

ATTACHMENT J:

MEDTOX – HERRERA HAZMAT SURVEY 2013

HAZARDOUS BUILDING MATERIALS SURVEY

King County Youth Detention Facility
Spruce Wing
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Acronyms

AAS	atomic absorption spectroscopy
ACM	asbestos-containing materials
ASHERA	Asbestos Hazard Emergency Response Act
ASHARA	Asbestos Schools Hazard Abatement Reauthorization Act
ASTM	American Society of Testing and Materials
CMU	cement masonry unit
CFC	chlorofluoro carbons
CFR	Code of Federal Regulation
CSP	Certified Safety Professional
DEHP	Di (2-ethylhexyl) phthalate
EPA	U.S. Environmental Protection Agency
HBM	hazardous building materials
HID	high intensity discharge
HM	homogeneous material
HVAC	heating, ventilation and air-conditioning
LBP	lead-based paint
LF	linear feet
LOD	level of detection
mg/cm ²	milligrams per square centimeter
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MTNW	Med-Tox Northwest
ND	none detected
NVLAP	National Voluntary Laboratory Accreditation Program
OSHA	Occupational Safety and Health Administration
PCB	polychlorinated biphenyl
PLM	polarized light microscopy
ppm	parts per million
PSCAA	Puget Sound Clean Air Agency
RCRA	Resource Conservation and Recovery Act
SF	square feet
TCLP	toxicity characteristic leaching procedure
TSCA	Toxic Substance Control Act
TSI	thermal system insulation
WAC	Washington Administration Code
WDOC	State of Washington Department of Commerce
WISHA	Washington Industrial Safety and Health Administration
WRD	WISHA Regional Directive
XRF	x-ray fluorescence
%wt	percent by weight

Survey Summary

On July 22nd-24th, 2013, Anthony Fullerton of Med-Tox Northwest (MTNW) and Brady Hanson of Herrera Environmental Consultants, Inc. (Herrera) conducted a hazardous building materials (HBM) survey of the King County Youth Detention Facility Spruce Wing located at 1211 East Alder Street in Seattle, Washington. This survey was performed for demolition purposes. The building was occupied at the time of the survey.

The survey included asbestos, lead-based paint (LBP), and other potential HBM such as chlorofluoro carbons (CFC), polychlorinated biphenyl (PCB) in light ballasts, mercury-containing fluorescent tubes and/or thermostats. Due to a lack of lead in painted materials, waste designation was not performed for construction debris based on segregation of building materials and toxicity characteristic leaching procedure (TCLP) analysis at the time of the survey.

This asbestos survey consisted of a visual inspection, touching of suspect materials, and sample collection with analysis. A previous 2011 survey report by Med-Tox Northwest was available and reviewed as part of the survey and is included in **Appendix A**. Copies of the inspectors Asbestos Hazard Emergency Response Act (AHERA) building inspector certificates and State of Washington Department of Commerce (WDOC) lead-based paint accreditation certificates are included in **Appendix B**.

Building Information

Photographic documentation of the building and its' major systems described herein are provided in **Appendix C**.

General and Structural

According to the 2011 MTNW survey report, King County documents show the Spruce Wing was constructed in 1993 as a youth living quarter (detention). Spruce Wing is a concrete building wing on a concrete foundation with concrete floors and ceilings and interior cement masonry unit (CMU) walls segregated into two levels. The exterior walls also have a brick finish. Roofing is a combination of three-tab composition, rolled, composition and white rubber membrane roofing over Spruce Wing. Windows throughout are metal framed. Areas within Spruce Wing covered in this report include central control rooms, intake area, Halls A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q and Z; Post areas 2, 3, and 4; mechanical rooms, electrical rooms, kitchen, health room, pool area, gym and school area.

Wall and Ceiling Finishes

Most of the walls throughout Spruce Wing consist of concrete or CMU, with additional wall finishes of plaster, un-textured gypsum wallboard and ceramic tiles. Several colors of 4-inch cove base can also be found on walls throughout Spruce Wing. Ceiling substrates throughout the holding cells are painted concrete due to the structural construction, the halls have un-textured gypsum wallboard and plaster with metal lathe. There are also various architectural ceiling finishes, including 12-inch glued on acoustical ceiling tile, 2-x 2-foot lay in acoustical ceiling tile and 2-x 4-foot lay in acoustical ceiling tile.

Flooring Systems

Substrates throughout all floors are concrete. Finish flooring materials consist of 12-inch vinyl floor tiles, sheet vinyl, rubber flooring, carpet, carpet squares, epoxy flooring and no-skid textured flooring.

Heating/Mechanical/Plumbing System

Heating, ventilation, and air conditioning (HVAC) systems for Spruce Wing consist of forced air mechanical systems. The ducting for the heating system is located above the ceiling. Piping throughout the Spruce Wing was either un-insulated or had fiberglass insulation with poly-vinyl chloride (PVC) fittings.

Asbestos Summary

The AHERA regulation, 40 Code of Federal Regulations (CFR) 763, is the primary governing regulation when performing asbestos surveys. This regulation was originally enacted for school buildings, but has since been applied to public and commercial buildings by the Asbestos School Hazard Abatement Reauthorization Act (ASHARA) in 1994 and by the Occupational Safety and Health Administration's (OSHA) worker protection regulations in 1995, specifically 29 CFR 1926.1101(k).

Puget Sound Clean Air Agency (PSCAA) also requires compliance with AHERA's survey and sampling requirements. This applies to any renovation or demolition activities where suspect asbestos-containing material (ACM) may be disturbed. PSCAA is a local agency that receives statutory authority from the U.S. Environmental Protection Agency (EPA) to enforce environmental regulations.

AHERA divides suspect ACM into three categories; "*surfacing materials*" (i.e., sprayed fireproofing, popcorn ceiling texture, etc.), "*thermal system insulation*" (TSI) (i.e., pipe or building insulation, etc.), and "*miscellaneous materials*" (i.e., flooring material, roofing, construction mastics, etc.). Spruce Wing was surveyed for these materials and

sampled as required (176 samples collected). For a complete listing of suspect materials sampled, see **Appendix D**.

Sampling locations are indicated on drawings in **Appendix E**.

Table 1 below provides a summary of asbestos materials identified in the building from existing surveys and the results of sampling by Med-Tox Northwest. These materials will need to be removed prior to building demolition.

Table 1. Summary of Asbestos-Containing Materials.

Material	Location	Friable	Quantity
Black tar sealant patch	South peak roof	No	4 SF
Black vent sealant around vents	Pool office area roof	No	24 SF
Black mastic under exterior window frame caulk	Upper pool windows	No	210 LF

LF= linear feet, SF= square feet. Note: This table is not to be used without the complete survey document including appendices for additional information.

Homogeneous material (HM) descriptions in the following text are provided to help correlate material descriptions provided in Appendix D.

Surfacing Materials

There were five (5) surfacing materials identified as defined in 40 CFR 763 identified in the building.

- Gray spray-on fireproofing (HM01). This material was applied to the structural steel and metal pan decking throughout Spruce Wing. Seven samples were collected based on square footage and analyzed for asbestos content; this material is negative for asbestos.
- White fire stop pipe penetration sealant (HM02). This material was identified in the kitchen storage room and health clinic. Five samples were collected and analyzed for asbestos content; this material is negative for asbestos
- White CMU smooth coat (HM03). This material was found on walls throughout the health clinic. Seven samples were collected based on square footage and analyzed for asbestos content; no asbestos was detected.
- CMU coating (HM04). This material was found on walls throughout the Spruce Wing. Seven samples were collected based on square footage and analyzed for asbestos content; no asbestos was detected.
- Plaster and skim coat (HM14). This material was found on walls and ceilings throughout the Hall areas of Spruce Wing. Seven samples were collected

based on square footage and analyzed for asbestos content; no asbestos was detected.

Thermal System Insulation

There was one TSI material as defined by 40 CFR 763 identified in Spruce Wing.

- Fiberglass pipe insulation with PVC fittings. This material was found on piping throughout Spruce Wing. Fiberglass insulation was visually determined non-asbestos-containing.

Miscellaneous Materials

- Un-textured gypsum wallboard (HM05). This material was found on walls throughout the School Area. Three samples were collected and analyzed for asbestos content; no asbestos was detected.
- Un-textured gypsum wallboard (HM06). This material was found on walls throughout the Health Center. Three samples were collected and analyzed for asbestos content; no asbestos was detected.
- CMU grout (HM07). This material was observed on walls in the Pool Area. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- Un-textured gypsum wallboard (HM08). This material was found on walls throughout the Hall areas. Three samples were collected and analyzed for asbestos content; no asbestos was detected.
- Un-textured gypsum wallboard (HM09). This material was found on walls throughout the former Pool Area offices. Two samples were collected and analyzed for asbestos content; no asbestos was detected.
- CMU grout (HM10). This material was observed on walls throughout Spruce Wing. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- Black window frame caulk (HM11). This material was identified around interior windows throughout Spruce Wing. Three samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- Gray duct sealant (HM12). This material was found on ducting throughout Spruce Wing. Three samples were collected and analyzed for asbestos content; this material is negative for asbestos.

- Red pipe penetration sealant (HM13). This material was identified in the Health Center and Pool Area. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- 12-inch beige mottled floor tile with black mastic (HM15). The Intake room has this flooring. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- 12-inch beige mottled floor tile with yellow mastic (HM16). The Gym Storage, Recreation/Supervisor Room and Library Checkout have this flooring. Three samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- 12-inch black with white flecks floor tile with white mastic (HM17). The central hallways of Spruce Wing have this flooring. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- Terrazzo pattern sheet vinyl flooring (HM18). This flooring can be found in the Health Center of Spruce Wing. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- Green rubber flooring mastic (HM19). This flooring can be found in the hallways of Spruce Wing. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- 12-inch white with black specks floor tile with black mastic (HM20). The Pool Area office's hallway has this flooring. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- No skid textured floor (HM21). This flooring material is located in the Kitchen of Spruce Wing. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- No skid textured floor (HM22). This flooring material is located in the Pool Area of Spruce Wing. Three samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- Wood grain rubber flooring with yellow mastic (HM23). This flooring material is located in the Gym of Spruce Wing. One sample was collected and analyzed for asbestos content; this material is negative for asbestos.
- Yellow carpet mastic (HM24). This floor material was found throughout various rooms in Spruce Wing. Three samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- Carpet mastic over gray leveling (HM25). This floor material was found in the Intake room. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- Tan carpet mastic (HM26). This floor material was found in the Pool Area. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.

- Yellow carpet mastic over white concrete sealant (HM27). This floor material was found in the School Area. Three samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- Gray epoxy flooring (HM28). This floor material was found in the Intake room and Kitchen. Three samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- Gray carpet square mastic (HM29). This flooring material is located in the Health Center. One sample was collected and analyzed for asbestos content; this material is negative for asbestos.
- Gray stair tread mastic (HM30). This flooring material is located in M Hall of Spruce Wing. One sample was collected and analyzed for asbestos content; this material is negative for asbestos.
- Tan stair tread mastic (HM31). This flooring material is located in L Hall of Spruce Wing. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- Newer green rubber floor mastic (HM32). This flooring material is throughout Hall A of Spruce Wing. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- 2-x 2-foot acoustical ceiling tile (ACT) (HM33). This material was observed in the metal t-grid drop ceiling system in the Pool Area. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- 12-inch ACT and brown mastic (HM34). This material was observed on the ceiling of Hall A and Hall L of Spruce Wing. Three samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- 12-inch ACT and tan mastic (HM35). This material was observed on the ceiling of Hall Z of Spruce Wing. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- 2-x 4-foot ACT with wormhole pattern (HM36). This material was observed in the metal t-grid drop ceiling system in the Kitchen. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- 2-x 4-foot ACT with random deep fissure and pinhole pattern (HM37). This material was observed in the metal t-grid drop ceiling system throughout Spruce Wing. Four samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- 2-x 4-foot ACT with random shallow fissure and pinhole pattern (HM38). This replacement tile was observed in the metal t-grid drop ceiling system in the Health Center. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.

- 4-inch light gray cove base and mastic (HM39). This material was identified in the Intake room and Recreation supervisor office of Spruce Wing. Three samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- 4-inch gray cove base and mastic (HM40). This material was identified in the Library and Health Center of Spruce Wing. Three samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- 4-inch tan cove base and mastic (HM41). This material was identified in the School Area by Room 010 of Spruce Wing. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- 4-inch blue cove base and mastic (HM42). This material was identified in the Pool Area office of Spruce Wing. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- 2-inch ceramic floor and wall tile grout (HM43). This material was identified in the School Area Room 008 of Spruce Wing. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- Concrete seam sealant (HM44). This material was identified between concrete floor seams throughout Spruce Wing. Three samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- Concrete crack filler (HM45). This filler material was identified between concrete floor seams throughout Spruce Wing. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- Gray window seam sealant (HM46). This window replacement material was found on Courtyard M windows of Spruce Wing. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- Roof tar (HM47). This material was found seeping down a wall in the Pool Area of Spruce Wing. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- Black sink undercoat (HM48). This material was found in the Health Center Room 42. One sample was collected and analyzed for asbestos content; this material is negative for asbestos.
- Black sink undercoat (HM49). This material was found in the Health Center South hallway. One sample was collected and analyzed for asbestos content; this material is negative for asbestos.
- Black sink undercoat (HM50). This material was found in L Hall of Spruce Wing. One sample was collected and analyzed for asbestos content; this material is negative for asbestos.
- Black sink undercoat (HM51). This material was found in the Intake room of Spruce Wing. One sample was collected and analyzed for asbestos content; this material is negative for asbestos.

- Black sink undercoat (HM52). This material was found in the School Area Room 006C of Spruce Wing. One sample was collected and analyzed for asbestos content; this material is negative for asbestos.
- Black sink undercoat (HM53). This material was found in the School Area Room 002B of Spruce Wing. One sample was collected and analyzed for asbestos content; this material is negative for asbestos.
- Pipe gasket (HM54). This material was found in the west mechanical room. One sample was collected and analyzed for asbestos content; this material is negative for asbestos.
- Three-tab composition roofing (HM55). This material was identified on the south roof of Spruce Wing. One sample was collected and analyzed for asbestos content; this material is negative for asbestos.
- Three-tab composition roofing (HM56). This material was identified on the north roof of Spruce Wing. One sample was collected and analyzed for asbestos content; this material is negative for asbestos.
- Vapor barrier (HM57). This material was identified on the north and south roof under HM55 and HM56. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- Rolled composition roofing (HM58). This material was identified on the lower pool roof. One sample was collected and analyzed for asbestos content; this material is negative for asbestos.
- Rolled composition roofing (HM59). This material was identified on the upper pool roof. One sample was collected and analyzed for asbestos content; this material is negative for asbestos.
- White rubber membrane roof (HM60). This material was identified on the main roof. One sample was collected and analyzed for asbestos content; this material is negative for asbestos.
- Pitched roof parapet composition roofing (HM61). This material was identified on the south roof of Spruce Wing. One sample was collected and analyzed for asbestos content; this material is negative for asbestos.
- White rubber membrane flashing sealant (gray) (HM62). This material was identified on the roof. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- White rubber membrane flashing sealant (tan) (HM63). This material was identified on the roof. One sample was collected and analyzed for asbestos content; this material is negative for asbestos.
- **Black tar sealant patch (HM64).** The south peak roof of Spruce Wing has this patching material adhered to it. One sample was collected and analyzed for asbestos content; **this material was determined to contain 4% Chrysotile asbestos.**

- **Black vent sealant (HM65).** The former pool office area roof of Spruce Wing has this material adhered to vents. One sample was collected and analyzed for asbestos content; **this material was determined to contain 5% Chrysotile asbestos.**
- **Black flashing caulk (HM66).** This material was identified around the roof flashing of Spruce Wing. Three samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- **Vertical CMU caulk (HM67).** This material was identified on exterior CMU walls of Spruce Wing. Three samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- **Window frame caulk (HM68).** This material is found around exterior upper metal in-laid windows in the pool area. Two samples were collected and analyzed for asbestos content; the window frame caulk was negative for asbestos content; however, **the black mastic under the window frame caulk was determined to contain 3% Chrysotile asbestos.**
- **Gray window frame caulk (HM69).** This material was identified around the exterior window frames of Spruce Wing. Four samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- **Gray door frame caulk (HM70).** This material was identified around the exterior door frames. Three samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- **Concrete to CMU wall cap caulk (HM71).** This material was identified on the exterior of Spruce Wing. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- **Mechanical room vent frame caulk (HM72).** This material was identified on the north side exterior of the mechanical room. One sample was collected and analyzed for asbestos content; this material is negative for asbestos.
- **Brick mortar (HM73).** This material was identified on brick walls of the Spruce Wing. Three samples were collected and analyzed for asbestos content; this material is negative for asbestos.
- **Concrete skim coat (HM74).** This exterior wall material was identified on the east side of the Pool Area. Two samples were collected and analyzed for asbestos content; this material is negative for asbestos.

Table 2 below lists all suspect materials that have been determined non-asbestos based on existing surveys and sampling performed by Med-Tox Northwest.

Table 2. Summary of Suspect Materials Determined Non-Asbestos.

