location	Quantity:
EH-15A	Floor 1 - Community Area - N Side	

HM# 16	Material Description: 12" Beige/Tan Streak VFT w/ Mastic	
Sample ID	Sample Location & Material Location	Quantity:
EH-16A	Floor 1 - Chair Storage - E side	
EH-16B	Floor 2 - Janitor Closet - E Side	
~~EH-16C~~	~~Floor 3 - ↓ - ↓~~	

HM# 17	Material Description: GWB w/ Joint Compound	
Sample ID	Sample Location & Material Location	Quantity:
EH-17A	Floor 1 - Chair Storage - SE Corner	
~~-17B~~	~~Floor 1 - Custodial Room - SE Corner~~	
↓ -17C	↓ - Janitor Closet - SE Corner	

Relinquished By: John McCaslin **Signature:** [signature] **Date/Time:** 2/15/2013 1730

Received By: _____ **Signature:** _____ **Date/Time:** _____

Relinquished By: _____ **Signature:** _____ **Date/Time:** _____

Received By: RAZ MANSURI **Signature:** [signature] **Date/Time:** 2/19/13

13-0423

RGA
ENVIRONMENTAL

__X__ PM – Angela Harkins
angela.harkins@rgaenv.com
fax: 206-281-8922

_____Sr. PM-E.Hartman
eric.hartman@rgaenv.com
fax: 206.281.8922

RGA CLIENT: King County Housing Authority_____

ACM BULK SAMPLE DATA SHEET

* PLM Analysis

_X_ Stop Analysis at First Positive

___ Analyze All Samples

___ Point Count Analysis (400-point)

Project Name/Address: 120 West Sunset Way Issaquah, WA.

Samples Submitted 2/15/2013 76

RGA Project #: KCHA32114

Sampled By: JA/RB

Sample Date: 2/15/2013

Sample(s) Sent To: _X_RGA ___ EMSL ___ Other:_____

TAT: __Rush ___24Hrs __48Hrs X__ 3-5 Days

FAX OR E-MAIL REPORT TO: *SEE ABOVE PROJECT MANAGER (PM)**

***ADDITIONAL REPORT RECIPIENT(S): Angela ***

HM# 18	Material Description: Mastic Assoc. W/ 4" Brown Cove base
Sample ID	Sample Location & Material Location — Quantity:
EH-18A	Floor 1 - Garbage Room - S Wall

HM# 19	Material Description: Texture on GWB Walls/Ceilings
Sample ID	Sample Location & Material Location — Quantity:
EH-19A	Floor 1 - Garbage Room - E Wall
↓ -19B	↓ - Janitor Closet - E Wall

HM# 20	Material Description: Gasket @ Sink Drain
Sample ID	Sample Location & Material Location — Quantity:
EH-20A	Floor 1 - Janitor Closet - NW Corner

HM# 21	Material Description: Mastic Assoc. W/ 4" Tan Cove base
Sample ID	Sample Location & Material Location — Quantity:
EH-21A	Floor 1 - Unit 111 - Bathroom - SW Corner
EH-21A	↓ Unit 113 - ↓ - S Wall

HM# 22	Material Description: Beige/Gray Tile Pattern VFSW/mastic
Sample ID	Sample Location & Material Location — Quantity:
EH-22A	Floor 1 - Unit 111 - Bathroom - SW Corner
EH-22B	↓ - Unit 113 - ↓ - S Side

HM# 23	Material Description: GWB W/ Joint Compound
Sample ID	Sample Location & Material Location — Quantity:
EH-23A	Floor 1 - Unit 111 - Bedroom Closet - NW Corner
EH-23B	↓ Unit 113 - Bathroom - S Wall

Relinquished By: John McCarlie Signature: _____ Date/Time: 2/15/2013 1730

Received By: _____ Signature: _____ Date/Time: _____

Relinquished By: _____ Signature: _____ Date/Time: _____

Received By: Rafe Mansuer Signature: _____ Date/Time: 2/19/13

13-0423

RGA ENVIRONMENTAL

___X__ PM – Angela Harkins
angela.harkins@rgaenv.com
fax: 206-281-8922

_____Sr. PM-E.Hartman
eric.hartman@rgaenv.com
fax: 206.281.8922

RGA CLIENT: King County Housing Authority_____

ACM BULK SAMPLE DATA SHEET

* PLM Analysis

_X_ Stop Analysis at First Positive

___ Analyze All Samples

___ Point Count Analysis (400-point)

Project Name/Address: 120 West Sunset Way Issaquah, WA. Samples Submitted 76

RGA Project #: KCHA32114 Sampled By: [illegible] Sample Date: 2/13/2013

Sample(s) Sent To: _X_RGA ___ EMSL ___ Other:_____ TAT: __Rush ___24Hrs __48Hrs X__ 3-5 Days

FAX OR E-MAIL REPORT TO: *SEE ABOVE PROJECT MANAGER (PM)**

***ADDITIONAL REPORT RECIPIENT(S): Angela ***

HM# 24	**Material Description:** Texture on GWB Walls/Ceiling
Sample ID	**Sample Location & Material Location** — **Quantity:**
EH-24A	Floor 1 - Unit 111 - Bedroom Closet - N Wall
EH-24B	↓ - Unit 113 - Bathroom - S Wall
HM# 25	**Material Description:** Gray Sink Undercoat w/Gasket + Putty
Sample ID	**Sample Location & Material Location** — **Quantity:**
EH-25A	Floor 1 - Unit 111 - Kitchen - Sink (S Side)
EH-25B	↓ - Unit 113 - ↓ - ↓ (W Side)
HM# 26	**Material Description:** Pink Wallpaper on GWB
Sample ID	**Sample Location & Material Location** — **Quantity:**
EH-26A	Floor 2 - E Hall Way - E End
HM# 27	**Material Description:** GWB w/ Joint Compound
Sample ID	**Sample Location & Material Location** — **Quantity:**
EH-27A	Floor 2 - Laundry Room - NW Corner
EH-27B	Floor 3 - ↓ - ↓
HM# 28	**Material Description:** Texture on GWB Walls/Ceiling
Sample ID	**Sample Location & Material Location** — **Quantity:**
EH-28A	Floor 2 - Laundry Room - W Wall
EH-28B	Floor 3 - ↓ - ↓
HM# 29	**Material Description:** Mastic Assoc. w/ 4" Beige Coved Base
Sample ID	**Sample Location & Material Location** — **Quantity:**
EH-29A	Floor 2 - Unit 211 - Bathroom - SW Corner