Material	Material
Gray spray-on fireproofing	White fire stop pipe penetration sealant
White CMU smooth coat	CMU coating
Un-textured gypsum wallboard system (4 types)	CMU grout (2 types)
Black window caulk	Gray duct sealant
Red pipe penetration sealant	Plaster and skim coat
12-inch beige mottled vinyl floor tile and black mastic	12-inch beige mottled vinyl floor tile and yellow mastic
12-inch black with white flecks vinyl floor tile and white mastic	Terrazzo pattern sheet vinyl flooring
Green rubber flooring mastic	12-inch white with black specks vinyl floor tile and black mastic
No skid textured floor (2 types)	Wood grain rubber flooring with yellow mastic
Yellow carpet mastic	Carpet mastic over gray leveling
Tan carpet mastic	Yellow carpet mastic over white concrete sealant
Gray epoxy flooring	Gray carpet square mastic
Gray stair tread mastic	Tan stair tread mastic
Newer green rubber floor mastic	2-x 2-foot ACT
12-inch ACT and brown mastic	12-inch ACT and tan mastic
2-x 4-foot ACT wormhole pattern	2-x 4-foot ACT random deep fissure and pinhole pattern
2-x 4-foot ACT random shallow fissure and pinhole pattern (replacement tile)	4-inch light gray cove base and mastic
4-inch gray cove base and mastic	4-inch tan cove base and mastic
4-inch blue cove base and mastic	2-inch ceramic floor and wall tile grout
Concrete seam sealant	Concrete crack filler
Gray window seam sealant (replacement)	Roof tar-Pool Area
Black sink undercoat (6 types)	Pipe gasket
Three-tab composition roofing (2 types)	Vapor barrier
Rolled composition roofing (2 types)	White rubber membrane roof
Pitched roof parapet composition roofing	White rubber membrane flashing sealant (gray)
White rubber membrane flashing sealant (tan)	Black flashing caulk
Vertical CMU caulk	Gray window frame caulk
Gray door frame caulk	Concrete to CMU wall cap caulk
Mechanical room vent frame caulk	Brick mortar
Concrete skim coat	

Note: This table is not to be used without the complete survey document including appendices for additional information.

Lead-Based Paint Summary

Lead was commonly used in most paint products until 1978, when it was banned from residential paints at concentrations greater than 600 parts per million (ppm); however, commercial applications with lead were still utilized and are still available. Lead is poisonous to the human body and presents a potential health hazard during any kind of disturbance (such as maintenance, including grinding, welding, and cutting) and if improperly disposed, where lead can enter drinking water supplies.

EPA defines lead-based paint as a concentration of 1.0 milligram per centimeter squared (mg/cm^2) or greater by X-Ray fluorescence (XRF) or 0.5 percent by weight or greater by total lead analysis (equivalent to 5,000 milligrams per kilogram [mg/kg]). This EPA action level triggers requirements for protection of the environment, maintenance workers, and building occupants. It also triggers training and certification requirements for inspectors, project designers, contractors, supervisors, and workers. Although the training requirements only apply to certain residential structures at this time, they could apply to this type of property sometime in the future.

The Washington Industrial Safety and Health Administration (WISHA) worker protection regulations have not defined a minimum concentration for regulating lead, and have clarified that lead at any detectable concentration shall be considered regulated (Washington Administrative Code [WAC] 296-155-176, Lead).

Lead in Painted Surfaces

Interior and exterior painted surfaces were tested for LBP using bulk sample collection and chemical analysis. A total of 14 paint chip samples were collected. Analytical results are provided in **Table 3**.

Table 3. Summary of Bulk Paint Chip Sample Results.

Sample Number	Location	Component	Substrate	Color	Result (%wt)
7258.15-AF-01Pb	School Area	Wall	CMU	White	<0.029
7258.15-AF-02Pb	Health Clinic	Wall	CMU	Aqua	<0.013
7258.15-AF-03Pb	Health Clinic	Wall	GWB	Blue	<0.010
7258.15-AF-04Pb	Library	Wall	GWB	White	<0.010
7258.15-AF-05Pb	Hall A	Wall	CMU	White	<0.010
7258.15-AF-06Pb	Kitchen	Floor	Concrete	Gray	<0.022
7258.15-AF-07Pb	Hall L	Wall	CMU	White	<0.012
7258.15-AF-08Pb	Exterior	Wall	Concrete	Gray	<0.010
7258.15-AF-09Pb	Exterior	Wall	Brick	Red	<0.016
7258.15-AF-10Pb	Hall L	Wall	Plaster	White	<0.010
7258.15-AF-11Pb	Pool Area	Wall	CMU	White	<0.019
7258.15-AF-12Pb	Pool Area	Wall	Concrete	Beige	<0.017
7258.15-AF-13Pb	Kitchen	Wall	Concrete	Beige	<0.015
7258.15-AF-14Pb	Intake	Wall	CMU	Beige	<0.011

%wt= percent in weight. **Bolded values** – bulk paint chip samples with lead detected above the laboratory reporting limit have been bolded. WISHA worker protection regulations have stated that lead at any detectable concentration shall be considered regulated WAC 296-155-176, Lead.

Waste Designation Survey

The TCLP procedure is used to simulate the transfer of lead from lead-containing waste into the ground water system upon co-disposal of the lead-containing waste and municipal solid waste in unlined solid waste landfills. The TCLP attempts to simulate rain or ground water leaching, or both, of lead from the buried waste. In order for the procedure to yield an accurate predictor of the subsurface (in-ground) leaching process, a representative sample of the volume of the waste must be selected and submitted for leaching and analysis. The result of the sampling, leaching, and analysis process is used to determine the waste handling and disposal protocols to be followed and to document compliance with applicable laws, regulations, and requirements. WAC 173-303 Dangerous Waste Regulations defines hazardous waste as it relates to lead by toxicity as 5.0 milligrams per Liter (mg/L) by TCLP.

A visual inspection of the survey area was conducted to separate the major components of the structures to be demolished into two categories:

- **Recyclables.** It is anticipated that many of the metal items (i.e., metal piping, tanks, door frames, doors, handrails, flashing, aluminum window frames, etc.) and un-painted clean concrete materials in the survey area will be recycled or reused. These items were not tested for waste pre-designation. Additionally, glass is recyclable and not included in the waste designation survey.
- **Potential Wastes.** Items that are not likely to be recycled were sampled and tested for waste pre-designation. Since it is likely that the waste identified on this project will be segregated and disposed separately, samples of concrete, cement masonry unit (CMU) and all other building finish materials were collected and tested from the structures to be demolished.
- **Assumed hazardous waste.** None.

No TCLP sampling was performed based on a lack of lead in painted materials.

Other Hazardous Building Materials

Chlorofluoro Carbons

Med-Tox Northwest inspected the building for cooling systems with potential chlorofluorocarbons. Spruce Wing has a roof mounted cooling system in the heating, ventilation and air-conditioning (HVAC) system. This system will need to be drained prior to demolition of the building.

PCB Light Ballasts and Fluorescent Light Tubes

Older fluorescent light ballasts have small capacitors that may contain high concentrations of PCBs. Nearly all ballasts manufactured before 1979 contain PCBs. All ballasts manufactured after July 1, 1978 that do not contain PCBs are required to be clearly marked "No PCBs". Unmarked ballasts or ballasts without a date code should be assumed to be PCB ballasts. PCBs are toxic chemicals according to the EPA. While there is only a small amount, about one ounce, of PCBs in each light ballast capacitor, there are a large number of ballasts in the United States. About half of the one billion ballasts, estimated as currently installed, were manufactured before 1979 and usually contain PCBs. Ballasts manufactured after 1978 may contain a PCB replacement called Di (2-ethylhexyl) phthalate (DEHP), a probable human carcinogen. In any case, ballasts should not be disassembled for disposal but collected and sent to a certified recycling/disposal facility.

Fluorescent light fixtures were observed throughout the building. These fixtures were not inspected for the presence of PCB light ballasts due to being in use and the likelihood that many have been replaced since 1971. Determining how many

fluorescent lights actually contain PCB ballasts can only be verified during demolition. Therefore, all light fixtures are assumed to contain PCB light ballasts; light tubes are assumed to contain mercury. Additionally, exit lights, high intensity discharge (HID) lamps, smoke and heat detectors, and fire extinguishers may be regulated as universal or hazardous waste and will require dismantling and special handling. **Table 4** provides a summary of these items in the building:

Table 4. Summary of Fluorescent, HID, and Exit Lights.

Location /floor	HID lights	4-foot, 4-bulb	4-foot, 2-bulb	4-foot, 1-bulb/ bent tubes	Exit lights /emergency lights	Fire alarm/ fire extinguishers	Smoke/ heat detectors
1 st floor, intake, and Z-wing	0	280	225	9/8	2/17	0	0
Total	0	280	225	9/8	2/17	0	0

Typically, there is one-ballast for every two light tubes in a fluorescent light fixture; accordingly, there are approximately 802 ballasts in the light fixtures requiring recycling or PCB hazardous waste disposal. There are also approximately 1,354 four-foot light tubes and eight (8) bent tubes that will need to be recycled during demolition.

Mercury Containing Switches

There were no switches observed.

Laboratory Analytical Methods

Asbestos-Containing Materials

Bulk samples were analyzed by Polarized Light Microscopy (PLM) dispersion staining EPA Method 600/R-93/116 by Seattle Asbestos Test, LLC. Seattle Asbestos Test, LLC is accredited through the National Voluntary Laboratory Accreditation Program (NVLAP) of the U. S. Department of Commerce. This accreditation does not constitute endorsement, but rather a finding of laboratory competence. Seattle Asbestos Test, LLC participant number is 200768-0 (certifications in **Appendix F**). A copy of the laboratory analytical report is provided in **Appendix G**.

Lead-Based Paint

Bulk paint chip samples were submitted to EMSL Analytical, Inc. for analysis. A total of 14 paint chip sample were analyzed for lead using atomic absorption spectroscopy

(AAS) to determine the presence and percentage of lead. Procedures for analyzing metals are found in the ASTM D-3335-78 and EPA Method Manual SW-846, Method 6010B.

Analytical results for bulk paint chip sampling are provided in **Appendix H**, laboratory certification for EMSL Analytical, Inc. is attached in **Appendix I**.

Comments and Recommendations

Asbestos-Containing Materials

All materials identified in Table 1 will require removal prior to demolition of Spruce Wing.

Med-Tox Northwest recommends that this survey report be placed on-site during renovation and/or demolition and copies provided to the contractor(s) bidding and performing work. Washington Industrial Safety and Health Administration (WISHA), OSHA and PSCAA require that the report be on-site and available for review during the entire project duration.

Additional destructive investigation and sampling will be required prior to and during demolition activities including the following:

1. Inspect and sample electrical wiring/systems once the power has been terminated.
2. Although not assumed to contain asbestos, the doors and door frames of the building need to be drilled to determine if they contain asbestos prior to demolition. If fireproofing insulation is discovered, this material must be sampled by an AHERA accredited inspector.
3. Med-Tox Northwest inspected CMU for vermiculite insulation and none was observed. Perform destructive investigation inside CMU walls to verify suspect vermiculite asbestos is not hidden or present prior to demolition.

Med-Tox Northwest recommends requesting unit pricing from abatement contractors during the bidding process to adjust pricing depending on actual quantities verified in the field.

Lead-Based Paint

The WISHA criteria are used to determine if materials are hazardous during a demolition. For lead, any percentage of lead in the material should be an assumed risk to human health. Disposal options are also determined by whether the material contains lead. Some landfills cannot accept lead-containing wastes, even if they pass the leachability test.

There was no TCLP sampling at Spruce Wing based on a lack of lead in painted materials. The waste from this project can be disposed of as general construction debris.

PCB

During demolition, the asbestos abatement contractor should be tasked with dismantling light fixtures, checking for PCB-free labels, and recycling the light tubes. Ballasts without PCB-free labels are considered PCB-containing and must be disposed as a hazardous waste; all other light ballasts can be recycled. Additionally, light tubes can be recycled as a universal waste for minimal cost.

Other Hazardous Building Materials

HID, mercury vapor, exit lights, fire alarms, fire extinguishers, smoke detectors and heat detectors should be collected and recycled/disposed appropriately. The air conditioning units located on the roof will need to be drained prior to demolition of the structure.

Limitations

A good faith effort has been made to identify ACM, LBP, and other HBM in the Spruce Wing. This survey was performed for complete demolition of the building.

Sampling was performed consistent with the level of care and skill ordinarily exercised by professionals currently practicing under similar conditions in the area. No other warranty, expressed or implied, is made.

This report has been prepared for the exclusive use of King County and it's designates for this project only. The analyses, conclusions, and recommendations presented in this report are based on conditions encountered at the time of our study and our experience and judgment. Med-Tox Northwest cannot be held responsible for interpretation by others of the data contained in this report; any use of this report shall include the entire document. This survey is not intended for use as abatement plans and/or specifications.

Appendix A

Previous Survey

ASBESTOS BUILDING MATERIALS TARGETED SURVEY

King County Youth Services Center
Spruce Wing
1211 East Alder Street
Seattle, Washington 98122

Prepared for:

King County
500 King County Administration Building
500 4th Avenue
Seattle, Washington 98104
Telephone 206-296-0239

Prepared by:

Med-Tox Northwest
Post Office Box 1446
Auburn, Washington 98071-1446
Telephone: 253-351-0677

and

Herrera Environmental Consultants, Inc.
2200 Sixth Avenue, Suite 1100
Seattle, Washington 98121
Telephone: 206-441-9080

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Acronyms

ACBM	asbestos-containing building materials
ACT	acoustical ceiling tile
AHERA	Asbestos Hazard Emergency Response Act
ASHARA	Asbestos Schools Hazard Abatement Reauthorization Act
CMU	cement masonry unit
CFR	Code of Federal Regulation
EPA	U.S. Environmental Protection Agency
HERRERA	Herrera Environmental Consultants, Inc.
HM	homogeneous material
HVAC	heating, ventilation, and air-conditioning
MTNW	Med-Tox Northwest
NVLAP	National Voluntary Laboratory Accreditation Program
OSHA	Occupational Safety and Health Administration
PLM	polarized light microscopy
PSCAA	Puget Sound Clean Air Agency
TSI	thermal system insulation
WAC	Washington Administration Code
WISHA	Washington Industrial Safety and Health Administration

Survey Summary

On November 2, Teri Choate of Med-Tox Northwest (MTNW) conducted an asbestos containing building materials (ACBM) targeted survey of the King County Youth Services Center Spruce Wing located at 1211 East Alder Street in Seattle, Washington. Ms. Choate was provided an escort at the time of the survey. This survey was performed for security electronics upgrade purposes.

This survey consisted of a visual inspection, touching of suspect materials, and sample collection with analysis. Project drawings were available and reviewed as part of the survey. Previous survey documentation was not available for review. Those report copies are not included in this report. A copy of Ms. Choate's, Asbestos Hazard Emergency Response Act (AHERA) building inspector certificate is included in **Appendix A**.

Building Information

Photographic documentation of the buildings materials described herein is provided in **Appendix B**.

General and Structural

According to Art Green of King County documents show the Spruce Wing was constructed in 1993, as a youth living quarter (detention). Spruce Wing is a concrete building wing on a concrete foundation with concrete floors and ceilings and interior CMU walls segregated into two levels.

The spaces targeted during this inspection include central control rooms, intake area, Halls A, B, C, D, E, F, G, H, J, K, L, M, N, P and Q that include Post areas 2, 3, and 4, mechanical rooms HP 11 13 23 and HP 12 14 24 and electrical rooms. At the time of the survey, most of the inspection areas were occupied.

Heating/Mechanical/Plumbing System

Heating, ventilation, and air conditioning (HVAC) systems for Spruce Wing consist of forced air mechanical systems. HVAC ducts and pipe systems in the ceiling plenums and mechanical rooms should not be impacted during renovation.

Architectural Finishes

Ceilings

Ceiling substrates throughout are concrete due to the structural construction with concrete. The plenum above the ceilings has HVAC ducts and some piping. Access into the ceiling plenum was limited.

The primary ceiling systems throughout most of the wing consists of suspended acoustical ceiling tiles. Gypsum wall board ceiling finishes were located in select areas. Some areas have tectum ceiling panels on the ceiling which are screwed into wood furring. These ceiling areas are suspended with metal framework and hides mechanical systems. Detention spaces were primarily painted concrete.

Walls

Most of the walls throughout the targeted wing ceiling plenums consist of painted concrete, cement masonry units (CMU). There are gypsum finished and unfinished partial walls from the concrete substrate to the suspended ceilings in the hallways and other project related areas.

Asbestos Summary

The AHERA regulation, 40 Code of Federal Regulations (CFR) 763, is the primary governing regulation when performing asbestos surveys. This regulation was originally enacted for school buildings, but has since been applied to public and commercial buildings by the Asbestos School Hazard Abatement Reauthorization Act (ASHARA) in 1994 and by the Occupational Safety and Health Administration's (OSHA) worker protection regulations in 1995, specifically 29 CFR 1926.1101(k).

Puget Sound Clean Air Agency (PSCAA) also requires compliance with AHERA's survey and sampling requirements. This applies to any renovation or demolition activities where suspect asbestos-containing material (ACM) may be disturbed. PSCAA is a local agency that receives statutory authority from the EPA to enforce environmental regulations.

AHERA divides suspect ACM into three categories; "*surfacing materials*" (i.e., sprayed fireproofing, popcorn ceiling texture, etc.), "*thermal system insulation*" (TSI) (i.e., pipe or building insulation, etc.), and "*miscellaneous materials*" (i.e., flooring material, roofing, construction mastics, etc.). The Spruce Wing located at 1211 East Alder Street were surveyed for these materials and sampled as required (22 samples collected). For a complete listing of suspect materials sampled, see **Appendix C**.

Sampling locations are indicated on the drawings in **Appendix D**.

Homogeneous material (HM) descriptions in the following text are provided to help correlate material descriptions provided in Appendix C.

Surfacing Materials

- Fireproofing (HM01). This material is located throughout both levels. Seven samples were collected for asbestos content; no asbestos was detected.
- Fireproofing patch (HM03). This material is located in Classroom 007. One sample was collected for asbestos content; no asbestos was detected.
- Plaster patch (HM07). This material was observed in the Central Control area. One sample was collected for asbestos content; no asbestos was detected.

Miscellaneous Materials

- Gypsum board HM02). This material is located on some walls in the project areas and above ceiling finishes in the ceiling plenum. Three samples were collected for asbestos content; no asbestos was detected.
- Remnant sealant on CMU (HM04). This remnant material from HVAC installment is located on CMU within the ceiling plenum. Two samples were collected for asbestos content; no asbestos was detected.
- 2- x 4-foot acoustical ceiling tile medium fissure with random pinhole pattern (HM05). This material is located throughout the project area. Three samples were collected for asbestos content; no asbestos was detected
- White caulking (HM06). This material is located on the south side, second floor exterior brick wall where the stair rail meets the brick wall. Three samples were collected for asbestos content; no asbestos was detected.
- Cementitious fire stop on CMU (HM08). This material was observed in the electrical closets HP 11 13 23 and HP 12 14 24. Two samples were collected for asbestos content; no asbestos was detected.

Table 1 below lists all suspect materials that have been determined non-asbestos.

Table 1. Summary of Suspect Materials Determined Non-Asbestos.

Material	Material
Fireproofing	Gypsum wallboard system
White fireproofing patch	Black remnant sealant
2- x 4-foot acoustical ceiling tile medium fissure with random pinhole	White caulk
Plaster patch on CMU wall	Cementitious fire stop

Note: This table is not to be used without the complete survey document including appendices for additional information.

Laboratory Analytical Methods

Asbestos-Containing Materials

Bulk samples were analyzed by Polarized Light Microscopy (PLM) dispersion staining EPA Method 600/R-93/116 by MTNW. MTNW is accredited through the National Voluntary Laboratory Accreditation Program (NVLAP) of the U. S. Department of Commerce. This accreditation does not constitute endorsement, but rather a finding of laboratory competence. The NVLAP participant number is 102021 (certification in **Appendix E**). Copies of the laboratory analytical reports are provided in **Appendix F**.

Comments and Recommendations

Asbestos-Containing Materials

Med-Tox Northwest recommends that this survey report be placed on-site during renovation and/or demolition and copies provided to the contractor(s) bidding and performing work. WISHA, OSHA and PSCAA require that the report be on-site and available for review during the entire project duration.

Limitations

A good faith effort has been made to identify ACBM in the Spruce Wing. This targeted survey was performed in areas expected to be impacted during the security electronics upgrade purposes however, the building was occupied during the survey.

Sampling was performed consistent with the level of care and skill ordinarily exercised by professionals currently practicing under similar conditions in the area. No other warranty, expressed or implied, is made.

This report has been prepared for the exclusive use of King County and it's designates for this project only. The analyses, conclusions, and recommendations presented in this report are based on conditions encountered at the time of our study and our experience and judgment. Med-Tox Northwest cannot be held responsible for interpretation by others of the data contained in this report; any use of this report shall include the entire document. This survey is not intended for use as abatement plans and/or specifications.

Appendix B

AHERA Building Inspector and WDOC Lead-Based Paint Accreditation Certificates

Certificate of Completion

This is to certify that

Anthony Fullerton

has satisfactorily completed
4 hours of refresher training as an

Asbestos Building Inspector

to comply with the training requirements of
TSCA Title II / 40 CFR 763 (AHERA)

138985

Certificate Number


Instructor

EPA Provider Cert. Number: 1085



Oct 3, 2012

Date(s) of Training

Exam Score: NA

Expiration Date: Oct 3, 2013

Argus Pacific, Inc. • 1900 W. Nickerson, Suite 315 • Seattle, Washington • 98119 • 206.285.3373 • fax 206.285.3927

STATE OF WASHINGTON

Department of Commerce
Lead-Based Paint Program

Anthony L. Fullerton

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

Risk Assessor

Certification #	Issuance Date	Expiration Date
0242	4/13/2011	4/3/2014

1900 W. Nickerson, Suite 315
Seattle, WA 98119
(206) 285-3373



This certifies that
Brady A. Hanson
has satisfactorily completed
24 hours of training as an
Asbestos Building Inspector

complies with TSCA Title II / 40 CFR 763 (AHERA)

A handwritten signature in black ink, appearing to read "J. A. Hanson".

Instructor
EPA Provider Cert. Number: 1085

Cert. Num: 1030512
Class Date: Apr 22 - 24, 2009
Expires: Apr 24, 2010

1900 W. Nickerson, Suite 315
Seattle, WA 98119
(206) 285-3373



This certifies that
Brady A. Hanson
has satisfactorily completed
4 hours of refresher training as an
Asbestos Building Inspector

complies with TSCA Title II / 40 CFR 763 (AHERA)

A handwritten signature in black ink, appearing to read "J. A. Hanson".

Instructor
EPA Provider Cert. Number: 1085

Cert. Num: 138158
Class Date: Jul 25, 2012
Expires: Jul 25, 2013

Appendix C

Building and Asbestos Materials Photographic Documentation

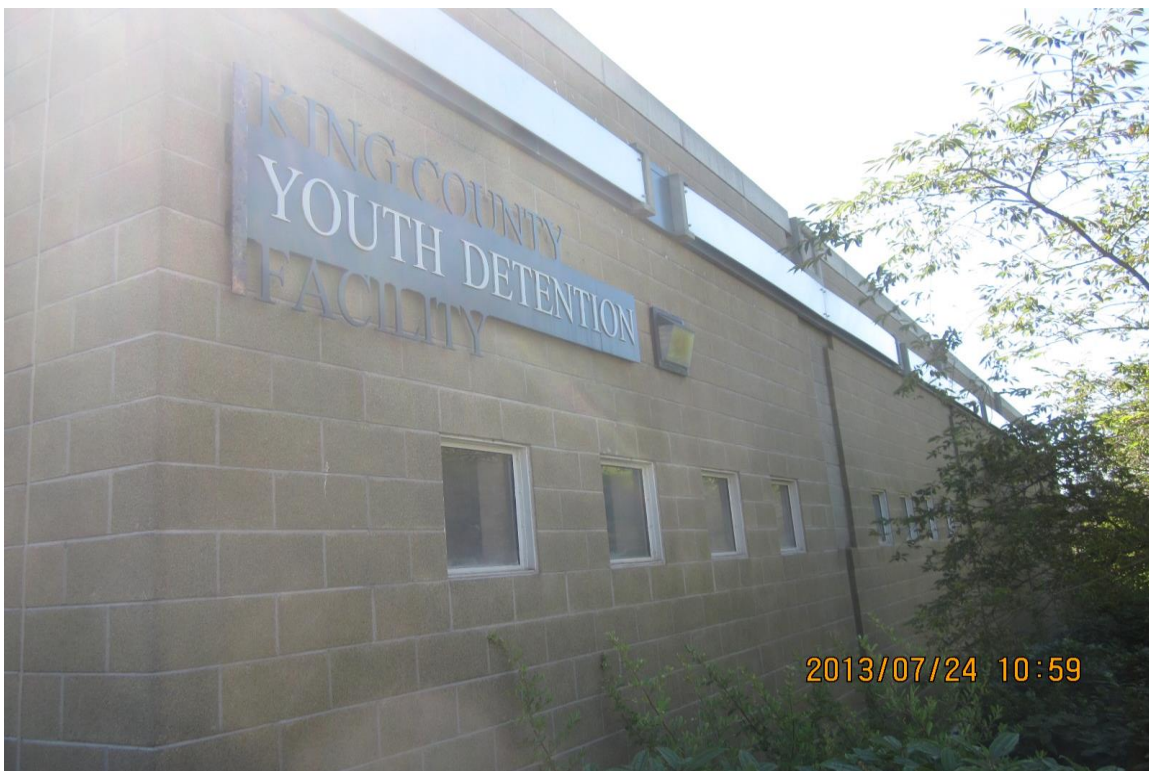


Photo 1. Spruce Wing of King County Youth Detention Facility in Seattle, WA.



Photo 2. South side of Spruce Wing looking east.



Photo 3. East side of Spruce Wing looking north.



Photo 4. South side of Spruce Wing exterior-concrete and CMU construction with brick finish.



Photo 5. Interior of Spruce Wing-central post branching to hallways.



Photo 6. Non-ACM 12-inch black with white flecks vinyl floor tile and mastic.



Photo 7. Health Center with Non-ACM terrazzo pattern sheet vinyl flooring.



Photo 8. Non-ACM 12-inch beige floor tile and mastic.



Photo 9. Non-ACM green rubber flooring mastic.



Photo 10. Non-ACM spray-on fireproofing on concrete and steel beams.



Photo 11. Fiberglass pipe insulation with PVC fittings found throughout Spruce Wing.



Photo 12. Exterior metal windows on upper pool roof have an ACM black mastic under non-ACM window frame caulk.



Photo 13. Exterior non-ACM gray window frame caulk.



Photo 14. Exterior gray door frame caulk is non-ACM.



Photo 15. View of Spruce Wing roof.



Photo 16. Concrete to CMU wall cap caulk is non ACM. Three-tab composition roofing and vapor barrier is also non ACM.



Photo 17. White rubber membrane roofing, tan and gray flashing sealant are non-ACM.



Photo 18. Non-ACM rolled composition roofing on the pool roof.



Photo 19. ACM black tar sealant patch on peaked roof.



Photo 20. ACM black vent sealant on pool office area roof.

Appendix D

Summary of Materials Sampled for Asbestos

Table
Summary of Materials Sampled for Asbestos

Sample	Location	Material	HM	Result
7258.15-AF-001	School area	Gray spray-on fireproofing	01	ND
7258.15-AF-002	School area	Gray spray-on fireproofing	01	ND
7258.15-AF-003	School area	Gray spray-on fireproofing	01	ND
7258.15-AF-004	Health Clinic- room 20	Gray spray-on fireproofing	01	ND
7258.15-AF-005	Health Clinic	Gray spray-on fireproofing	01	ND
7258.15-AF-006	L-Hall	Gray spray-on fireproofing	01	ND
7258.15-AF-007	L-Hall	Gray spray-on fireproofing	01	ND
7258.15-AF-008	Health Clinic	White fire stop pipe penetration sealant	02	ND
7258.15-AF-009	Health Clinic	White fire stop pipe penetration sealant	02	ND
7258.15-AF-010	Health Clinic	White fire stop pipe penetration sealant	02	ND
7258.15-AF-011	Kitchen storage	White fire stop pipe penetration sealant	02	ND
7258.15-AF-012	Kitchen storage	White fire stop pipe penetration sealant	02	ND
7258.15-AF-013	Health Clinic	White CMU smooth coat	03	ND
7258.15-AF-014	Health Clinic	White CMU smooth coat	03	ND
7258.15-AF-015	Health Clinic	White CMU smooth coat	03	ND
7258.15-AF-016	Health Clinic	White CMU smooth coat	03	ND
7258.15-AF-017	Health Clinic	White CMU smooth coat	03	ND
7258.15-AF-018	Health Clinic	White CMU smooth coat	03	ND
7258.15-AF-019	Health Clinic	White CMU smooth coat	03	ND
7258.15-AF-020	School Area- Room 008	CMU coating	04	ND
7258.15-AF-021	Library	CMU coating	04	ND
7258.15-AF-022	Intake	CMU coating	04	ND
7258.15-AF-023	Pool area	CMU coating	04	ND
7258.15-AF-024	L Hall	CMU coating	04	ND
7258.15-AF-025	P Hall	CMU coating	04	ND
7258.15-AF-026	Q Hall	CMU coating	04	ND
7258.15-AF-027	School Area- room 008	Un-textured gypsum wallboard system	05	ND
7258.15-AF-028	School Area- room 010	Un-textured gypsum wallboard system	05	ND
7258.15-AF-029	School Area- room 012B	Un-textured gypsum wallboard system	05	ND
7258.15-AF-030	Health Center- Room 36	Un-textured gypsum wallboard system	06	ND

Sample	Location	Material	HM	Result
7258.15-AF-031	Health Center-Room 47	Un-textured gypsum wallboard system	06	ND
7258.15-AF-032	Health Center- Room 40	Un-textured gypsum wallboard system	06	ND
7258.15-AF-033	Pool Area	CMU grout	07	ND
7258.15-AF-034	Pool Area	CMU grout	07	ND
7258.15-AF-035	P Hall	Un-textured gypsum wallboard system	08	ND
7258.15-AF-036	L Hall	Un-textured gypsum wallboard system	08	ND
7258.15-AF-037	L Hall	Un-textured gypsum wallboard system	08	ND
7258.15-AF-038	Former Pool area offices	Un-textured gypsum wallboard system	09	ND
7258.15-AF-039	Former Pool area offices	Un-textured gypsum wallboard system	09	ND
7258.15-AF-040	School Area	CMU grout	10	ND
7258.15-AF-041	Health Center	CMU grout	10	ND
7258.15-AF-042	L Hall	CMU grout	10	ND
7258.15-AF-043	M Hall	CMU grout	10	ND
7258.15-AF-044	School Area	Black window caulk	11	ND
7258.15-AF-045	Library	Black window caulk	11	ND
7258.15-AF-046	L Hall	Black window caulk	11	ND
7258.15-AF-047	School Area	Gray duct sealant	12	ND
7258.15-AF-048	School Area	Gray duct sealant	12	ND
7258.15-AF-049	P Hall	Gray duct sealant	12	ND
7258.15-AF-050	Health Center	Red pipe penetration sealant	13	ND
7258.15-AF-051	Pool Area	Red pipe penetration sealant	13	ND
7258.15-AF-052	P Hall	Plaster and skim coat	14	ND
7258.15-AF-053	P Hall	Plaster and skim coat	14	ND
7258.15-AF-054	P Hall	Plaster and skim coat	14	ND
7258.15-AF-055	P Hall	Plaster and skim coat	14	ND
7258.15-AF-056	Q Hall	Plaster and skim coat	14	ND
7258.15-AF-057	Q Hall	Plaster and skim coat	14	ND
7258.15-AF-058	Q Hall	Plaster and skim coat	14	ND
7258.15-AF-059	Intake	12-inch beige mottled vinyl floor tile with black mastic	15	ND
7258.15-AF-060	Intake	12-inch beige mottled vinyl floor tile with black mastic	15	ND
7258.15-AF-061	Gym storage	12-inch beige mottled vinyl floor tile with yellow mastic	16	ND
7258.15-AF-062	Recreation Supervisor	12-inch beige mottled vinyl floor tile with yellow mastic	16	ND

Sample	Location	Material	HM	Result
7258.15-AF-063	Library check out	12-inch beige mottled floor tile with yellow mastic	16	ND
7258.15-AF-064	Hallway	12-inch black with white flecks floor tile with white mastic	17	ND
7258.15-AF-065	Hallway	12-inch black with white flecks floor tile with white mastic	17	ND
7258.15-AF-066	Health Center	Terrazzo pattern sheet vinyl flooring	18	ND
7258.15-AF-067	Health Center	Terrazzo pattern sheet vinyl flooring	18	ND
7258.15-AF-068	P Hall	Green rubber flooring mastic	19	ND
7258.15-AF-069	L Hall	Green rubber flooring mastic	19	ND
7258.15-AF-070	L Hall	Green rubber flooring mastic	19	ND
7258.15-AF-071	Pool area offices hallway	12-inch white with black specks floor tile with black mastic	20	ND
7258.15-AF-072	Pool area offices hallway	12-inch white with black specks floor tile with black mastic	20	ND
7258.15-AF-073	Kitchen	No skid textured floor	21	ND
7258.15-AF-074	Kitchen	No skid textured floor	21	ND
7258.15-AF-075	Pool Area	No skid textured floor	22	ND
7258.15-AF-076	Pool Area	No skid textured floor	22	ND
7258.15-AF-077	Pool Area	No skid textured floor	22	ND
7258.15-AF-078	Gym	Wood grain rubber flooring with yellow mastic	23	ND
7258.15-AF-079	Health Center	Yellow carpet mastic	24	ND
7258.15-AF-080	Room 001A	Yellow carpet mastic	24	ND
7258.15-AF-081	Library	Yellow carpet mastic	24	ND
7258.15-AF-082	Intake	Carpet mastic over gray leveling	25	ND
7258.15-AF-083	Intake	Carpet mastic over gray leveling	25	ND
7258.15-AF-084	Pool Area	Tan carpet mastic	26	ND
7258.15-AF-085	Pool Area	Tan carpet mastic	26	ND
7258.15-AF-086	School Area- west end of school	Yellow carpet mastic white concrete sealant	27	ND
7258.15-AF-087	School Area- NW corner of school	Yellow carpet mastic white concrete sealant	27	ND
7258.15-AF-088	School Area- SW corner of school	Yellow carpet mastic white concrete sealant	27	ND
7258.15-AF-089	Intake	Gray epoxy flooring	28	ND
7258.15-AF-090	Intake	Gray epoxy flooring	28	ND

Sample	Location	Material	HM	Result
7258.15-AF-091	Kitchen	Gray epoxy flooring	28	ND
7258.15-AF-092	Health Center- room 47	Gray carpet square mastic	29	ND
7258.15-AF-093	M Hall	Gray stair tread mastic	30	ND
7258.15-AF-094	L Hall	Tan stair tread mastic	31	ND
7258.15-AF-095	L Hall	Tan stair tread mastic	31	ND
7258.15-AF-096	Hall A	Newer green rubber floor mastic	32	ND
7258.15-AF-097	Hall A	Newer green rubber floor mastic	32	ND
7258.15-AF-098	Pool area	2-x 2-foot ACT	33	ND
7258.15-AF-099	Pool area	2-x 2-foot ACT	33	ND
7258.15-AF-100	L Hall	12-inch ACT and brown mastic	34	ND
7258.15-AF-101	L Hall	12-inch ACT and brown mastic	34	ND
7258.15-AF-102	A Hall	12-inch ACT and brown mastic	34	ND
7258.15-AF-103	Z Hall	12-inch ACT with tan mastic	35	ND
7258.15-AF-104	Z Hall	12-inch ACT with tan mastic	35	ND
7258.15-AF-105	Kitchen	2- x4- ACT wormhole pattern	36	ND
7258.15-AF-106	Kitchen	2- x4- ACT wormhole pattern	36	ND
7258.15-AF-107	School area- N hallway	2-x 4-foot ACT White with random deep fissure and pin hole (Typical)	37	ND
7258.15-AF-108	School area- NW hallway	2-x 4-foot ACT White with random deep fissure and pin hole (Typical)	37	ND
7258.15-AF-109	Intake	2-x 4-foot ACT White with random deep fissure and pin hole (Typical)	37	ND
7258.15-AF-110	Health Center- Room 038	2-x 4-foot ACT White with random deep fissure and pin hole (Typical)	37	ND
7258.15-AF-111	Health Center- Hallway	2-x 4-foot ACT White with random shallow fissure and pin hole (replacement)	38	ND
7258.15-AF-112	Health Center- Room 036	2-x 4-foot ACT White with random shallow fissure and pin hole (replacement)	38	ND
7258.15-AF-113	Recreation supervisor office	4-inch light gray cove base and mastic	39	ND
7258.15-AF-114	Intake	4-inch light gray cove base and mastic	39	ND