Relinquished By: John McCaslin **Signature:** [signature] **Date/Time:** 2/15/2013 1730

Received By: _____ **Signature:** _____ **Date/Time:** _____

Relinquished By: _____ **Signature:** _____ **Date/Time:** _____

Received By: RAZ MANSURI **Signature:** [signature] **Date/Time:** 2/19/13

13-0423

RGA ENVIRONMENTAL

___X__ PM – Angela Harkins
angela.harkins@rgaenv.com
fax: 206-281-8922

_____Sr. PM-E.Hartman
eric.hartman@rgaenv.com
fax: 206.281.8922

RGA CLIENT: King County Housing Authority_____

ACM BULK SAMPLE DATA SHEET

* PLM Analysis

_X_ Stop Analysis at First Positive **PAGE 6 OF 8**

___ Analyze All Samples

___ Point Count Analysis (400-point)

Project Name/Address: 120 West Sunset Way Issaquah, WA. Samples Submitted 76

RGA Project #: KCHA32114 Sampled By: RB Sample Date: 2/15/2013

Sample(s) Sent To: _X_RGA ___ EMSL ___ Other:_____ TAT: __Rush ___24Hrs __48Hrs X__ 3-5 Days

FAX OR E-MAIL REPORT TO: *SEE ABOVE PROJECT MANAGER (PM)**

ADDITIONAL REPORT RECIPIENT(S): Angela

HM# 30	**Material Description:** Beige Gray Tile Pattern VFS w/ Mastic Over Pebble Pattern
Sample ID	**Sample Location & Material Location** — **Quantity:** VFS w/ Mastic
EH-30A	Unit 211 - Bathroom - SW Corner

HM# 31	**Material Description:** GWB w/ Joint Compound
Sample ID	**Sample Location & Material Location** — **Quantity:**
EH-31A	Unit 211 - Bedroom Closet - SE Corner
EH-31B	Unit 213 - ↓ - NE Corner

HM# 32	**Material Description:** Texture on GWB Walls / Ceilings
Sample ID	**Sample Location & Material Location** — **Quantity:**
EH-32A	Unit 211 - Bedroom Closet - W Wall
EH-32B	Unit 213 - ↓ - NE Corner

HM# 33	**Material Description:** Gray Sink Undercoat w/ Gasket + Putty
Sample ID	**Sample Location & Material Location** — **Quantity:**
EH-33A	Unit 211 - Kitchen - S Side - Sink

HM# 34	**Material Description:** Mastic Assoc. w/ 4" Olive Green Covebase
Sample ID	**Sample Location & Material Location** — **Quantity:**
EH-34A	Unit 213 - Bathroom - SE corner
EH-34B	Unit 311 - ↓ - SW Corner

HM# 35	**Material Description:** Green Mosaic Pattern VFS w/ Mastic
Sample ID	**Sample Location & Material Location** — **Quantity:**
EH-35A	Unit 213 - Bathroom - SE Corner
EH-35B	Unit 311 - ↓ - SW Corner

Relinquished By: John McAslin **Signature:** _____ **Date/Time:** 2/15/2013 1730

Received By: _____ **Signature:** _____ **Date/Time:** _____

Relinquished By: _____ **Signature:** _____ **Date/Time:** _____

Received By: ZAL MANSURO **Signature:** _____ **Date/Time:** 2/19/13

13-0423

RGA ENVIRONMENTAL

___X__ PM – Angela Harkins
angela.harkins@rgaenv.com
fax: 206-281-8922

_____Sr. PM-E.Hartman
eric.hartman@rgaenv.com
fax: 206.281.8922

RGA CLIENT: King County Housing Authority_____

ACM BULK SAMPLE DATA SHEET

* PLM Analysis

_X_ Stop Analysis at First Positive

___ Analyze All Samples

___ Point Count Analysis (400-point)

Project Name/Address: 120 West Sunset Way Issaquah, WA. Samples Submitted 76

RGA Project #: KCHA32114 Sampled By: ~~JM~~/RB Sample Date: 2/15/2013

Sample(s) Sent To: _X_RGA ___ EMSL ___ Other:_____ TAT: __Rush ___24Hrs __48Hrs X__ 3-5 Days

FAX OR E-MAIL REPORT TO: *SEE ABOVE PROJECT MANAGER (PM)**

ADDITIONAL REPORT RECIPIENT(S): Angela

HM# 36	Material Description: Black Sink Undercoat w/Gasket + Putty
Sample ID	Sample Location & Material Location — Quantity:
EH-36A	Unit 313 - Kitchen - S Side - Sink
HM# 37	Material Description: GWB w/Joint Compound
Sample ID	Sample Location & Material Location — Quantity:
EH-37A	Unit 313 - Bedroom Closet - NE Corner
EH-37B	Unit 311 - ↓ - ↓
HM# 38	Material Description: Texture on GWB walls/ceilings
Sample ID	Sample Location & Material Location — Quantity:
EH-38A	Unit 313 - Bedroom Closet - ~~NE Corner~~ N Wall
EH-38B	Unit 311 - ↓ - ↓
HM# 39	Material Description: Mastic Assoc. w/ 4" Tan Covebase
Sample ID	Sample Location & Material Location — Quantity:
EH-39A	Unit 313 - Bathroom - SE Corner
HM# 40	Material Description: Beige/Gray Tile Pattern VFS ~~over~~ PW/mastic over Pebbled
Sample ID	Sample Location & Material Location — Quantity: VFS w/mastic
EH-40A	Unit 313 - Bathroom - SE Corner
HM# 41	Material Description: Black Sink Undercoat w/Gasket + Putty
Sample ID	Sample Location & Material Location — Quantity:
EH-41A	Unit 313 - Kitchen - S Side - Sink
EH-41B	Unit 311 - ↓ ↓ ↓