Sample	Location	Material	HM	Result
7258.15-AF-115	Intake	4-inch light gray cove base and mastic	39	ND
7258.15-AF-116	Library	4-inch gray cove base and mastic	40	ND
7258.15-AF-117	Health Center room 20	4-inch gray cove base and mastic	40	ND
7258.15-AF-118	Health Center room 47	4-inch gray cove base and mastic	40	ND
7258.15-AF-119	School area By room 010	4-inch tan cove base and mastic	41	ND
7258.15-AF-120	School area by room 010	4-inch tan cove base and mastic	41	ND
7258.15-AF-121	Pool area office	4-inch blue cove base and mastic	42	ND
7258.15-AF-122	Pool area office	4-inch blue cove base and mastic	42	ND
7258.15-AF-123	School area room 008	2-inch ceramic floor and wall tile grout	43	ND
7258.15-AF-124	School area room 008	2-inch ceramic floor and wall tile grout	43	ND
7258.15-AF-125	L Hall	Concrete seam sealant	44	ND
7258.15-AF-126	P Hall	Concrete seam sealant	44	ND
7258.15-AF-127	Intake	Concrete seam sealant	44	ND
7258.15-AF-128	Pool area	Concrete crack filler	45	ND
7258.15-AF-129	Pool area	Concrete crack filler	45	ND
7258.15-AF-130	Courtyard M	Gray window seam sealant (replacement)	46	ND
7258.15-AF-131	Courtyard M	Gray window seam sealant (replacement)	46	ND
7258.15-AF-132	Pool area	Roof tar (seeping down wall)	47	ND
7258.15-AF-133	Pool area	Roof tar (seeping down wall)	47	ND
7258.15-AF-134	Health center room 42	Black sink undercoat	48	ND
7258.15-AF-135	Health center south hall	Black sink undercoat	49	ND
7258.15-AF-136	L Hall	Black sink undercoat	50	ND
7258.15-AF-137	Intake	Black sink undercoat	51	ND
7258.15-AF-138	School area room 006c	Black sink undercoat	52	ND
7258.15-AF-139	School area Room 002b	Black sink undercoat	53	ND
7258.15-AF-140	West mechanical room	Pipe gasket	54	ND
Roof and Exterior				ND
7258.15-AF-141	South side of roof	3 tab composition roofing	55	ND
7258.15-AF-142	North side of roof	3 tab composition roofing	56	ND
7258.15-AF-143	South side of roof	Vapor barrier	57	ND

Sample	Location	Material	HM	Result
7258.15-AF-144	North side of roof	Vapor barrier	57	ND
7258.15-AF-145	Lower pool roof	Rolled composition roofing	58	ND
7258.15-AF-146	Upper pool roof	Rolled composition roofing	59	ND
7258.15-AF-147	Main roof	White rubber membrane roof	60	ND
7258.15-AF-148	South roof	Pitched roof parapet composition roofing	61	ND
7258.15-AF-149	Roof	White rubber membrane flashing sealant (gray)	62	ND
7258.15-AF-150	Roof	White rubber membrane flashing sealant (gray)	62	ND
7258.15-AF-151	Roof	White rubber membrane flashing sealant (tan)	63	ND
7258.15-AF-152	South peak roof	Black tar sealant patching	64	4% CHR
7258.15-AF-153	Pool office area roof	Black vent sealant	65	5% CHR
7258.15-AF-154	Roof	Black flashing caulk	66	ND
7258.15-AF-155	Roof	Black flashing caulk	66	ND
7258.15-AF-156	Roof	Black flashing caulk	66	ND
7258.15-AF-157	Exterior east side	Vertical CMU caulk	67	ND
7258.15-AF-158	Exterior south side	Vertical CMU caulk	67	ND
7258.15-AF-159	Exterior west side	Vertical CMU caulk	67	ND
7258.15-AF-160	Upper west side of pool roof	Window frame caulk	68	ND
7258.15-AF-161	Upper west side of pool roof	Window frame caulk	68	Layer 1: ND Layer 2: 3% CHR
7258.15-AF-162	Exterior west side	Gray window frame caulk	69	ND
7258.15-AF-163	Exterior south side	Gray window frame caulk	69	ND
7258.15-AF-164	Exterior east side	Gray window frame caulk	69	ND
7258.15-AF-165	Exterior west side	Gray window frame caulk	69	ND
7258.15-AF-166	Exterior north side	Gray door frame caulk	70	ND
7258.15-AF-167	Exterior South side	Gray door frame caulk	70	ND
7258.15-AF-168	Exterior East side	Gray door frame caulk	70	ND
7258.15-AF-169	Exterior- south side	Concrete to CMU wall cap caulk	71	ND
7258.15-AF-170	Exterior- south side	Concrete to CMU wall cap caulk	71	ND
7258.15-AF-171	Exterior north side	Mechanical room vent frame caulk	72	ND
7258.15-AF-172	Exterior- East side	Brick mortar	73	ND
7258.15-AF-173	Exterior- west side	Brick mortar	73	ND
7258.15-AF-174	Exterior- south side	Brick mortar	73	ND
7258.15-AF-175	Exterior- east side pool exterior	Concrete skim coat	74	ND

Sample	Location	Material	HM	Result
7258.15-AF-176	Exterior- east side pool exterior	Concrete skim coat	74	ND

This table is not to be used without the complete survey document including appendices.
CHR = Chrysotile Asbestos, HM = homogeneous material, ND = none detected.

Appendix E

Sample and Material Location Drawings


Figure 1.
King County Detention Center,
Spruce Alder Wing - 1st Floor
Asbestos Sampling, Seattle,
Washington.

Legend

● Asbestos sample

N

0 50 100 ft

 HERRERA

G:\Graphics\09-04193-017\All\Alder_Wing_L1.ai (08/05/2013)

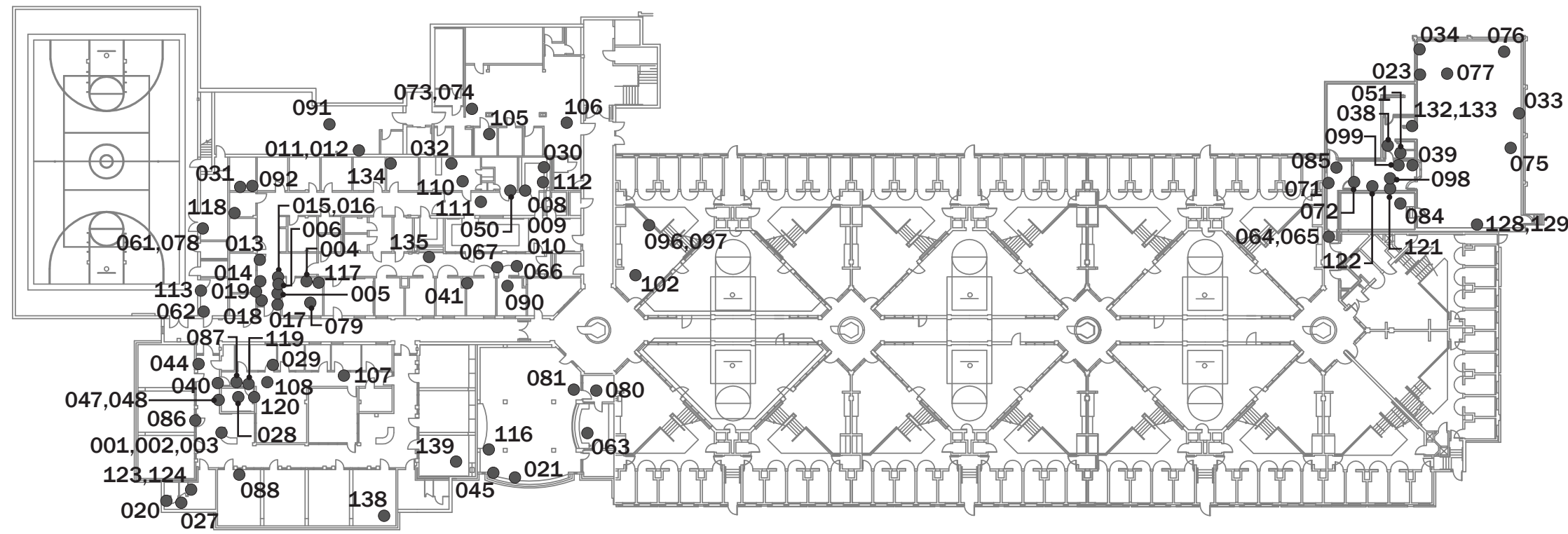


Figure 2.
King County Detention Center,
Spruce Alder Wing - 2nd Floor,
Basement, and Roof Asbestos
Sampling, Seattle, Washington.

Legend

● Asbestos sample

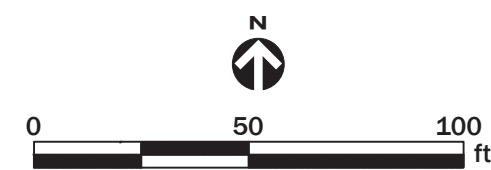
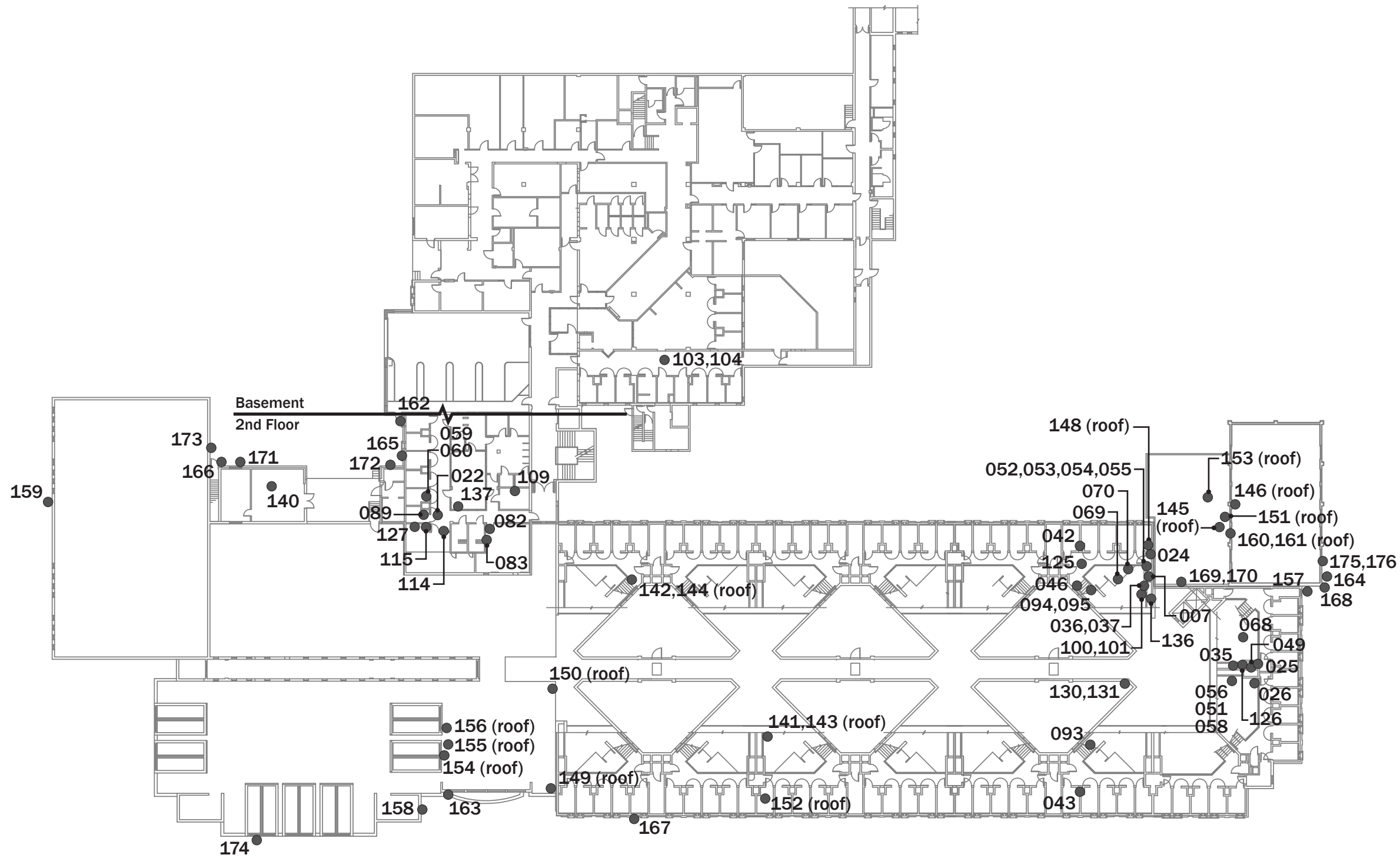


Figure 3.
King County Detention Center,
Spruce Alder Wing - 1st Floor,
Lead Sampling, Seattle, Washington.

Legend

● Lead sample

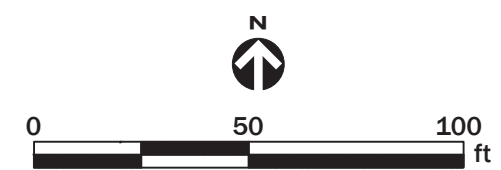
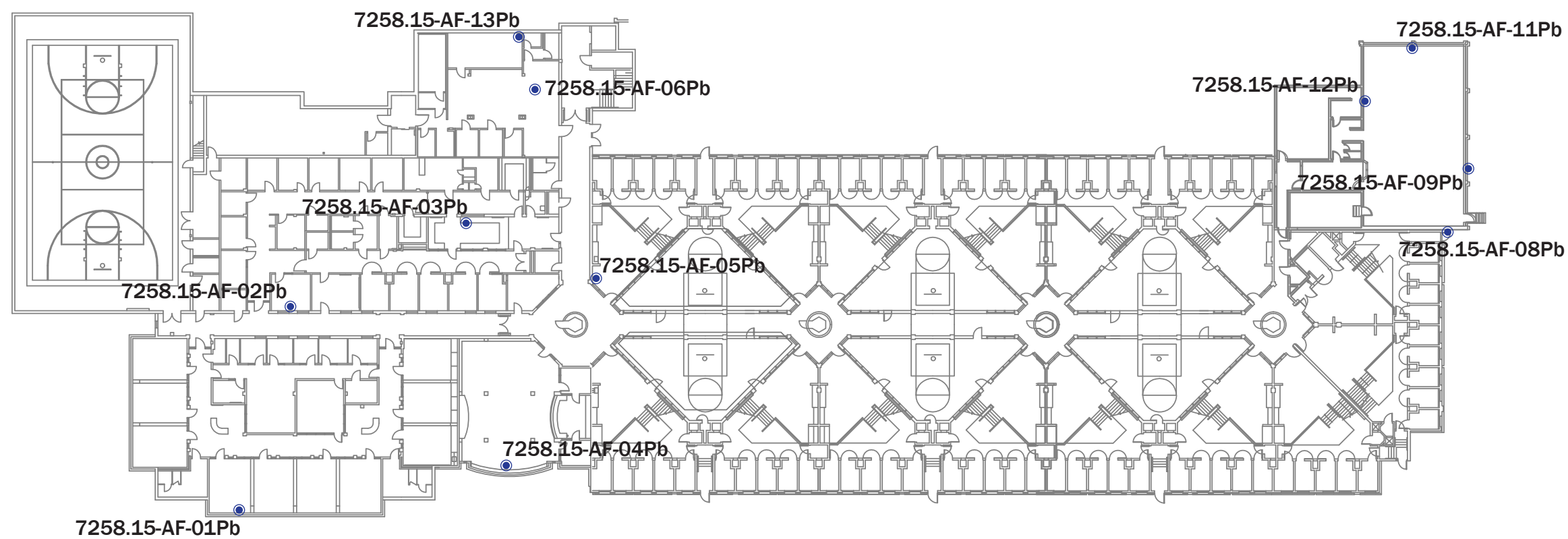
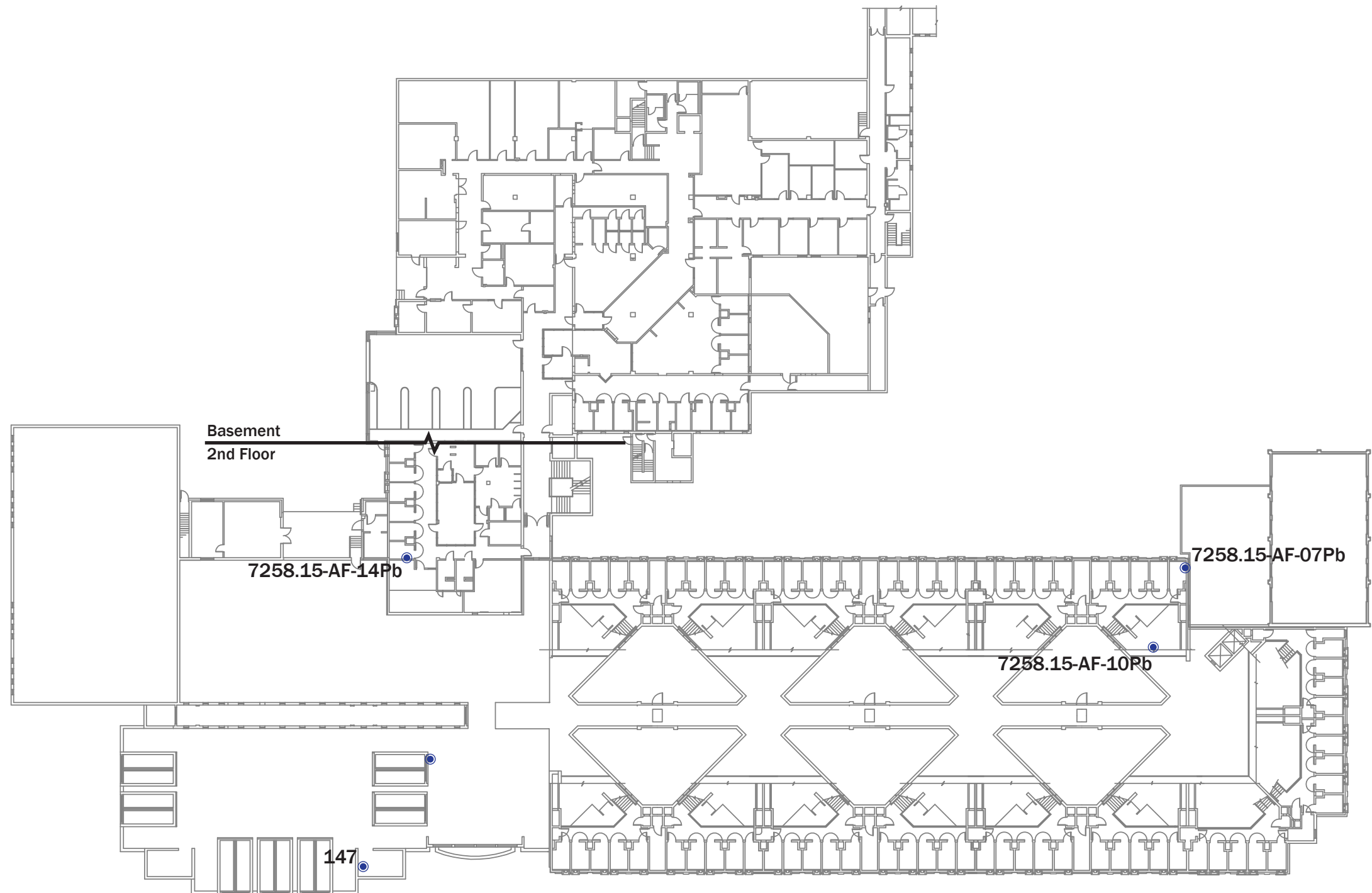