Relinquished By: John McCaslin Signature: [signature] Date/Time: 2/15/2013 1730

Received By: _____ Signature: _____ Date/Time: _____

Relinquished By: _____ Signature: _____ Date/Time: _____

Received By: RAZ MANSURD Signature: [signature] Date/Time: 2/19/13

13-0423

RGA
ENVIRONMENTAL

___X__ PM – Angela Harkins
angela.harkins@rgaenv.com
fax: 206-281-8922

_____Sr. PM-E.Hartman
eric.hartman@rgaenv.com
fax: 206.281.8922

RGA CLIENT: King County Housing Authority_____

ACM BULK SAMPLE DATA SHEET

* PLM Analysis

_X_ Stop Analysis at First Positive **PAGE 8 OF __**

___ Analyze All Samples

___ Point Count Analysis (400-point)

Project Name/Address: 120 West Sunset Way Issaquah, WA. Samples Submitted 76

RGA Project #: KCHA32114 Sampled By: ~~JM~~/RB Sample Date: 2/15/2013

Sample(s) Sent To: _X_RGA ___ EMSL ___ Other:_____ TAT: __Rush ___24Hrs __48Hrs X__ 3-5 Days

FAX OR E-MAIL REPORT TO: *SEE ABOVE PROJECT MANAGER (PM)**

***ADDITIONAL REPORT RECIPIENT(S): Angela ***

HM# 42	Material Description: Blue Wallpaper on GWB	
Sample ID	Sample Location & Material Location	Quantity:
EH-42A	Floor 3 - E Hallway - E End	

HM#	Material Description:	
Sample ID	Sample Location & Material Location	Quantity:

HM#	Material Description:	
Sample ID	Sample Location & Material Location	Quantity:

HM#	Material Description:	
Sample ID	Sample Location & Material Location	Quantity:

HM#	Material Description:	
Sample ID	Sample Location & Material Location	Quantity:

Relinquished By: John McCarthy	**Signature:**	**Date/Time:** 2/15/2013 1730
Received By:	**Signature:**	**Date/Time:**
Relinquished By:	**Signature:**	**Date/Time:**
Received By: RAZ MANSURI	**Signature:**	**Date/Time:** 2/19/13

Sample Log
Chain of Custody

RGA Laboratory Services
INTERNAL

Client:	Client Contact
Company:	King County Housing Authority
Client Address:	15455 65th Ave S
Seattle / City	WA / State — 98188-2583 / Zip
Phone #:	(206)244-7750
2nd or Cell #:	
Fax #:	(206)242-0733
e-mail Address:	

RGA Batch #:	13-0423
RGA Project #:	KCHA32114
Client Job #:	
Number of Samples:	76

Project Manager: Angela Harkins

Project Location: 120 West Sunset Way, Issaquah, WA

Condition: X Good ____ Damaged ____ Severe Damage

TYPE OF ANALYSIS		
ASBESTOS:	**METALS:** ____	
____ PCM (air)	____ Paint	____ Soil
X PLM (bulk)	____ Wipe	____ Air
____ Pt. Count (bulk)	____ TCLP	____ Water
MOLD: P&K ___ 100 ___ 101 ___ 102 ___ 105 ___ 117		
Other Method:		

Turn Around Time (other): 5 day		
2 hour / 4 hour	Same Day	One Day
Two Day	~~3-5 days~~	10 days
Price per Sample:	$____	

#	Client Sample ID	RGA Laboratory ID	Comments	#	Client Sample ID	RGA Laboratory ID	Comments
1	EH-01A	13004153		11	EH-05A	13004163	
2	EH-01B	13004154		12	EH-05B	13004164	
3	EH-01C	13004155		13	EH-05C	13004165	Hold
4	EH-02A	13004156		14	EH-06A	13004166	
5	EH-02B	13004157		15	EH-06B	13004167	
6	EH-02C	13004158		16	EH-07A	13004168	
7	EH-03A	13004159		17	EH-07B	13004169	
8	EH-04A	13004160		18	EH-08A	13004170	Hold
9	EH-04B	13004161	Hold	19	EH-08B	13004171	
10	EH-04C	13004162		20	EH-08C	13004172	

	Signature	Date	Time
Sampled by:	JOHN MCCASLIN/RUSSELL BROWNE	2/15/13	
Relinquished by:			
Received by:			
Relinquished by:		2/19/13	945
Received for Laboratory by:		022713	1545
Analyzed by:			
Preliminary Results Reported to P.M. by:			
Final Report to P.M. by:			

Special Instructions:
Due by 2/26/2013

Stop analysis at first positive.

Sample Log
Chain of Custody

RGA Laboratory Services
INTERNAL

Client:	Client Contact	**RGA Batch #:**	13-0423
Company:	King County Housing Authority	**RGA Project #:**	KCHA32114
Client Address:	15455 65th Ave S	**Client Job #:**	
Seattle	WA 98188-2583	**Number of Samples:**	76
City	State Zip		

Page: 2 of 3

#	Client Sample ID	RGA Laboratory ID	Comments	#	Client Sample ID	RGA Laboratory ID	Comments
21	EH-09A	13004173		41	EH-21A	13004193	
22	EH-10A	13004174		42	EH-21B	13004194	
23	EH-10B	13004175	Hold	43	EH-22A	13004195	
24	EH-10C	13004176		44	EH-22B	13004196	
25	EH-11A	13004177		45	EH-23A	13004197	
26	EH-11B	13004178		46	EH-23B	13004198	
27	EH-12A	13004179		47	EH-24A	13004199	
28	EH-13A	13004180		48	EH-24B	13004200	
29	EH-14A	13004181		49	EH-25A	13004201	
30	EH-15A	13004182		50	EH-25B	13004202	
31	EH-16A	13004183		51	EH-26A	13004203	
32	EH-16B	13004184		52	EH-27A	13004204	
33	EH-16C	13004185	Hold	53	EH-27B	13004205	
34	EH-17A	13004186		54	EH-28A	13004206	
35	EH-17B	13004187	Hold	55	EH-28B	13004207	
36	EH-17C	13004188		56	EH-29A	13004208	
37	EH-18A	13004189		57	EH-30A	13004209	
38	EH-19A	13004190		58	EH-31A	13004210	
39	EH-19B	13004191		59	EH-31B	13004211	
40	EH-20A	13004192		60	EH-32A	13004212	

	Signature	Date	Time
Sampled by:	JOHN MCCASLIN/RUSSELL BROWNE	2/5/13	
Relinquished by:			
Received by:			
Relinquished by:		2/19/13	945
Received for Laboratory by:		022713	1545
Analyzed by:			
Preliminary Results Reported to P.M. by:			
Final Report to P.M. by:			

Special Instructions:
Due by 2/26/2013

Stop analysis at first positive.