Figure 4.
King County Detention Center,
Spruce Alder Wing - 2nd Floor and
Basement Lead Sampling, Seattle,
Washington.

Legend

● Lead sample



0 50 100
ft

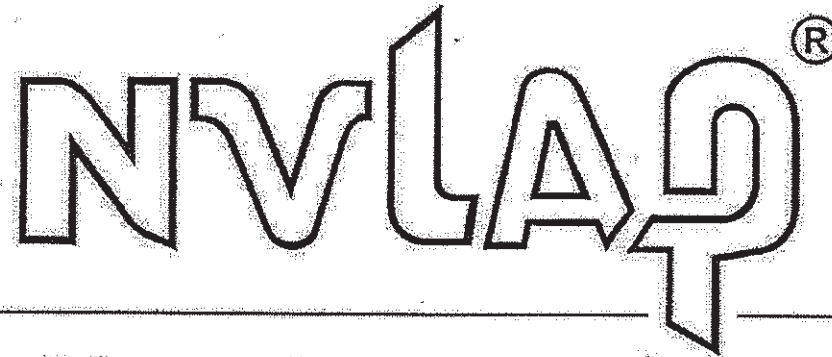


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Appendix F

Seattle Asbestos Test, LLC NVLAP Certificate

United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 200768-0

Seattle Asbestos Test, LLC
Lynnwood, WA

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:*

BULK ASBESTOS FIBER ANALYSIS

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality
management system (refer to joint ISO-ILAC-IAF Communiqué dated January 2009).*

2012-10-01 through 2013-09-30

Effective dates



A handwritten signature in black ink, appearing to read "William R. Mudd".

For the National Institute of Standards and Technology

Appendix G

Analytical Report-Asbestos

#201313065

SEATTLE ASBESTOS TEST, LLC

Lynnwood Lab: 19711 Scriber Lake Road, Suite D, WA 98036, Tel:425.673.9850, Fax:425.673.9810
 Bellevue Lab: 12727 Northup Way, Suite 1, Bellevue, WA 98005, Tel:425.861.1111, Fax:425.861.1118
 Email: admin@seattleasbestostest.com, Website: www.seattleasbestostest.com

Analyzing Quality

- ☒ Bulk Asbestos
☒ 1 Hour

- ☐ Point Count 400
☐ 2 Hours

CHAIN OF CUSTODY

- ☐ Point Count 1000
☐ Same day (4 to 6 Hrs.)
☐ Point Count Gravimetric
☐ 1 Day

- ☐ Other (Specify) _____

☒ 5 Days

Med-Tox, Northwest

PO Box 1446, Auburn, WA 98071-1446

Tel: 253.351.0677

Fax: 253.351.0688

Number of Samples 176 PO# 7258-15 Project Location KC YSC Spruce Wing

Project Manager (Check one or more):

- ☒ Anthony Fullerton 206.356.8927
☐ Ginie Kindler
☐ Judy Lurvey

fullertona@medtoxnw.com
 kindlerg@medtoxnw.com
 lurveyj@medtoxnw.com

- ☐ Carol Evans
☐ Jon Havelock
☐ Teresa Choate

evansc@medtoxnw.com
 havelockj@medtoxnw.com
 choatet@medtoxnw.com

SEQ#	CLIENT SAMPLE #	SAMPLE DESCRIPTION	LOCATION	NOTES
41	7258-15-AF-001			
42				
43				
44				
45				
46				
47				
48				
49				
50				
51				
52				
53				
54				
55				
56				
57				
58				
59				
60	7258-15-AF-176			

Print Name	Signature	Company	Date	Time
Sampled: A. Fullerton		Med-Tox, Northwest		
Relinquished: A. Fullerton		Med-Tox, Northwest	7/29/13	1230
Delivered: Christina Bure		Med-Tox, Northwest		
Received: Ryan Anderson		Seattle Asbestos Test	7/29/13	1500
Analyzed: Ryan Anderson		Seattle Asbestos Test	8/1/13	1705
Reported: Ryan Anderson		Seattle Asbestos Test		

Seattle Asbestos Test warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted and disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. Seattle Asbestos Test accepts no legal responsibility for the purpose for which the client uses the test results. By signing on this form, the clients agree to relieve Seattle Asbestos Test of any liability that may arise from the test results. It is the client's responsibility to make sure the samples are appropriately taken according to federal and local regulations. Invoices paid late may be charged of interest, and invoices go to collection may be charged 17% to 25% of collection fee. NSF checks will be charged of \$50.

Results reporting method: ☐ Phone ☐ Fax ☐ Email ☐ Pick-up
☐ Composite all wallboard samples ☐ Text result to phone ☐ Point count samples with % or less asbestos

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#201313065

Table
Summary of Materials Sampled for Asbestos

Sample	Location	Material	HM	Result
7258.15-AF-001	School area	Gray spray-on fireproofing	01	
7258.15-AF-002	School area	Gray spray-on fireproofing	01	
7258.15-AF-003	School area	Gray spray-on fireproofing	01	
7258.15-AF-004	Health Clinic- room 20	Gray spray-on fireproofing	01	
7258.15-AF-005	Health Clinic	Gray spray-on fireproofing	01	
7258.15-AF-006	L-Hall	Gray spray-on fireproofing	01	
7258.15-AF-007	L-Hall	Gray spray-on fireproofing	01	
7258.15-AF-008	Health Clinic	White fire stop pipe penetration sealant	02	
7258.15-AF-009	Health Clinic	White fire stop pipe penetration sealant	02	
7258.15-AF-010	Health Clinic	White fire stop pipe penetration sealant	02	
7258.15-AF-011	Kitchen storage	White fire stop pipe penetration sealant	02	
7258.15-AF-012	Kitchen storage	White fire stop pipe penetration sealant	02	
7258.15-AF-013	Health Clinic	White CMU smooth coat	03	
7258.15-AF-014	Health Clinic	White CMU smooth coat	03	
7258.15-AF-015	Health Clinic	White CMU smooth coat	03	
7258.15-AF-016	Health Clinic	White CMU smooth coat	03	
7258.15-AF-017	Health Clinic	White CMU smooth coat	03	
7258.15-AF-018	Health Clinic	White CMU smooth coat	03	
7258.15-AF-019	Health Clinic	White CMU smooth coat	03	
7258.15-AF-020	School Area- Room 008	CMU coating	04	
7258.15-AF-021	Library	CMU coating	04	
7258.15-AF-022	Intake	CMU coating	04	
7258.15-AF-023	Pool area	CMU coating	04	
7258.15-AF-024	L Hall	CMU coating	04	
7258.15-AF-025	P Hall	CMU coating	04	
7258.15-AF-026	Q Hall	CMU coating	04	
7258.15-AF-027	School Area- room 008	Un-textured gypsum wallboard system	05	
7258.15-AF-028	School Area- room 010	Un-textured gypsum wallboard system	05	
7258.15-AF-029	School Area- room 012B	Un-textured gypsum wallboard system	05	
7258.15-AF-030	Health Center- Room 36	Un-textured gypsum wallboard system	06	

#201313065

Sample	Location	Material	HM	Result
7258.15-AF-031	Health Center-Room 47	Un-textured gypsum wallboard system	06	
7258.15-AF-032	Health Center- Room 40	Un-textured gypsum wallboard system	06	
7258.15-AF-033	Pool Area	CMU grout	07	
7258.15-AF-034	Pool Area	CMU grout	07	
7258.15-AF-035	P Hall	Un-textured gypsum wallboard system	08	
7258.15-AF-036	L Hall	Un-textured gypsum wallboard system	08	
7258.15-AF-037	L Hall	Un-textured gypsum wallboard system	08	
7258.15-AF-038	Former Pool area offices	Un-textured gypsum wallboard system	09	
7258.15-AF-039	Former Pool area offices	Un-textured gypsum wallboard system	09	
7258.15-AF-040	School Area	CMU grout	10	
7258.15-AF-041	Health Center	CMU grout	10	
7258.15-AF-042	L Hall	CMU grout	10	
7258.15-AF-043	M Hall	CMU grout	10	
7258.15-AF-044	School Area	Black window caulk	11	
7258.15-AF-045	Library	Black window caulk	11	
7258.15-AF-046	L Hall	Black window caulk	11	
7258.15-AF-047	School Area	Gray duct sealant	12	
7258.15-AF-048	School Area	Gray duct sealant	12	
7258.15-AF-049	P Hall	Gray duct sealant	12	
7258.15-AF-050	Health Center	Red pipe penetration sealant	13	
7258.15-AF-051	Pool Area	Red pipe penetration sealant	13	
7258.15-AF-052	P Hall	Plaster and skim coat	14	
7258.15-AF-053	P Hall	Plaster and skim coat	14	
7258.15-AF-054	P Hall	Plaster and skim coat	14	
7258.15-AF-055	P Hall	Plaster and skim coat	14	
7258.15-AF-056	Q Hall	Plaster and skim coat	14	
7258.15-AF-057	Q Hall	Plaster and skim coat	14	
7258.15-AF-058	Q Hall	Plaster and skim coat	14	
7258.15-AF-059	Intake	12-inch beige mottled vinyl floor tile with black mastic	15	
7258.15-AF-060	Intake	12-inch beige mottled vinyl floor tile with black mastic	15	
7258.15-AF-061	Gym storage	12-inch beige mottled vinyl floor tile with yellow mastic	16	
7258.15-AF-062	Recreation Supervisor	12-inch beige mottled vinyl floor tile with yellow mastic	16	

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Sample	Location	Material	HM	Result
7258.15-AF-063	Library check out	12-inch beige mottled floor tile with yellow mastic	16	
7258.15-AF-064	Hallway	12-inch black with white flecks floor tile with white mastic	17	
7258.15-AF-065	Hallway	12-inch black with white flecks floor tile with white mastic	17	
7258.15-AF-066	Health Center	Terrazzo pattern sheet vinyl flooring	18	
7258.15-AF-067	Health Center	Terrazzo pattern sheet vinyl flooring	18	
7258.15-AF-068	P Hall	Green rubber flooring mastic	19	
7258.15-AF-069	L Hall	Green rubber flooring mastic	19	
7258.15-AF-070	L Hall	Green rubber flooring mastic	19	
7258.15-AF-071	Pool area offices hallway	12-inch white with black specks floor tile with black mastic	20	
7258.15-AF-072	Pool area offices hallway	12-inch white with black specks floor tile with black mastic	20	
7258.15-AF-073	Kitchen	No skid textured floor	21	
7258.15-AF-074	Kitchen	No skid textured floor	21	
7258.15-AF-075	Pool Area	No skid textured floor	22	
7258.15-AF-076	Pool Area	No skid textured floor	22	
7258.15-AF-077	Pool Area	No skid textured floor	22	
7258.15-AF-078	Gym	Wood grain rubber flooring with yellow mastic	23	
7258.15-AF-079	Health Center	Yellow carpet mastic	24	
7258.15-AF-080	Room 001A	Yellow carpet mastic	24	
7258.15-AF-081	Library	Yellow carpet mastic	24	
7258.15-AF-082	Intake	Carpet mastic over gray leveling	25	
7258.15-AF-083	Intake	Carpet mastic over gray leveling	25	
7258.15-AF-084	Pool Area	Tan carpet mastic	26	
7258.15-AF-085	Pool Area	Tan carpet mastic	26	
7258.15-AF-086	School Area- west end of school	Yellow carpet mastic white concrete sealant	27	
7258.15-AF-087	School Area- NW corner of school	Yellow carpet mastic white concrete sealant	27	
7258.15-AF-088	School Area- SW corner of school	Yellow carpet mastic white concrete sealant	27	
7258.15-AF-089	Intake	Gray epoxy flooring	28	
7258.15-AF-090	Intake	Gray epoxy flooring	28	
7258.15-AF-091	Kitchen	Gray epoxy flooring	28	
7258.15-AF-092	Health Center- room 47	Gray carpet square mastic	29	
7258.15-AF-093	M Hall	Gray stair tread mastic	30	
7258.15-AF-094	L Hall	Tan stair tread mastic	31	

#201313065

Sample	Location	Material	HM	Result
7258.15-AF-095	L Hall	Tan stair tread mastic	31	
7258.15-AF-096	Hall A	Newer green rubber floor mastic	32	
7258.15-AF-097	Hall A	Newer green rubber floor mastic	32	
7258.15-AF-098	Pool area	2-x 2-foot ACT	33	
7258.15-AF-099	Pool area	2-x 2-foot ACT	33	
7258.15-AF-100	L Hall	12-inch ACT and brown mastic	34	
7258.15-AF-101	L Hall	12-inch ACT and brown mastic	34	
7258.15-AF-102	A Hall	12-inch ACT and brown mastic	34	
7258.15-AF-103	Z Hall	12-inch ACT with tan mastic	35	
7258.15-AF-104	Z Hall	12-inch ACT with tan mastic	35	
7258.15-AF-105	Kitchen	2- x4- ACT wormhole pattern	36	
7258.15-AF-106	Kitchen	2- x4- ACT wormhole pattern	36	
7258.15-AF-107	School area- N hallway	2-x 4-foot ACT White with random deep fissure and pin hole (Typical)	37	
7258.15-AF-108	School area- NW hallway	2-x 4-foot ACT White with random deep fissure and pin hole (Typical)	37	
7258.15-AF-109	Intake	2-x 4-foot ACT White with random deep fissure and pin hole (Typical)	37	
7258.15-AF-110	Health Center- Room 038	2-x 4-foot ACT White with random deep fissure and pin hole (Typical)	37	
7258.15-AF-111	Health Center- Hallway	2-x 4-foot ACT White with random shallow fissure and pin hole (replacement)	38	
7258.15-AF-112	Health Center- Room 036	2-x 4-foot ACT White with random shallow fissure and pin hole (replacement)	38	
7258.15-AF-113	Recreation supervisor office	4-inch light gray cove base and mastic	39	
7258.15-AF-114	Intake	4-inch light gray cove base and mastic	39	
7258.15-AF-115	Intake	4-inch light gray cove base and mastic	39	
7258.15-AF-116	Library	4-inch gray cove base and mastic	40	
7258.15-AF-117	Health Center room 20	4-inch gray cove base and mastic	40	
7258.15-AF-118	Health Center room 47	4-inch gray cove base and mastic	40	
7258.15-AF-119	School area By room 010	4-inch tan cove base and mastic	41	
7258.15-AF-120	School area by room 010	4-inch tan cove base and mastic	41	
7258.15-AF-121	Pool area office	4-inch blue cove base and mastic	42	
7258.15-AF-122	Pool area office	4-inch blue cove base and mastic	42	
7258.15-AF-123	School area room 008	2-inch ceramic floor and wall tile grout	43	
7258.15-AF-124	School area room 008	2-inch ceramic floor and wall tile grout	43	

#201313065

Sample	Location	Material	HM	Result
7258.15-AF-125	L Hall	Concrete seam sealant	44	
7258.15-AF-126	P Hall	Concrete seam sealant	44	
7258.15-AF-127	Intake	Concrete seam sealant	44	
7258.15-AF-128	Pool area	Concrete crack filler	45	
7258.15-AF-129	Pool area	Concrete crack filler	45	
7258.15-AF-130	Courtyard M	Gray window seam sealant (replacement)	46	
7258.15-AF-131	Courtyard M	Gray window seam sealant (replacement)	46	
7258.15-AF-132	Pool area	Roof tar (seeping down wall)	47	
7258.15-AF-133	Pool area	Roof tar (seeping down wall)	47	
7258.15-AF-134	Health center room 42	Black sink undercoat	48	
7258.15-AF-135	Health center south hall	Black sink undercoat	49	
7258.15-AF-136	L Hall	Black sink undercoat	50	
7258.15-AF-137	Intake	Black sink undercoat	51	
7258.15-AF-138	School area room 006c	Black sink undercoat	52	
7258.15-AF-139	School area Room 002b	Black sink undercoat	53	
7258.15-AF-140	West mechanical room	Pipe gasket	54	
Roof and Exterior				
7258.15-AF-141	South side of roof	3 tab composition roofing	55	
7258.15-AF-142	North side of roof	3 tab composition roofing	56	
7258.15-AF-143	South side of roof	Vapor barrier	57	
7258.15-AF-144	North side of roof	Vapor barrier	57	
7258.15-AF-145	Lower pool roof	Rolled composition roofing	58	
7258.15-AF-146	Upper pool roof	Rolled composition roofing	59	
7258.15-AF-147	Main roof	White rubber membrane roof	60	
7258.15-AF-148	South roof	Pitched roof parapet composition roofing	61	
7258.15-AF-149	Roof	White rubber membrane flashing sealant (gray)	62	
7258.15-AF-150	Roof	White rubber membrane flashing sealant (gray)	62	
7258.15-AF-151	Roof	White rubber membrane flashing sealant (tan)	63	
7258.15-AF-152	South peak roof	Black tar sealant	64	
7258.15-AF-153	Roof	Black vent sealant	65	
7258.15-AF-154	Roof	Black flashing caulk	66	
7258.15-AF-155	Roof	Black flashing caulk	66	
7258.15-AF-156	Roof	Black flashing caulk	66	
7258.15-AF-157	Exterior east side	Vertical CMU caulk	67	
7258.15-AF-158	Exterior south side	Vertical CMU caulk	67	
7258.15-AF-159	Exterior west side	Vertical CMU caulk	67	

#201313065

Sample	Location	Material	HM	Result
7258.15-AF-160	Upper west side of pool roof	Window frame caulk	68	
7258.15-AF-161	Upper west side of pool roof	Window frame caulk	68	
7258.15-AF-162	Exterior west side	Gray window frame caulk	69	
7258.15-AF-163	Exterior south side	Gray window frame caulk	69	
7258.15-AF-164	Exterior east side	Gray window frame caulk	69	
7258.15-AF-165	Exterior west side	Gray window frame caulk	69	
7258.15-AF-166	Exterior north side	Gray door frame caulk	70	
7258.15-AF-167	Exterior South side	Gray door frame caulk	70	
7258.15-AF-168	Exterior East side	Gray door frame caulk	70	
7258.15-AF-169	Exterior- south side	Concrete to CMU wall cap caulk	71	
7258.15-AF-170	Exterior- south side	Concrete to CMU wall cap caulk	71	
7258.15-AF-171	Exterior north side	Mechanical room vent frame caulk	72	
7258.15-AF-172	Exterior- East side	Brick mortar	73	
7258.15-AF-173	Exterior- west side	Brick mortar	73	
7258.15-AF-174	Exterior- south side	Brick mortar	73	
7258.15-AF-175	Exterior- east side pool exterior	Concrete skim coat	74	
7258.15-AF-176	Exterior- east side pool exterior	Concrete skim coat	74	

This table is not to be used without the complete survey document including appendices.
 Ch = Chrysotile Asbestos, HM = homogeneous material, ND = none detected.

SEATTLE ASBESTOS TEST

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103,
Lynnwood, WA 98036, Tel: 425.673.9850, Fax: 425.673.9810

NVLAP Accreditation Lab Codes: Bellevue-200876, Lynnwood-200768

Bellevue Laboratory: 12727 Northup Way, Suite 1, Bellevue,
WA 98005, Tel: 425.861.1111, Fax: 425.861.1118

Seattle Laboratory: 4500 9th Ave. NE, Suite 300, Seattle, WA
98105, Tel: 206.633.1111, Fax: 206.633.4747

ANALYTICAL LABORATORY REPORT

PLM by Method EPA/600/R-93/116

Attn.: Mr. Anthony
Fullerton

Client: Med-Tox, Northwest

Address: PO Box 1446, Auburn, WA 98071-1446

Job#: 7258.15

Batch#: 201313065


Date Received: 7/29/2013

Samples Rec'd: 176

Date Analyzed: 8/1/2013

Samples Analyzed: 176

Project Loc.: KCYSC Spruce Wing

Analyzed by:  Ryan Antolock

Reviewed by: Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
1	7258.15-AF-001	1	Gray powdery material with fibrous material		None detected	Filler, Fine particles, Synthetic foam	23	Cellulose
2	7258.15-AF-002	1	Gray powdery material with fibrous material		None detected	Filler, Fine particles, Synthetic foam	21	Cellulose
3	7258.15-AF-003	1	Gray powdery material with fibrous material		None detected	Filler, Fine particles, Synthetic foam	25	Cellulose
4	7258.15-AF-004	1	Gray powdery material with fibrous material		None detected	Filler, Fine particles, Synthetic foam	24	Cellulose
5	7258.15-AF-005	1	Gray/white powdery material with fibrous material		None detected	Filler, Fine particles, Synthetic foam	26	Cellulose
6	7258.15-AF-006	1	Gray/white powdery material with fibrous material		None detected	Filler, Fine particles, Synthetic foam	23	Cellulose
7	7258.15-AF-007	1	Gray/white powdery material with fibrous material		None detected	Filler, Fine particles, Synthetic foam	27	Cellulose
8	7258.15-AF-008	1	White brittle material with paint		None detected	Filler, Binder, Paint, Synthetic foam	5	Cellulose
9	7258.15-AF-009	1	White brittle material with paint		None detected	Filler, Binder, Paint, Synthetic foam	6	Cellulose
10	7258.15-AF-010	1	White brittle material with paint and paper		None detected	Filler, Binder, Paint, Synthetic foam	26	Cellulose
11	7258.15-AF-011	1	White/beige brittle material		None detected	Filler, Binder	4	Cellulose
12	7258.15-AF-012	1	White/beige brittle material		None detected	Filler, Binder	5	Cellulose
13	7258.15-AF-013	1	White sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	3	Cellulose
14	7258.15-AF-014	1	White sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	2	Cellulose
15	7258.15-AF-015	1	White sandy/brittle material with paint and debris		None detected	Sand, Filler, Binder, Paint, Fine particles, Debris	4	Cellulose
16	7258.15-AF-016	1	White sandy/brittle material with paint and debris		None detected	Sand, Filler, Binder, Paint, Fine particles, Debris	5	Cellulose
17	7258.15-AF-017	1	White sandy/brittle material with paint and debris		None detected	Sand, Filler, Binder, Paint, Fine particles, Debris	4	Cellulose
18	7258.15-AF-018	1	White sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	2	Cellulose

SEATTLE ASBESTOS TEST

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103,
Lynnwood, WA 98036, Tel: 425.673.9850, Fax: 425.673.9810

Bellevue Laboratory: 12727 Northup Way, Suite 1, Bellevue,
WA 98005, Tel: 425.861.1111, Fax: 425.861.1118

Seattle Laboratory: 4500 9th Ave. NE, Suite 300, Seattle, WA
98105, Tel: 206.633.1111, Fax: 206.633.4747

NVLAP Accreditation Lab Codes: Bellevue-200876, Lynnwood-200768

ANALYTICAL LABORATORY REPORT

PLM by Method EPA/600/R-93/116

Attn.: Mr. Anthony
Fullerton

Client: Med-Tox, Northwest

Address: PO Box 1446, Auburn, WA 98071-1446

Job#: 7258.15

Batch#: 201313065

Date Received: 7/29/2013

Samples Rec'd: 176

Date Analyzed: 8/1/2013

Samples Analyzed: 176

Project Loc.: KCYSC Spruce Wing

Analyzed by: Ryan Antolock

Reviewed by: Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
19	7258.15-AF-019	1	White sandy/brittle material with paint and debris		None detected	Sand, Filler, Binder, Paint, Fine particles, Debris	5	Cellulose
20	7258.15-AF-020	1	White powdery material with paint		None detected	Binder/filler, Paint	4	Cellulose
21	7258.15-AF-021	1	White powdery material with paint		None detected	Binder/filler, Paint	5	Cellulose
22	7258.15-AF-022	1	Trace white powdery material with paint		None detected	Binder/filler, Paint	3	Cellulose
23	7258.15-AF-023	1	Off-white/green paint		None detected	Paint/binder	2	Cellulose
24	7258.15-AF-024	1	White powdery material with paint		None detected	Binder/filler, Paint	4	Cellulose
25	7258.15-AF-025	1	White powdery material with paint		None detected	Binder/filler, Paint	3	Cellulose
26	7258.15-AF-026	1	White powdery material with paint		None detected	Binder/filler, Paint	4	Cellulose
27	7258.15-AF-027	1	White powdery material with paint		None detected	Binder/filler, Paint	5	Cellulose
		2	White chalky material with paper		None detected	Binder/filler, Gypsum/binder	37	Cellulose, Glass fibers
28	7258.15-AF-028	1	Off-white powdery material with paint and paper		None detected	Binder/filler, Paint	33	Cellulose
		2	White chalky material with paper		None detected	Binder/filler, Gypsum/binder	35	Cellulose, Glass fibers
29	7258.15-AF-029	1	Off-white/white powdery material with paint and paper		None detected	Binder/filler, Paint	32	Cellulose
		2	White chalky material with paper		None detected	Binder/filler, Gypsum/binder	34	Cellulose, Glass fibers
30	7258.15-AF-030	1	White chalky material with paint and paper		None detected	Binder/filler, Gypsum/binder, Paint	41	Cellulose, Glass fibers
31	7258.15-AF-031	1	Off-white powdery material with paint and paper		None detected	Binder/filler, Paint	31	Cellulose
		2	White chalky material with paper		None detected	Binder/filler, Gypsum/binder, Mica	36	Cellulose, Glass fibers
32	7258.15-AF-032	1	Off-white powdery material with paint and paper		None detected	Binder/filler, Paint	33	Cellulose
		2	Gray chalky material with paper		None detected	Binder/filler, Gypsum/binder, Mica	37	Cellulose, Glass fibers
33	7258.15-AF-033	1	Red sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	3	Cellulose

SEATTLE ASBESTOS TEST

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ANALYTICAL LABORATORY REPORT

PLM by Method EPA/600/R-93/116

Attn.: Mr. Anthony
Fullerton

Client: Med-Tox, Northwest

Address: PO Box 1446, Auburn, WA 98071-1446

Job#: 7258.15

Batch#: 201313065

Date Received: 7/29/2013

Samples Rec'd: 176

Date Analyzed: 8/1/2013

Samples Analyzed: 176

Project Loc.: KCYSC Spruce Wing

Analyzed by: Ryan Antolock

Reviewed by: Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
34	7258.15-AF-034	1	Red sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	2	Cellulose
35	7258.15-AF-035	1	Off-white powdery material with paint and fibrous material		None detected	Binder/filler, Paint	16	Glass fibers, Cellulose
		2	Beige/pink chalky material with paper		None detected	Binder/filler, Gypsum/binder	34	Cellulose, Glass fibers
36	7258.15-AF-036	1	Off-white powdery material with paint and fibrous material		None detected	Binder/filler, Paint	14	Glass fibers, Cellulose
		2	White chalky material with paper		None detected	Binder/filler, Gypsum/binder	38	Cellulose, Glass fibers
37	7258.15-AF-037	1	Off-white powdery material with paint		None detected	Binder/filler, Paint	4	Cellulose
		2	White chalky material with paper		None detected	Binder/filler, Gypsum/binder	32	Cellulose, Glass fibers
38	7258.15-AF-038	1	Off-white/white powdery material with paint and paper		None detected	Binder/filler, Paint	34	Cellulose
		2	White chalky material with paper		None detected	Binder/filler, Gypsum/binder	37	Cellulose, Glass fibers
39	7258.15-AF-039	1	Off-white/white powdery material with paint and paper		None detected	Binder/filler, Paint	35	Cellulose
		2	White chalky material with paper		None detected	Binder/filler, Gypsum/binder	39	Cellulose, Glass fibers
40	7258.15-AF-040	1	Gray/brown sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	4	Cellulose
41	7258.15-AF-041	1	Gray sandy/brittle material		None detected	Sand, Filler, Binder	2	Cellulose
42	7258.15-AF-042	1	Gray/brown sandy/brittle material		None detected	Sand, Filler, Binder	3	Cellulose
		2	Trace gray powdery material with fibrous material		None detected	Filler, Fine particles, Synthetic foam	26	Cellulose
43	7258.15-AF-043	1	Gray/brown sandy/brittle material with debris		None detected	Sand, Filler, Binder, Fine particles, Debris	4	Cellulose
44	7258.15-AF-044	1	Black soft/elastic material with paint		None detected	Binder, Filler, Paint	3	Cellulose
45	7258.15-AF-045	1	Black soft/elastic material with paint and debris		None detected	Binder, Filler, Paint, Fine particles, Debris	6	Cellulose
46	7258.15-AF-046	1	Black soft/elastic material with paint and debris		None detected	Binder, Filler, Paint, Fine particles, Debris	5	Cellulose

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ANALYTICAL LABORATORY REPORT

PLM by Method EPA/600/R-93/116

Attn.: Mr. Anthony
Fullerton

Client: Med-Tox, Northwest

Address: PO Box 1446, Auburn, WA 98071-1446

Job#: 7258.15

Batch#: 201313065

Date Received: 7/29/2013

Samples Rec'd: 176

Date Analyzed: 8/1/2013

Samples Analyzed: 176

Project Loc.: KCYSC Spruce Wing

Analyzed by: Ryan Antolock

Reviewed by: Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
47	7258.15-AF-047	1	Gray soft/elastic material		None detected	Binder, Filler	4	Cellulose
48	7258.15-AF-048	1	Gray soft/elastic material		None detected	Binder, Filler	3	Cellulose
		2	Trace gray powdery material with fibrous material		None detected	Filler, Fine particles, Synthetic foam	23	Cellulose
49	7258.15-AF-049	1	Gray soft/elastic material with paint		None detected	Binder, Filler, Paint	4	Cellulose
		2	White powdery material with paint		None detected	Binder/filler, Paint	3	Cellulose
50	7258.15-AF-050	1	Red soft/elastic material with powdery material and fibrous material		None detected	Binder, Filler	11	Glass fibers, Cellulose
51	7258.15-AF-051	1	Red soft/elastic material with powdery material, fibrous material, and flaky material		None detected	Binder, Filler	13	Glass fibers, Cellulose
52	7258.15-AF-052	1	White brittle material with paint		None detected	Filler, Binder, Paint	2	Cellulose
		2	Gray sandy/brittle material		None detected	Sand, Filler, Binder	3	Cellulose
53	7258.15-AF-053	1	White brittle material with paint		None detected	Filler, Binder, Paint	2	Cellulose
		2	Gray sandy/brittle material		None detected	Sand, Filler, Binder	4	Cellulose
54	7258.15-AF-054	1	White brittle material with paint		None detected	Filler, Binder, Paint	3	Cellulose
		2	Gray sandy/brittle material		None detected	Sand, Filler, Binder	4	Cellulose
55	7258.15-AF-055	1	White/yellow brittle material with paint		None detected	Filler, Binder, Paint	2	Cellulose
		2	Gray sandy/brittle material		None detected	Sand, Filler, Binder	4	Cellulose
56	7258.15-AF-056	1	White brittle material with paint		None detected	Filler, Binder, Paint	3	Cellulose
		2	Gray sandy/brittle material		None detected	Sand, Filler, Binder	4	Cellulose
57	7258.15-AF-057	1	White brittle material with paint		None detected	Filler, Binder, Paint	2	Cellulose
		2	Gray sandy/brittle material		None detected	Sand, Filler, Binder	3	Cellulose
58	7258.15-AF-058	1	White brittle material with paint		None detected	Filler, Binder, Paint	2	Cellulose
		2	Gray sandy/brittle material		None detected	Sand, Filler, Binder	4	Cellulose

SEATTLE ASBESTOS TEST

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NVLAP Accreditation Lab Codes: Bellevue-200876, Lynnwood-200768

ANALYTICAL LABORATORY REPORT

PLM by Method EPA/600/R-93/116

Attn.: Mr. Anthony
Fullerton

Client: Med-Tox, Northwest

Address: PO Box 1446, Auburn, WA 98071-1446

Job#: 7258.15

Batch#: 201313065

Date Received: 7/29/2013

Samples Rec'd: 176

Date Analyzed: 8/1/2013

Samples Analyzed: 176

Project Loc.: KCYSC Spruce Wing

Analyzed by:  Ryan Antolock

Reviewed by: Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
59	7258.15-AF-059	1	Beige tile		None detected	Vinyl/binder, Mineral grains	3	Cellulose
		2	Black/yellow mastic with debris		None detected	Mastic/binder, Fine particles, Debris	5	Cellulose
60	7258.15-AF-060	1	Beige tile		None detected	Vinyl/binder, Mineral grains	2	Cellulose
		2	Black/yellow mastic with debris		None detected	Mastic/binder, Fine particles, Debris	6	Cellulose
61	7258.15-AF-061	1	Beige tile		None detected	Vinyl/binder, Mineral grains	3	Cellulose
		2	Clear mastic with debris		None detected	Mastic/binder, Fine particles, Debris	4	Cellulose
62	7258.15-AF-062	1	Beige tile		None detected	Vinyl/binder, Mineral grains	2	Cellulose
		2	Yellow mastic with debris		None detected	Mastic/binder, Fine particles, Debris	5	Cellulose
63	7258.15-AF-063	1	Beige tile		None detected	Vinyl/binder, Mineral grains	2	Cellulose
		2	Clear/yellow mastic with debris		None detected	Mastic/binder, Fine particles, Debris	4	Cellulose
64	7258.15-AF-064	1	Black tile		None detected	Vinyl/binder, Mineral grains	3	Cellulose
		2	Black mastic		None detected	Mastic/binder	4	Cellulose
		3	White brittle material		None detected	Filler, Binder	2	Cellulose
65	7258.15-AF-065	1	Black tile		None detected	Vinyl/binder, Mineral grains	3	Cellulose
		2	Black mastic		None detected	Mastic/binder	4	Cellulose
		3	White brittle material with debris		None detected	Filler, Binder, Fine particles, Debris, Sand	5	Cellulose
66	7258.15-AF-066	1	Green/white sheet vinyl		None detected	Vinyl/binder		None detected
		2	White fibrous material with mastic and brittle material		None detected	Binder/filler, Mastic/binder	72	Synthetic fibers, Cellulose
67	7258.15-AF-067	1	Green/white sheet vinyl		None detected	Vinyl/binder		None detected
		2	White fibrous material with mastic and brittle material		None detected	Binder/filler, Mastic/binder	69	Synthetic fibers, Cellulose
68	7258.15-AF-068	1	Beige/brown mastic with paint		None detected	Mastic/binder, Paint	3	Cellulose
69	7258.15-AF-069	1	Green/brown/yellow with paint and debris		None detected	Mastic/binder, Fine particles, Debris, Paint	5	Cellulose