Sample Log
Chain of Custody

RGA Laboratory Services
INTERNAL

Client:	Client Contact	**RGA Batch #:**	13-0423
Company:	King County Housing Authority	**RGA Project #:**	KCHA32114
Client Address:	15455 65th Ave S	**Client Job #:**	
Seattle	WA 98188-2583	**Number of Samples:**	76
City	State Zip		

Page: 3 of 3

#	Client Sample ID	RGA Laboratory ID	Comments	#	Client Sample ID	RGA Laboratory ID	Comments
61	EH-32B	13004213		81			
62	EH-33A	13004214		82			
63	EH-34A	13004215		83			
64	EH-34B	13004216		84			
65	EH-35A	13004217		85			
66	EH-35B	13004218		86			
67	EH-36A	13004219		87			
68	EH-37A	13004220		88			
69	EH-37B	13004221		89			
70	EH-38A	13004222		90			
71	EH-38B	13004223		91			
72	EH-39A	13004224		92			
73	EH-40A	13004225		93			
74	EH-41A	13004226		94			
75	EH-41B	13004227		95			
76	EH-42A	13004228		96			
77				97			
78				98			
79				99			
80				100			

	Signature	Date	Time
Sampled by:	JOHN MCCASLIN/RUSSELL BROWNE	2/15/13	
Relinquished by:			
Received by:			
Relinquished by:			
Received for Laboratory by:		2/19/13	948
Analyzed by:		022713	1545
Preliminary Results Reported to P.M. by:			
Final Report to P.M. by:			

Special Instructions:
Due by 2/26/2013

Stop analysis at first positive.

RGA ENVIRONMENTAL

Attachment 2

RGA Technician Field Notes

RGA ENVIRONMENTAL

WWW.RGAENV.COM

PROJECT NAME: _____

RGA PROJECT #: ~~KCHA~~ DATE: _____

RGA REPRESENTATIVE: _____

DESCRIPTION: _____

NOTES: _____

EastRidge ~~Homes~~ (King Co Housing Auth)

ACM + Pb by XRF

3 story bldg - 40 units (2 units per floor - 6 units total)

Full plumbing removal + replacement

- Kitchens / Baths / Bedroom Closets
- Common areas w/ plumbing access
- Walls / Floors / plumbing usual
- Ext. Siding components

Ext. Samples -

2 GWB Ea unit (Bath/Closet)	= 12	45
1 GWB Ea Hallway	= 3	
2 Flooring ea unit	= 12	
2 CB ea unit	= 12	
? (2) Flooring ea hallway @ riser pen.	= 3	
1 CB ea Hallway	= 3	
2 ea. Siding	= 2	9
1 ea unit / 1 hall - Text	= 7	
Pipe insul? (10 ea)	= 10	10