SEATTLE ASBESTOS TEST

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ANALYTICAL LABORATORY REPORT

PLM by Method EPA/600/R-93/116

Attn.: Mr. Anthony
Fullerton

Client: Med-Tox, Northwest

Address: PO Box 1446, Auburn, WA 98071-1446

Job#: 7258.15

Batch#: 201313065


Date Received: 7/29/2013

Samples Rec'd: 176

Date Analyzed: 8/1/2013

Samples Analyzed: 176

Project Loc.: KCYSC Spruce Wing

Analyzed by:  Ryan Antolock

Reviewed by: Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
70	7258.15-AF-070	1	Green/yellow mastic with paint and debris		None detected	Mastic/binder, Fine particles, Debris, Paint	4	Cellulose
71	7258.15-AF-071	1	White/black tile		None detected	Vinyl/binder, Mineral grains	2	Cellulose
		2	Black/brown mastic		None detected	Mastic/binder	3	Cellulose
72	7258.15-AF-072	1	White/black tile		None detected	Vinyl/binder, Mineral grains	2	Cellulose
		2	Black/brown mastic		None detected	Mastic/binder	4	Cellulose
73	7258.15-AF-073	1	Gray sandy/brittle material		None detected	Sand, Filler, Binder	3	Cellulose
74	7258.15-AF-074	1	Gray sandy/brittle material		None detected	Sand, Filler, Binder	2	Cellulose
75	7258.15-AF-075	1	Tan sandy/brittle material		None detected	Sand, Filler, Binder	4	Cellulose
76	7258.15-AF-076	1	Tan sandy/brittle material		None detected	Sand, Filler, Binder	3	Cellulose
77	7258.15-AF-077	1	Tan sandy/brittle material		None detected	Sand, Filler, Binder	4	Cellulose
78	7258.15-AF-078	1	Brown rubbery material		None detected	Rubber/binder	2	Cellulose
		2	Gray foamy material		None detected	Synthetic foam		None detected
		3	Yellow mastic		None detected	Mastic/binder	4	Cellulose
79	7258.15-AF-079	1	Yellow/clear mastic		None detected	Mastic/binder	3	Cellulose
80	7258.15-AF-080	1	Yellow/brown mastic with paint		None detected	Mastic/binder, Paint	6	Synthetic fibers, Cellulose
81	7258.15-AF-081	1	Yellow/brown mastic with paint		None detected	Mastic/binder, Paint	5	Synthetic fibers, Cellulose
82	7258.15-AF-082	1	Yellow/clear mastic with brittle material		None detected	Mastic/binder, Filler	7	Synthetic fibers, Cellulose
83	7258.15-AF-083	1	Yellow/clear mastic with brittle material		None detected	Mastic/binder, Filler	6	Synthetic fibers, Cellulose
84	7258.15-AF-084	1	Tan mastic		None detected	Mastic/binder	5	Synthetic fibers, Cellulose
85	7258.15-AF-085	1	Tan mastic with brittle material		None detected	Mastic/binder, Filler	6	Synthetic fibers, Cellulose
86	7258.15-AF-086	1	Yellow mastic		None detected	Mastic/binder	5	Synthetic fibers, Cellulose
		2	Gray brittle/sandy material		None detected	Filler, Binder, Sand	3	Cellulose
87	7258.15-AF-087	1	Yellow/brown mastic with paint and trace brittle material		None detected	Mastic/binder, Filler, Paint	6	Synthetic fibers, Cellulose

SEATTLE ASBESTOS TEST

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ANALYTICAL LABORATORY REPORT

PLM by Method EPA/600/R-93/116

Attn.: Mr. Anthony
Fullerton

Client: Med-Tox, Northwest

Address: PO Box 1446, Auburn, WA 98071-1446

Job#: 7258.15

Batch#: 201313065

Date Received: 7/29/2013

Samples Rec'd: 176

Date Analyzed: 8/1/2013

Samples Analyzed: 176

Project Loc.: KCYSC Spruce Wing

Analyzed by:  Ryan Antolock

Reviewed by: Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
88	7258.15-AF-088	1	Yellow/brown mastic with paint and brittle material		None detected	Mastic/binder, Filler, Paint	7	Synthetic fibers, Cellulose
89	7258.15-AF-089	1	Gray paint with trace mastic		None detected	Paint/binder, Mastic/binder	3	Cellulose
90	7258.15-AF-090	1	Gray brittle/sandy material with paint		None detected	Binder, Sand, Paint	4	Cellulose
91	7258.15-AF-091	1	Gray paint with trace brittle material		None detected	Paint/binder, Mastic/binder	3	Cellulose
92	7258.15-AF-092	1	Yellow/clear mastic with paint and brittle material		None detected	Mastic/binder, Filler, Paint	6	Synthetic fibers, Cellulose
93	7258.15-AF-093	1	Yellow/white mastic with paint and debris		None detected	Mastic/binder, Fine particles, Debris Pa	7	Synthetic fibers, Cellulose
94	7258.15-AF-094	1	Yellow/brown mastic		None detected	Mastic/binder	5	Synthetic fibers, Cellulose
95	7258.15-AF-095	1	Yellow/brown mastic		None detected	Mastic/binder	6	Synthetic fibers, Cellulose
96	7258.15-AF-096	1	Off-white mastic with paint		None detected	Mastic/binder, Paint	4	Cellulose
97	7258.15-AF-097	1	Off-white mastic with paint		None detected	Mastic/binder, Paint	3	Cellulose
98	7258.15-AF-098	1	Gray fibrous material with paint		None detected	Paint, Filler, Perlite, Glass beads	78	Cellulose, Glass fibers
99	7258.15-AF-099	1	Gray fibrous material with paint		None detected	Paint, Filler, Perlite, Glass beads	76	Cellulose, Glass fibers
100	7258.15-AF-100	1	Gray/white fibrous material with paint		None detected	Paint, Filler, Glass beads	84	Glass fibers, Cellulose
		2	Brown mastic		None detected	Mastic/binder	4	Cellulose
101	7258.15-AF-101	1	Gray/white fibrous material with paint		None detected	Paint, Filler, Glass beads	82	Glass fibers, Cellulose
		2	Brown mastic		None detected	Mastic/binder	3	Cellulose
102	7258.15-AF-102	1	Gray/white fibrous material with trace paint		None detected	Paint, Filler, Glass beads	80	Glass fibers, Cellulose
		2	Brown mastic		None detected	Mastic/binder	4	Cellulose
103	7258.15-AF-103	1	Gray fibrous material with paint		None detected	Paint, Filler, Glass beads	76	Glass fibers, Cellulose
		2	Tan mastic with paper		None detected	Mastic/binder, Filler	27	Cellulose
104	7258.15-AF-104	1	Gray fibrous material with paint		None detected	Paint, Filler, Glass beads	74	Glass fibers, Cellulose

SEATTLE ASBESTOS TEST

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ANALYTICAL LABORATORY REPORT

PLM by Method EPA/600/R-93/116

Attn.: Mr. Anthony
Fullerton

Client: Med-Tox, Northwest

Address: PO Box 1446, Auburn, WA 98071-1446

Job#: 7258.15

Batch#: 201313065

Date Received: 7/29/2013

Samples Rec'd: 176

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Samples Analyzed: 176

Project Loc.: KCYSC Spruce Wing

Analyzed by:  Ryan Antolock

Reviewed by: Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
		2	Tan mastic with paper		None detected	Mastic/binder, Filler	28	Cellulose
105	7258.15-AF-105	1	Silver foil with paint		None detected	Foil/binder, Paint	2	Cellulose
		2	Gray fibrous material with paint		None detected	Paint, Filler, Glass beads, Perlite	72	Cellulose, Glass fibers
106	7258.15-AF-106	1	Gray fibrous material with paint		None detected	Paint, Filler, Glass beads, Perlite	73	Cellulose, Glass fibers
107	7258.15-AF-107	1	Gray fibrous material with paint		None detected	Paint, Filler, Glass beads, Perlite	75	Cellulose, Glass fibers
108	7258.15-AF-108	1	Gray fibrous material with paint		None detected	Paint, Filler, Glass beads, Perlite	73	Cellulose, Glass fibers
109	7258.15-AF-109	1	Gray fibrous material with paint		None detected	Paint, Filler, Glass beads, Perlite	72	Cellulose, Glass fibers
110	7258.15-AF-110	1	Gray fibrous material with paint		None detected	Paint, Filler, Glass beads, Perlite	76	Cellulose, Glass fibers
111	7258.15-AF-111	1	Gray fibrous material with paint		None detected	Paint, Filler, Perlite	68	Cellulose
112	7258.15-AF-112	1	Gray fibrous material with paint		None detected	Paint, Filler, Perlite	66	Cellulose
113	7258.15-AF-113	1	Light gray rubbery material		None detected	Rubber/binder	2	Cellulose
		2	Gray mastic		None detected	Mastic/binder	3	Cellulose
114	7258.15-AF-114	1	Light gray rubbery material		None detected	Rubber/binder	2	Cellulose
		2	Trace black mastic		None detected	Mastic/binder	3	Cellulose
		3	Gray mastic		None detected	Mastic/binder	4	Cellulose
115	7258.15-AF-115	1	Light gray rubbery material		None detected	Rubber/binder	3	Cellulose
		2	Trace clear/black mastic		None detected	Mastic/binder	4	Cellulose
		3	Gray mastic		None detected	Mastic/binder	5	Cellulose
116	7258.15-AF-116	1	Gray rubbery material		None detected	Rubber/binder	2	Cellulose
		2	White mastic		None detected	Mastic/binder	4	Cellulose
117	7258.15-AF-117	1	Gray rubbery material		None detected	Rubber/binder	2	Cellulose
		2	Tan/beige mastic		None detected	Mastic/binder	3	Cellulose
		3	White mastic with paint		None detected	Mastic/binder, Paint	5	Cellulose
118	7258.15-AF-118	1	Gray rubbery material		None detected	Rubber/binder	3	Cellulose

SEATTLE ASBESTOS TEST

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Bellevue Laboratory: 12727 Northup Way, Suite 1, Bellevue,
WA 98005, Tel: 425.861.1111, Fax: 425.861.1118

NVLAP Accreditation Lab Codes: Bellevue-200876, Lynnwood-200768

Seattle Laboratory: 4500 9th Ave. NE, Suite 300, Seattle, WA
98105, Tel: 206.633.1111, Fax: 206.633.4747

ANALYTICAL LABORATORY REPORT

PLM by Method EPA/600/R-93/116

Attn: Mr. Anthony
Fullerton

Client: Med-Tox, Northwest

Address: PO Box 1446, Auburn, WA 98071-1446

Job#: 7258.15

Batch#: 201313065

Date Received: 7/29/2013

Samples Rec'd: 176

Date Analyzed: 8/1/2013

Samples Analyzed: 176

Project Loc.: KCYSC Spruce Wing

Analyzed by: Ryan Antolock

Reviewed by: Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
		2	White/yellow mastic		None detected	Mastic/binder	4	Cellulose
		3	Trace white powdery material with paint		None detected	Binder/filler, Paint	3	Cellulose
119	7258.15-AF-119	1	Tan rubbery material		None detected	Rubber/binder	2	Cellulose
		2	Tan mastic		None detected	Mastic/binder	4	Cellulose
		3	White powdery material with paint		None detected	Binder/filler, Paint	5	Cellulose
120	7258.15-AF-120	1	Tan rubbery material		None detected	Rubber/binder	2	Cellulose
		2	Tan mastic		None detected	Mastic/binder	3	Cellulose
		3	White powdery material with paint		None detected	Binder/filler, Paint	4	Cellulose
121	7258.15-AF-121	1	Blue rubbery material		None detected	Rubber/binder	2	Cellulose
		2	Beige/white mastic		None detected	Mastic/binder	3	Cellulose
122	7258.15-AF-122	1	Blue rubbery material		None detected	Rubber/binder	2	Cellulose
		2	Beige/white mastic		None detected	Mastic/binder	4	Cellulose
123	7258.15-AF-123	1	Beige brittle/sandy material with debris		None detected	Binder, Sand, Fine particles, Debris	6	Cellulose, Synthetic fibers
124	7258.15-AF-124	1	Beige brittle/sandy material with debris		None detected	Binder, Sand, Fine particles, Debris	5	Cellulose, Synthetic fibers
125	7258.15-AF-125	1	Gray soft/elastic material with paint		None detected	Binder, Filler, Paint	4	Cellulose
126	7258.15-AF-126	1	White soft/elastic material with paint		None detected	Binder, Filler, Paint	3	Cellulose
127	7258.15-AF-127	1	White powdery material with paint		None detected	Binder/filler, Paint	4	Cellulose
		2	White soft/elastic material with paper		None detected	Binder, Filler	23	Cellulose
		3	Trace black mastic		None detected	Mastic/binder	2	Cellulose
128	7258.15-AF-128	1	Gray brittle/sandy material with paint		None detected	Binder, Sand, Paint	4	Cellulose
129	7258.15-AF-129	1	Gray brittle/sandy material with paint		None detected	Binder, Sand, Paint	3	Cellulose
130	7258.15-AF-130	1	Gray soft/elastic material with debris		None detected	Binder, Filler, Fine particles, Debris	5	Cellulose
131	7258.15-AF-131	1	Gray soft/elastic material with debris		None detected	Binder, Filler, Fine particles, Debris	4	Cellulose

SEATTLE ASBESTOS TEST

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98105, Tel: 206.633.1111, Fax: 206.633.4747

ANALYTICAL LABORATORY REPORT

PLM by Method EPA/600/R-93/116

Attn.: Mr. Anthony
Fullerton

Client: Med-Tox, Northwest

Address: PO Box 1446, Auburn, WA 98071-1446

Job#: 7258.15

Batch#: 201313065


Date Received: 7/29/2013

Samples Rec'd: 176

Date Analyzed: 8/1/2013

Samples Analyzed: 176

Project Loc.: KCYSC Spruce Wing

Analyzed by:  Ryan Antolock

Reviewed by: Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
132	7258.15-AF-132	1	Black asphaltic material with fibrous material		None detected	Asphalt/binder	46	Cellulose
		2	Beige brittle material		None detected	Filler, Binder	2	Cellulose
133	7258.15-AF-133	1	Black asphaltic material with fibrous material and paint		None detected	Asphalt/binder, Paint	49	Cellulose
		2	Beige brittle material		None detected	Filler, Binder	3	Cellulose
134	7258.15-AF-134	1	Black soft/loose material		None detected	Filler, Fine particles	5	Cellulose
135	7258.15-AF-135	1	Black soft/loose material		None detected	Filler, Fine particles	4	Cellulose
136	7258.15-AF-136	1	Black soft/loose material		None detected	Filler, Fine particles	3	Cellulose
137	7258.15-AF-137	1	Black soft/loose material		None detected	Filler, Fine particles	4	Cellulose
138	7258.15-AF-138	1	Black soft/loose material		None detected	Filler, Fine particles	3	Cellulose
139	7258.15-AF-139	1	Black soft/loose material		None detected	Filler, Fine particles	5	Cellulose
140	7258.15-AF-140	1	Black brittle material		None detected	Filler, Binder	6	Cellulose
141	7258.15-AF-141	1	Black asphaltic material with sand		None detected	Asphalt/binder, Sand	27	Glass fibers, Cellulose
142	7258.15-AF-142	1	Black asphaltic material with sand		None detected	Asphalt/binder, Sand	28	Glass fibers, Cellulose
143	7258.15-AF-143	1	Black asphaltic fibrous material		None detected	Filler, Asphalt, Binder	67	Cellulose
144	7258.15-AF-144	1	Black asphaltic fibrous material		None detected	Filler, Asphalt, Binder	69	Cellulose
145	7258.15-AF-145	1	Black asphaltic material with sand and fibrous material		None detected	Asphalt/binder, Sand	34	Synthetic fibers, Cellulose
		2	Black asphaltic material		None detected	Asphalt/binder	5	Cellulose
		3	Black asphaltic fibrous material		None detected	Filler, Asphalt, Binder	72	Glass fibers
		4	Multi-layered black asphaltic material with sand		None detected	Asphalt/binder	76	Glass fibers, Cellulose
		5	Brown fibrous material		None detected	Filler, Perlite	68	Cellulose
		6	Yellow/white foamy material		None detected	Synthetic foam		None detected
		7	Black asphaltic fibrous material		None detected	Filler, Asphalt, Binder	71	Cellulose, Glass fibers

SEATTLE ASBESTOS TEST

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ANALYTICAL LABORATORY REPORT