RGA ENVIRONMENTAL

Attachment 3

ACM Materials Sample Location Drawing

KCHA 32114 2/15/2013

ACM Sample Locations

Unit 111 - Bath + Kitchen have same VFS + Lovebase

★ No Vapor barrier or other SACM @ Ext. Penetration location

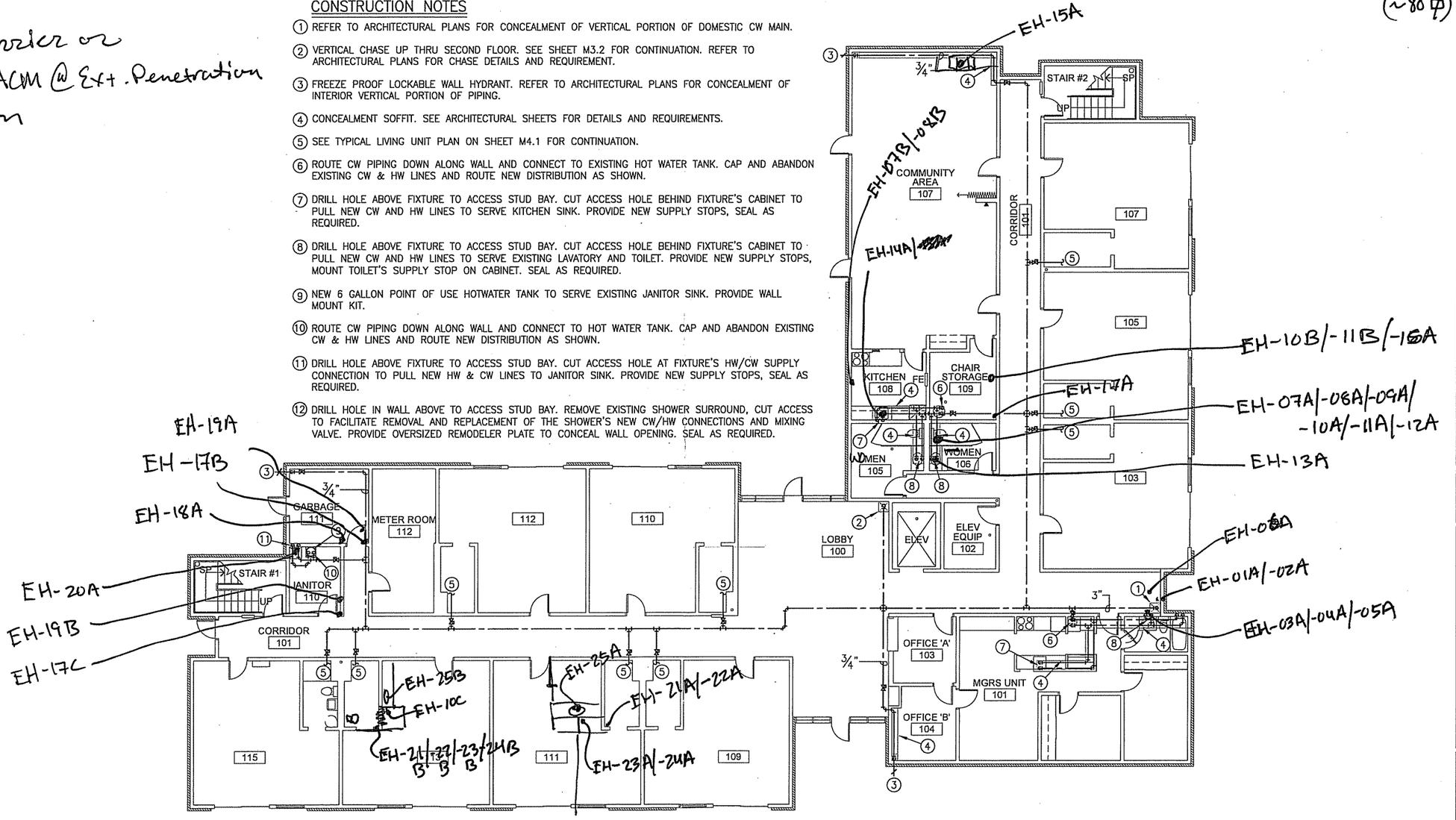
GENERAL NOTES

1. PIPING OFFSET FOR CLARITY. ROUTE SHOWN IS IDEAL. ADDITIONAL OFFSETS AND FITTINGS MAY BE REQUIRED DUE TO EXISTING SYSTEMS.
2. CW MAINS IN CORRIDORS SHALL BE COPPER AND SUSPENDED FROM STRUCTURE ABOVE DROPPED CEILING. LIVING UNIT'S SUPPLY BRANCHES SHALL BE PEX PIPING.

CONSTRUCTION NOTES

1. REFER TO ARCHITECTURAL PLANS FOR CONCEALMENT OF VERTICAL PORTION OF DOMESTIC CW MAIN.
2. VERTICAL CHASE UP THRU SECOND FLOOR. SEE SHEET M3.2 FOR CONTINUATION. REFER TO ARCHITECTURAL PLANS FOR CHASE DETAILS AND REQUIREMENT.
3. FREEZE PROOF LOCKABLE WALL HYDRANT. REFER TO ARCHITECTURAL PLANS FOR CONCEALMENT OF INTERIOR VERTICAL PORTION OF PIPING.
4. CONCEALMENT SOFFIT. SEE ARCHITECTURAL SHEETS FOR DETAILS AND REQUIREMENTS.
5. SEE TYPICAL LIVING UNIT PLAN ON SHEET M4.1 FOR CONTINUATION.
6. ROUTE CW PIPING DOWN ALONG WALL AND CONNECT TO EXISTING HOT WATER TANK. CAP AND ABANDON EXISTING CW & HW LINES AND ROUTE NEW DISTRIBUTION AS SHOWN.
7. DRILL HOLE ABOVE FIXTURE TO ACCESS STUD BAY. CUT ACCESS HOLE BEHIND FIXTURE'S CABINET TO PULL NEW CW AND HW LINES TO SERVE KITCHEN SINK. PROVIDE NEW SUPPLY STOPS, SEAL AS REQUIRED.
8. DRILL HOLE ABOVE FIXTURE TO ACCESS STUD BAY. CUT ACCESS HOLE BEHIND FIXTURE'S CABINET TO PULL NEW CW AND HW LINES TO SERVE EXISTING LAVATORY AND TOILET. PROVIDE NEW SUPPLY STOPS, MOUNT TOILET'S SUPPLY STOP ON CABINET. SEAL AS REQUIRED.
9. NEW 6 GALLON POINT OF USE HOTWATER TANK TO SERVE EXISTING JANITOR SINK. PROVIDE WALL MOUNT KIT.
10. ROUTE CW PIPING DOWN ALONG WALL AND CONNECT TO HOT WATER TANK. CAP AND ABANDON EXISTING CW & HW LINES AND ROUTE NEW DISTRIBUTION AS SHOWN.
11. DRILL HOLE ABOVE FIXTURE TO ACCESS STUD BAY. CUT ACCESS HOLE AT FIXTURE'S HW/CW SUPPLY CONNECTION TO PULL NEW HW & CW LINES TO JANITOR SINK. PROVIDE NEW SUPPLY STOPS, SEAL AS REQUIRED.
12. DRILL HOLE IN WALL ABOVE TO ACCESS STUD BAY. REMOVE EXISTING SHOWER SURROUND, CUT ACCESS TO FACILITATE REMOVAL AND REPLACEMENT OF THE SHOWER'S NEW CW/HW CONNECTIONS AND MIXING VALVE. PROVIDE OVERSIZED REMODELER PLATE TO CONCEAL WALL OPENING. SEAL AS REQUIRED.

Assumed Matls - Mens RR - 4" Beige CWT w/grout + mortar
- Garbage Room - White FRP on walls (to ~ 4')
- Unit 111 - Bathroom - CWT @ Bath (~ 10 ft)
- Unit 113 - Bathroom - Mastic @ Shower surround (~ 80 ft)



1 FIRST FLOOR PLUMBING PLAN
SCALE: 1/8"=1-0"

★ All matls. in Women's RR same as Men's RR

★ Texture on GWB Uniform thru common areas + hallways

bce engineers, inc.
p:(253) 922-0446
f: (253) 922-0896
6021 12th street east, suite 200, tacoma, wa 98424

SCOTT P. ZIMBELMAN STATE OF WASHINGTON REGISTERED PROFESSIONAL ENGINEER

KCHA
EASTRIDGE HOUSE
PLUMBING REPLACEMENT
ISSAQUAH, WA

FIRST FLOOR
PLUMBING PLAN

DRAWN BY: CB
CHECKED BY: SZ
REVISIONS:

DRAWING No.
M3.1

DATE: 1-10-12
CHECK SET
PROJECT No. 212-223

KCHA 32114 2/15/2013

Add Sample Locations

Tan Caulk at w/ Brown Mastic (same as FL1 common areas) in common areas on this floor

Janitor Closet - Same gasket as FL1 Jan. Clos.

Std Bathrooms ~ 6'X12'

GENERAL NOTES

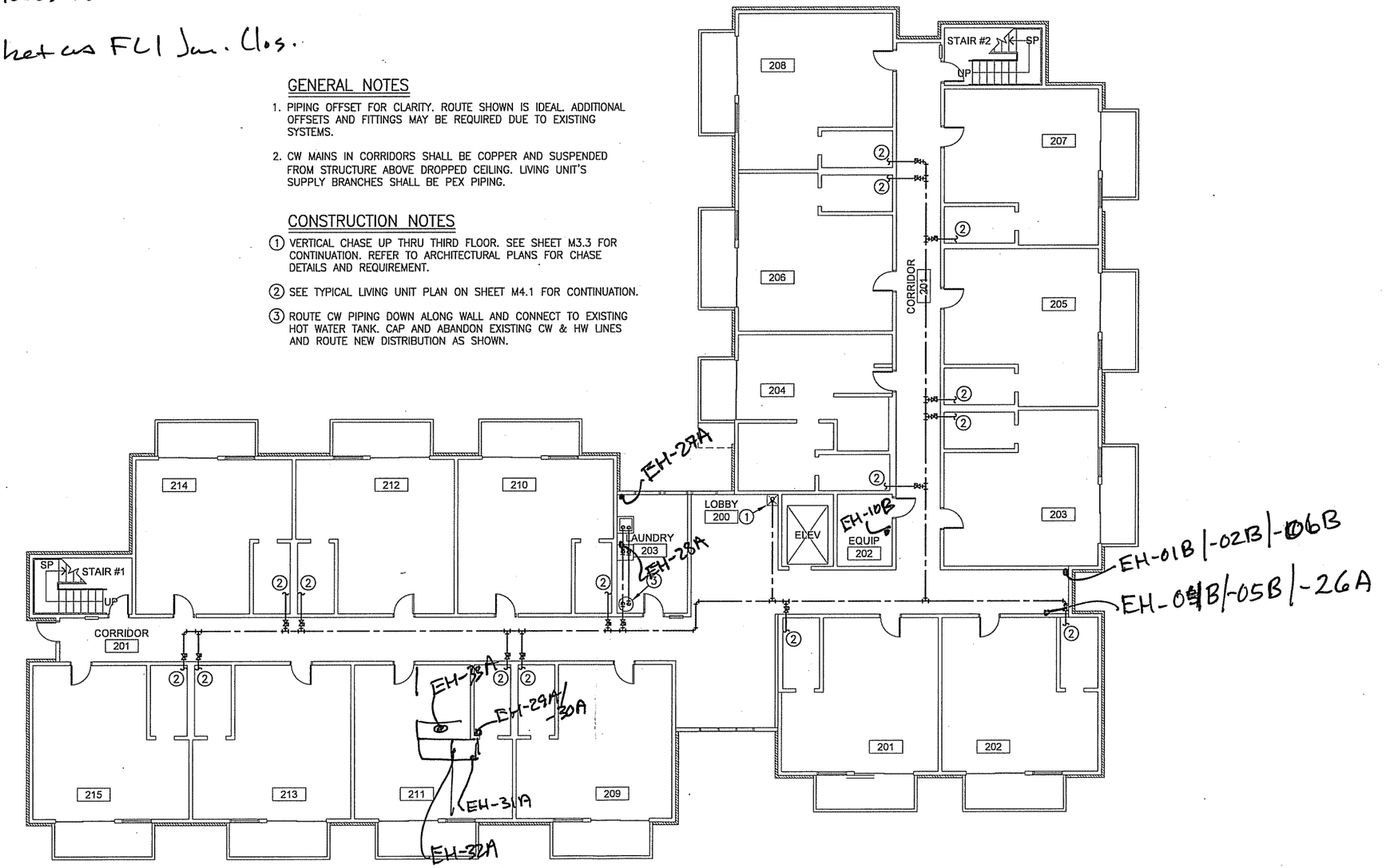
1. PIPING OFFSET FOR CLARITY. ROUTE SHOWN IS IDEAL. ADDITIONAL OFFSETS AND FITTINGS MAY BE REQUIRED DUE TO EXISTING SYSTEMS.
2. CW MAINS IN CORRIDORS SHALL BE COPPER AND SUSPENDED FROM STRUCTURE ABOVE DROPPED CEILING. LIVING UNIT'S SUPPLY BRANCHES SHALL BE PEX PIPING.

CONSTRUCTION NOTES

(1) VERTICAL CHASE UP THRU THIRD FLOOR. SEE SHEET M3.3 FOR CONTINUATION. REFER TO ARCHITECTURAL PLANS FOR CHASE DETAILS AND REQUIREMENT.

(2) SEE TYPICAL LIVING UNIT PLAN ON SHEET M4.1 FOR CONTINUATION.

(3) ROUTE CW PIPING DOWN ALONG WALL AND CONNECT TO EXISTING HOT WATER TANK. CAP AND ABANDON EXISTING CW & HW LINES AND ROUTE NEW DISTRIBUTION AS SHOWN.