PLM by Method EPA/600/R-93/116

Attn.: Mr. Anthony
Fullerton

Client: Med-Tox, Northwest

Address: PO Box 1446, Auburn, WA 98071-1446

Job#: 7258.15

Batch#: 201313065

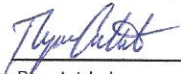
Date Received: 7/29/2013

Samples Rec'd: 176

Date Analyzed: 8/1/2013

Samples Analyzed: 176

Project Loc.: KCYSC Spruce Wing

Analyzed by:  Ryan Antolock

Reviewed by: Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
146	7258.15-AF-146	1	Black asphaltic material with sand and fibrous material		None detected	Asphalt/binder, Sand	34	Synthetic fibers, Cellulose
		2	Multi-layered black asphaltic material with sand		None detected	Asphalt/binder	76	Glass fibers, Cellulose
		3	Black asphaltic material		None detected	Asphalt/binder	4	Cellulose
		4	Black asphaltic material with fibrous material		None detected	Asphalt/binder, Sand	42	Synthetic fibers, Cellulose
147	7258.15-AF-147	1	White/gray soft/elastic material with woven fibrous material		None detected	Filler, Binder	31	Synthetic fibers
		2	Yellow foamy material		None detected	Synthetic foam		None detected
		3	Gray fibrous material		None detected	Filler, Binder	68	Cellulose, Glass fibers
148	7258.15-AF-148	1	Black asphaltic material with sand		None detected	Asphalt/binder, Sand	4	Cellulose
		2	Black asphaltic fibrous material		None detected	Asphalt/binder, Binder/filler	73	Cellulose
149	7258.15-AF-149	1	Gray/tan soft/elastic material with paint, mastic, and debris		None detected	Mastic/binder, Filler, Paint, Fine particles, Debris	6	Cellulose
150	7258.15-AF-150	1	Gray soft/elastic material		None detected	Binder, Filler	4	Cellulose
151	7258.15-AF-151	1	Tan soft/elastic material		None detected	Binder, Filler	3	Cellulose
152	7258.15-AF-152	1	Black asphaltic material	4	Chrysotile	Asphalt/binder	4	Cellulose
153	7258.15-AF-153	1	Black asphaltic material	5	Chrysotile	Asphalt/binder	3	Cellulose
154	7258.15-AF-154	1	Black soft/elastic material with paint and debris		None detected	Binder, Filler, Paint, Fine particles, Debris	5	Cellulose
155	7258.15-AF-155	1	Gray/tan soft/elastic material with debris		None detected	Binder, Filler, Fine particles, Debris, Sand	4	Cellulose
156	7258.15-AF-156	1	Gray soft/elastic material with paint		None detected	Binder, Filler, Paint	5	Cellulose
		2	Red brittle material		None detected	Filler, Binder	2	Cellulose
157	7258.15-AF-157	1	Tan/gray soft/elastic material		None detected	Binder, Filler	4	Cellulose
		2	Brown brittle material		None detected	Filler, Binder	2	Cellulose

SEATTLE ASBESTOS TEST

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ANALYTICAL LABORATORY REPORT

PLM by Method EPA/600/R-93/116

Attn.: Mr. Anthony
Fullerton

Client: Med-Tox, Northwest

Address: PO Box 1446, Auburn, WA 98071-1446

Job#: 7258.15

Batch#: 201313065

Date Received: 7/29/2013

Samples Rec'd: 176

Date Analyzed: 8/1/2013

Samples Analyzed: 176

Project Loc.: KCYSC Spruce Wing

Analyzed by: Ryan Antolock

Reviewed by: Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
158	7258.15-AF-158	1	Tan/gray soft/elastic material		None detected	Binder, Filler	4	Cellulose
159	7258.15-AF-159	1	Tan soft/elastic material		None detected	Binder, Filler	3	Cellulose
		2	Trace yellow foamy material		None detected	Synthetic foam		None detected
160	7258.15-AF-160	1	Brown soft/elastic material with paint		None detected	Binder, Filler, Paint	4	Cellulose
		2	Trace red brittle material		None detected	Filler, Binder	2	Cellulose
161	7258.15-AF-161	1	Brown soft/elastic material with paint		None detected	Binder, Filler, Paint	3	Cellulose
		2	Trace black mastic	3	Chrysotile	Mastic/binder	2	Cellulose
162	7258.15-AF-162	1	Tan soft/elastic material		None detected	Binder, Filler	4	Cellulose
163	7258.15-AF-163	1	Tan soft/elastic material with trace mastic		None detected	Mastic/binder, Filler	5	Cellulose
164	7258.15-AF-164	1	Tan soft/elastic material		None detected	Binder, Filler	4	Cellulose
165	7258.15-AF-165	1	Tan soft/elastic material		None detected	Binder, Filler	3	Cellulose
166	7258.15-AF-166	1	Tan soft/elastic material with paint		None detected	Binder, Filler, Paint	5	Cellulose
		2	Gray foamy material		None detected	Synthetic foam		None detected
167	7258.15-AF-167	1	Tan soft/elastic material		None detected	Binder, Filler	4	Cellulose
		2	Red/black brittle material		None detected	Filler, Binder	2	Cellulose
168	7258.15-AF-168	1	Tan soft/elastic material		None detected	Binder, Filler	4	Cellulose
169	7258.15-AF-169	1	Tan/gray soft/elastic material		None detected	Binder, Filler	3	Cellulose
		2	Trace black/red brittle material		None detected	Filler, Binder	2	Cellulose
170	7258.15-AF-170	1	Tan/gray soft/elastic material		None detected	Binder, Filler	3	Cellulose
171	7258.15-AF-171	1	Tan soft/elastic material with paint		None detected	Binder, Filler, Paint	4	Cellulose
		2	Gray foamy material		None detected	Synthetic foam		None detected
172	7258.15-AF-172	1	Beige sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	4	Cellulose
173	7258.15-AF-173	1	Gray sandy/brittle material		None detected	Sand, Filler, Binder	2	Cellulose
174	7258.15-AF-174	1	Gray sandy/brittle material		None detected	Sand, Filler, Binder	3	Cellulose

SEATTLE ASBESTOS TEST

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ANALYTICAL LABORATORY REPORT

PLM by Method EPA/600/R-93/116

Attn.: Mr. Anthony
Fullerton

Client: Med-Tox, Northwest

Address: PO Box 1446, Auburn, WA 98071-1446

Job#: 7258.15

Batch#: 201313065

Date Received: 7/29/2013

Samples Rec'd: 176

Date Analyzed: 8/1/2013

Samples Analyzed: 176

Project Loc.: KCYSC Spruce Wing

Analyzed by: 
Ryan Antolock

Reviewed by: Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
175	7258.15-AF-175	1	Gray brittle material with paint		None detected	Filler, Binder, Paint	2	Cellulose
176	7258.15-AF-176	1	Gray brittle material with paint		None detected	Filler, Binder, Paint	3	Cellulose

Appendix H

Analytical Report-Lead



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Lead (Pb) Chain of Custody

EMSL Order ID (Lab Use Only):

201307428

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (800) 220-3675
FAX: (856) 786-5974

Company: <u>Med-Tox Northwest</u>		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: <u>1701 W. Valley Hwy N #3</u>		Third Party Billing requires written authorization from third party	
City: <u>Auburn</u>	State/Province: <u>WA</u>	Zip/Postal Code: <u>98321</u>	Country:
Report To (Name): <u>Anthony Fullerton</u>		Telephone #: <u>(253) 351-0677</u>	
Email Address: <u>FullertonA@medtoxnw.com</u>		Fax #: <u>(253) 351-0688</u>	
Project Name/Number: <u>A-7258.15</u>		Purchase Order:	
U.S. State Samples Taken: <u>14</u>		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input checked="" type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week			
*Analysis completed in accordance with EMSL's Terms and Conditions located in the Price Guide			
Matrix	Method	Instrument	Reporting Limit
Chips <input checked="" type="checkbox"/> % by wt. <input type="checkbox"/> mg/cm ² <input type="checkbox"/> ppm	SW846-7000B	Flame Atomic Absorption	0.01%
Air	NIOSH 7082	Flame Atomic Absorption	4 µg/filter
	NIOSH 7105	Graphite Furnace AA	0.03 µg/filter
	NIOSH 7300 modified	ICP-AES/ICP-MS	0.5 µg/filter
Wipe* <input type="checkbox"/> ASTM <input type="checkbox"/> non ASTM <input type="checkbox"/> *If no box is checked, non-ASTM Wipe is assumed	SW846-7000B	Flame Atomic Absorption	10 µg/wipe
	SW846-6010B or C	ICP-AES	1.0 µg/wipe
	SW846-7000B/7010	Graphite Furnace AA	0.075 µg/wipe
TCLP	SW846-1311/7000B/SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)
	SW846-1131/SW846-6010B or C	ICP-AES	0.1 mg/L (ppm)
Soil	SW846-7000B	Flame Atomic Absorption	40 mg/kg (ppm)
	SW846-7010	Graphite Furnace AA	0.3 mg/kg (ppm)
	SW846-6010B or C	ICP-AES	2 mg/kg (ppm)
Wastewater Unpreserved <input type="checkbox"/> Preserved with HNO ₃ pH < 2 <input type="checkbox"/>	SM3111B/SW846-7000B	Flame Atomic Absorption	0.4 mg/L (ppm)
	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)
	EPA 200.7	ICP-AES	0.020 mg/L (ppm)
Drinking Water Unpreserved <input type="checkbox"/> Preserved with HNO ₃ pH < 2 <input type="checkbox"/>	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)
	EPA 200.8	ICP-MS	0.001 mg/L (ppm)
TSP/SPM Filter	40 CFR Part 50	ICP-AES	12 µg/filter
	40 CFR Part 50	Graphite Furnace AA	3.6 µg/filter
Other:			
Name of Sampler: <u>Anthony Fullerton</u>		Signature of Sampler:	
Sample #	Location	Volume/Area	Date/Time Sampled
<u>7258.15-AF-DIP6</u>	<u>Through (See Table)</u>		
<u>7258.15-AF-14PB</u>			
Client Sample #'s	<u>DIP6 - 14PB</u>	Total # of Samples:	<u>14</u>
Relinquished (Client): <u>[Signature]</u>	Date: <u>7/26/13</u>	Time: <u>0805</u>	
Received (Lab): <u>[Signature]</u>	Date: <u>7/29/13</u>	Time: <u>0459</u>	
Comments:			

201307428

Table 3. Summary of Bulk Paint Chip Sample Results.

	Sample Number	Location	Component	Substrate	Color	Result (%wt*)
-1	7258.15-AF-01Pb	School Area	Wall	CMU	White	
-2	7258.15-AF-02Pb	Health Clinic	Wall	CMU	Aqua	
-3	7258.15-AF-03Pb	Health Clinic	Wall	GWB	Blue	
-4	7258.15-AF-04Pb	Library	Wall	GWB	White	
-5	7258.15-AF-05Pb	Hall A	Wall	CMU	White	
-6	7258.15-AF-06Pb	Kitchen	Floor	Concrete	Gray	
-7	7258.15-AF-07Pb	Hall L	Wall	CMU	White	
-8	7258.15-AF-08Pb	Exterior	Wall	Concrete	Gray	
-9	7258.15-AF-09Pb	Exterior	Wall	Brick	Red	
-10	7258.15-AF-10Pb	Hall L	Wall	Plaster	White	
-11	7258.15-AF-11Pb	Pool Area	Wall	CMU	White	
-12	7258.15-AF-12Pb	Pool Area	Wall	Concrete	Beige	
-13	7258.15-AF-13Pb	Kitchen	Wall	Concrete	Beige	
-14	7258.15-AF-14Pb	Intake	Wall	CMU	Beige	

*wt= percent in weight. **Bolded values** – bulk paint chip samples with lead detected above the laboratory reporting limit have been bolded. The Washington Industrial Safety and Health Administration (WISHA) worker protection regulations have stated that lead at any detectable concentration shall be considered regulated (Washington Administrative Code [WAC] 296-155-176, Lead.

RECEIVED
ENSL
CINNAMINSON, NJ
2013 JUL 29 A 9:59

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856) 303-2500 / (856) 786-5974

<http://www.emsl.com>cinnaminsonleadlab@emsl.com

EMSL Order: 201307428

CustomerID: MEDT50

CustomerPO:

ProjectID:

Attn: **Anthony Fullerton**
Med-Tox Northwest
PO Box 1446

Phone: (253) 351-0677
Fax: (253) 351-0688
Received: 07/29/13 9:59 AM
Collected:

Auburn, WA 98071Project: **A7258.15****Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B*/7000B)**

<i>Client Sample Description</i>	<i>Lab ID</i>	<i>Collected</i>	<i>Analyzed</i>	<i>Lead Concentration</i>
7258.15-AF-01Pb Site: School Area- Wall Desc: White	0001	8/5/2013		<0.029 % wt
7258.15-AF-02Pb Site: Health Clinic- Wall Desc: Aqua	0002	8/5/2013		<0.013 % wt
7258.15-AF-03Pb Site: Health Clinic- Wall Desc: Blue	0003	8/5/2013		<0.010 % wt
7258.15-AF-04Pb Site: Library- Wall Desc: White	0004	8/5/2013		<0.010 % wt
7258.15-AF-05Pb Site: Hall A- Wall Desc: White	0005	8/5/2013		<0.010 % wt
7258.15-AF-06Pb Site: Kitchen - Floor Desc: Gray	0006	8/5/2013		<0.022 % wt
7258.15-AF-07Pb Site: Hall L- Wall Desc: White	0007	8/5/2013		<0.012 % wt
7258.15-AF-08Pb Site: Exterior- Wall Desc: Gray	0008	8/5/2013		<0.010 % wt
7258.15-AF-09Pb Site: Exterior- Wall Desc: Red	0009	8/5/2013		<0.016 % wt
7258.15-AF-10Pb Site: Hall L- Wall Desc: White	0010	8/5/2013		<0.010 % wt
7258.15-AF-11Pb Site: Pool Area- Wall Desc: White	0011	8/5/2013		<0.019 % wt

Julie Smith - Laboratory Director
NJ-NELAP Accredited:03036
or other approved signatory

Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. The QC data associated with these results included in this report meet the method QC requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. * slight modifications to methods applied. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NELAP Certifications: NJ 03036, NY 10872, PA 68-00367, AIHA-LAP, LLC ELLAP 100194, A2LA 2845.01

Initial report from 08/05/2013 12:59:21

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856) 303-2500 / (856) 786-5974

<http://www.emsl.com>cinnaminsonleadlab@emsl.com

EMSL Order: 201307428

CustomerID: MEDT50

CustomerPO:

ProjectID:

Attn: **Anthony Fullerton**
Med-Tox Northwest
PO Box 1446

Phone: (253) 351-0677
Fax: (253) 351-0688
Received: 07/29/13 9:59 AM
Collected:

Auburn, WA 98071Project: **A7258.15****Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B*/7000B)**

<i>Client Sample Description</i>	<i>Lab ID</i>	<i>Collected</i>	<i>Analyzed</i>	<i>Lead Concentration</i>
7258.15-AF-12Pb	0012	8/5/2013		<0.017 % wt
Site: Pool Area- Wall Desc: Beige				
7258.15-AF-13Pb	0013	8/5/2013		<0.015 % wt
Site: Kitchen- Wall Desc: Beige				
7258.15-AF-14Pb	0014	8/5/2013		<0.011 % wt
Site: Intake- Wall Desc: Beige				

Julie Smith - Laboratory Director
NJ-NELAP Accredited:03036
or other approved signatory

Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. The QC data associated with these results included in this report meet the method QC requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. * slight modifications to methods applied. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NELAP Certifications: NJ 03036, NY 10872, PA 68-00367, AIHA-LAP, LLC ELLAP 100194, A2LA 2845.01

Initial report from 08/05/2013 12:59:21

Appendix I

EMSL Analytical, Inc. Laboratory Certification



AIHA Laboratory Accreditation Programs, LLC

acknowledges that

EMSL Analytical, Inc.

2001 East 52nd St, Indianapolis, IN 46205

Laboratory ID: 157245

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

LABORATORY ACCREDITATION PROGRAMS

- ✓ **INDUSTRIAL HYGIENE**
- ✓ **ENVIRONMENTAL LEAD**
- ✓ **ENVIRONMENTAL MICROBIOLOGY**
- ☐ **FOOD**
- ☐ **UNIQUE SCOPES**

Accreditation Expires: 03/01/2015

Accreditation Expires: 03/01/2015

Accreditation Expires: 03/01/2015

Accreditation Expires:

Accreditation Expires:

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached **Scope of Accreditation**. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2005 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached **Scope of Accreditation**. Please review the AIHA-LAP, LLC website (www.aihaaccreditedlabs.org) for the most current Scope.

Larry S. Pierce
Chairperson, Analytical Accreditation Board

Cheryl O. Morton
Managing Director, AIHA Laboratory Accreditation Programs, LLC

Revision 13: 03/12/2013

Date Issued: 05/31/2013



AIHA Laboratory Accreditation Programs, LLC

SCOPE OF ACCREDITATION

EMSL Analytical, Inc.

2001 East 52nd St, Indianapolis, IN 46205

Laboratory ID: **157245**

Issue Date: 05/31/2013

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or withdrawal of accreditation.

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

Environmental Lead Laboratory Accreditation Program (ELLAP)

Initial Accreditation Date: 09/01/2002

Field of Testing (FoT)	Method	Method Description <i>(for internal methods only)</i>
Paint	EPA SW-846 3050B	
	EPA SW-846 7000B	
Soil	EPA SW-846 3050B	
	EPA SW-846 7000B	
Settled Dust by Wipe	EPA SW-846 3050B	
	EPA SW-846 7000B	
Airborne Dust	NIOSH 7082	

A complete listing of currently accredited Environmental Lead laboratories is available on the AIHA-LAP, LLC website at: <http://www.aihaaccreditedlabs.org>