2 SECOND FLOOR PLUMBING PLAN
SCALE: 1/8"=1-0'

N

bce engineers, inc.
p:(253) 922-0446
f: (253) 922-0896
6021 12th street east, suite 200, tacoma, wa 98424

SCOTT P. ZIMBELMAN
STATE OF WASHINGTON
REGISTERED
PROFESSIONAL ENGINEER

KCHA
EASTRIDGE HOUSE
PLUMBING REPLACEMENT
ISSAQUAH, WA

SECOND FLOOR
PLUMBING PLAN

DRAWN BY: CB
CHECKED BY: SZ
REVISIONS:

DRAWING No.
M3.2

DATE: 1-10-12
CHECK SET
PROJECT No. 212-223

KCHA 32114 2/15/2013
ACM sample locations

Unit 311 - Same VFT + CB as Unit 213

Laundry Room Vinyl + CB Same as FL 2 Laundry

GENERAL NOTES

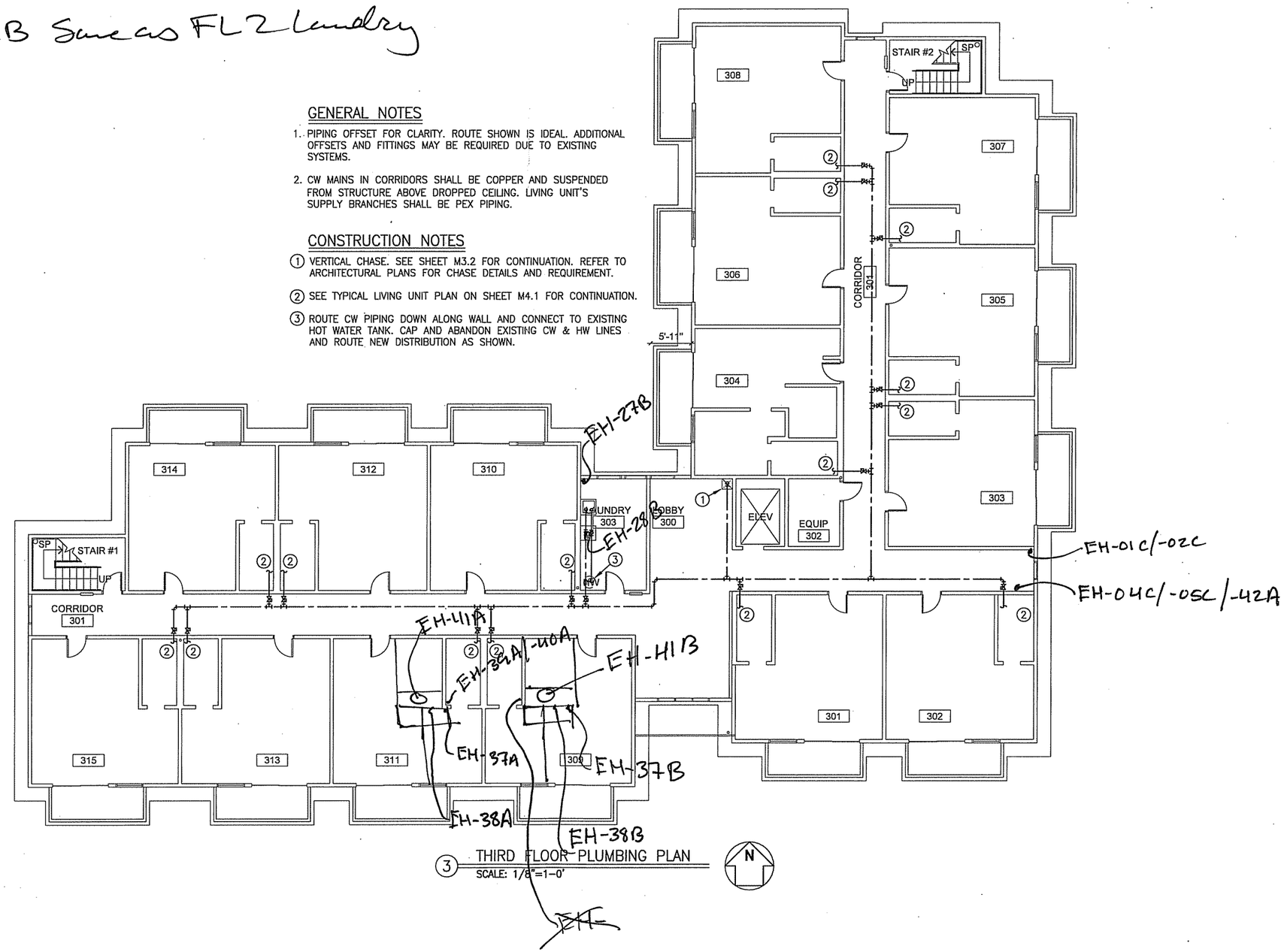
1. PIPING OFFSET FOR CLARITY. ROUTE SHOWN IS IDEAL. ADDITIONAL OFFSETS AND FITTINGS MAY BE REQUIRED DUE TO EXISTING SYSTEMS.
2. CW MAINS IN CORRIDORS SHALL BE COPPER AND SUSPENDED FROM STRUCTURE ABOVE DROPPED CEILING. LIVING UNIT'S SUPPLY BRANCHES SHALL BE PEX PIPING.

CONSTRUCTION NOTES

(1) VERTICAL CHASE. SEE SHEET M3.2 FOR CONTINUATION. REFER TO ARCHITECTURAL PLANS FOR CHASE DETAILS AND REQUIREMENT.

(2) SEE TYPICAL LIVING UNIT PLAN ON SHEET M4.1 FOR CONTINUATION.

(3) ROUTE CW PIPING DOWN ALONG WALL AND CONNECT TO EXISTING HOT WATER TANK. CAP AND ABANDON EXISTING CW & HW LINES AND ROUTE NEW DISTRIBUTION AS SHOWN.



3 THIRD FLOOR PLUMBING PLAN
SCALE: 1/8"=1-0'

bce engineers, inc.
p:(253) 922-0446
f: (253) 922-0896
6021 12th street east, suite 200, tacoma, wa 98424

SCOTT P. ZIMBELMAN STATE OF WASHINGTON 21148 REGISTERED PROFESSIONAL ENGINEER

KCHA
EASTRIDGE HOUSE
PLUMBING REPLACEMENT
ISSAQUAH, WA

THIRD FLOOR
PLUMBING PLAN

DRAWN BY: CB
CHECKED BY: SZ
REVISIONS:

DRAWING No.
M3.3

DATE: 1-10-12
CHECK SET
PROJECT No. 212-223

RGA ENVIRONMENTAL

Attachment 4

RGA Certifications

Certificate of Completion

This is to certify that

Angela Harkins

has satisfactorily completed

8 hours of refresher training as an

AHERA Project Designer

in compliance with TSCA Title II AHERA 40 CFR Part 763
U.S. EPA Region 10 Accreditation #792

Course Date: 05/07/2012 Cert.# 12-0906

Refresher required by: 5/7/2013

RGA ENVIRONMENTAL

1730 Minor Ave Suite 900
Seattle, WA 98101 • 888.281.8858
www.rgatraining.com

---

8 hours of refresher training as an
AHERA Project Designer

Angela Harkins
Cert.# 12-0906
Course Date: 05/07/2012
Refresher required by: 5/7/2013

Instructor: Ethel Kaufman

Ethel Kaufman

Training Manager: Wendy Newell
RGA Training: 206.269.6313
RGA Laboratory: 206.956.3775
RGA Consulting: 206.2696302
Corporate Office: 510.547.7771

RGA ENVIRONMENTAL 1730 Minor Ave Suite 900, Seattle, WA 98101
888.281.8858 • www.rgatraining.com

4 hours of refresher training as an
AHERA Building Inspector

David L. Welch
Cert.# **12-1164**

Course Date: 06/25/2012
Refresher required by: **6/25/2013**

Instructor: **Ethel Kaufman**

Training Manager: Wendy Newell
RGA Training: 206.269.6313
RGA Laboratory: 206.956.3775
RGA Consulting: 206.2696302
Corporate Office: 510.547.7771

RGA ENVIRONMENTAL 1730 Minor Ave Suite 900, Seattle, WA 98101
888.281.8858 • www.rgatraining.com

Certificate of Completion
This is to certify that
David L. Welch
has satisfactorily completed
4 hours of refresher training as an
AHERA Building Inspector
in compliance with TSCA Title II AHERA 40 CFR Part 763
U.S. EPA Region 10 Accreditation #792

Course Date: 06/25/2012 Cert.# **12-1164**
Refresher required by: **6/25/2013**

RGA ENVIRONMENTAL
1730 Minor Ave Suite 900
Seattle, WA 98101 • 888.281.8858
www.rgatraining.com

---

8 hours of refresher training as an
AHERA Project Designer

David L. Welch
Cert.# **12-2319**

Course Date: 11/19/2012
Refresher required by: **11/19/2013**

Instructor **Ethel Kaufman**

Training Manager: Wendy Newell
RGA Training: 206.269.6313
RGA Laboratory: 206.956.3775
RGA Consulting: 206.2696302
Corporate Office: 510.547.7771

RGA ENVIRONMENTAL 1730 Minor Ave Suite 900, Seattle, WA 98101
888.281.8858 • www.rgatraining.com

Certificate of Completion
This is to certify that
David L. Welch
has satisfactorily completed
8 hours of refresher training as an
AHERA Project Designer
in compliance with TSCA Title II AHERA 40 CFR Part 763
U.S. EPA Region 10 Accreditation #792

Course Date: 11/19/2012 Cert.# **12-2319**
Refresher required by: **11/19/2013**

RGA ENVIRONMENTAL
1730 Minor Ave Suite 900
Seattle, WA 98101 • 888.281.8858
www.rgatraining.com

Certificate of Completion

This is to certify that

John McCaslin

has satisfactorily completed

4 hours of refresher training as an

AHERA Building Inspector

in compliance with TSCA Title II AHERA 40 CFR Part 763
U.S. EPA Region 10 Accreditation #792

Course Date: 05/10/2012 Cert.# **12-0923**

Refresher required by: **5/10/2013**

RGA ENVIRONMENTAL

1730 Minor Ave Suite 900
Seattle, WA 98101 • 888.281.8858
www.rgatraining.com

---

4 hours of refresher training as an
AHERA Building Inspector

John McCaslin
Cert.# **12-0923**
Course Date: 05/10/2012
Refresher required by: **5/10/2013**

Instructor: **Ethel Kaufman**

Training Manager: Wendy Newell
RGA Training: 206.269.6313
RGA Laboratory: 206.956.3775
RGA Consulting: 206.2696302
Corporate Office: 510.547.7771

RGA ENVIRONMENTAL 1730 Minor Ave Suite 900, Seattle, WA 98101
888.281.8858 • www.rgatraining.com

G703 - *Continuation*

EXHIBIT S

APPLICATION NO:	01
APPLICATION DATE:	
PERIOD FROM:	
PERIOD TO:	

A	B	C	D	E	F	G		H	I
ITEM NO.	DESCRIPTION OF WORK	SCHEDULED VALUE	WORK COMPLETED		MATERIALS PRESENTLY STORED (NOT IN D OR E)	TOTAL COMPLETED & STORED TO DATE (D + E + F)	% (G ÷C)	BALANCE TO FINISH (C - G)	RETAINAGE (AGGREGATE TO DATE)
			FROM PREVIOUS APPLICATION(S) (G)	THIS PERIOD					
	Allowance & Contingencies	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Close-Out 5%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Bonds & Insurance	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	O&P	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	General Conditions	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Permits	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Hazmat/Abatement	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Demo-Heat Systems	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Demo-Electrical	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Electrical-Materials	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Electrical-Labor	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Demo-Capentry	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Carpenty-Materials	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Carpentry-Labor	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Wall Mounted heat pumps-Equip	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Materials	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Labor	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Electric Cove Heaters-Equip	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Materials	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Labor	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	ERV (Community Room)-Equip	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Materials	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Labor	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Exhaust Fans-Equip	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Materials	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Labor	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Grilles, Registers, Diffusers-Equip	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Materials	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Labor	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	GWB Repairs	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Painting	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	TAB	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	Commissioning Coordination	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	TOTALS	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	0% RETAINAGE	0.00	0.00	0.00	0.00	0.00			
	TOTALS LESS RETAINAGE	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**

G703 - *Continuation*

EXHIBIT S

APPLICATION NO:	01
APPLICATION DATE:	
PERIOD FROM:	
PERIOD TO:	

A	B	C	D	E	F	G	H	I
	TOTAL BALANCE TO FINISH (H + I)							0.00
	NET CHANGE ORDERS THIS PERIOD:	0.00	CHANGE ORDERS APPROVED THIS PERIOD (LIST C/O #s)					
	NET C/O ADDITIONS (THIS PERIOD):	0.00	NET C/O DEDUCTIONS (THIS PERIOD):		0.00			
	TOTAL CHANGE ORDERS TO DATE:	0.00						