

HAZARDOUS MATERIALS ASSESSMENT

WRANGELL CAPITAL FACILITIES BUILDING

WRANGELL, ALASKA

**Surveyed
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EHS, ALASKA, INC.
ENGINEERING, HEALTH & SAFETY CONSULTANTS
11901 BUSINESS BLVD., SUITE 208
EAGLE RIVER, ALASKA 99577-7701

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HAZARDOUS MATERIALS ASSESSMENT WRANGELL CAPITAL FACILITIES BUILDING

WRANGELL, ALASKA

OVERVIEW

Wrangell Capital Facilities Building, located in Wrangell, Alaska, was surveyed for the presence of asbestos-containing materials (ACM), and other potentially hazardous materials as requested by Wrangell Capital Facilities for the city of Wrangell, Alaska. There is no current proposed work for the building, but it may be scheduled for relocation, sale or transfer. Mr. Brandon W. Hill, and Mr. Robert A. French, P.E. of EHS-Alaska, Inc. (EHS-Alaska) conducted the September 2020. During maintenance, sale, disturbance, removal or renovation, it will be the contractor's responsibility to take this baseline data, and to conduct hazardous materials removal in compliance with all regulatory requirements.

A. GENERALIZED REQUIREMENTS FOR HAZARDOUS MATERIALS

Potentially hazardous materials have been identified in the Wrangell Capital Facilities Building that may be affected by future activities. Those materials include asbestos, lead, polychlorinated bi-phenyls (PCBs), mercury, and radioactive materials. Not all materials were tested for potentially hazardous components, other potentially hazardous materials, including those exterior to the building, such as contamination from underground fuel tanks may be present, but are not part of this report.

Buildings or portions of buildings that were constructed prior to 1978 which are residences, or contain day care facilities, kindergarten classes or other activities frequently visited by children under 6 years of age are classified as *child occupied facilities*. All work classified as "renovations" or disturbing more than 6 square feet of lead-based painted surfaces per room for interior activities or more than 20 square feet for exterior activities in child occupied facilities must comply with the requirements of 40 CFR 745. This building is not classified as a *child occupied facility* and therefore the requirements of 40 CFR 745 are not applicable.

There are no federal or state requirements to remove potentially hazardous building materials once found. There are federal and state requirements that govern the removal or disturbance of hazardous materials that must be followed. The removal and disposal of potentially hazardous materials are highly regulated, and it is anticipated that removal and disposal of asbestos, lead and chemical hazards will be conducted by a subcontractor to the general contractor who is qualified for such removal. It is anticipated that the general contractor and other trades will be able to conduct their work using engineering controls and work practices to control worker exposure and to keep airborne contaminants out of occupied areas of the building.

Settled and concealed dusts in areas not subject to routine cleaning are present throughout the building, including the roof, and inside and on top of architectural, mechanical, electrical, and structural elements, and those dusts are assumed to contain regulated air contaminants. This should not be read to imply that there is an existing hazard to building occupants (normal occupants of the building as opposed to construction workers working in the affected areas). However, depending on the specific work items involved and on the means and methods employed when working in the affected areas, construction workers could be exposed to regulated air contaminants from those dusts in excess of the OSHA Permissible Exposure Limits (PELs).

The settled and concealed dusts were examined by an EPA Certified Building Inspector but were not sampled. The inspector determined that the dusts are not "asbestos debris" from an asbestos-containing building material (ACBM). Based on similar sampling from similar buildings, the inspector also determined that the dusts are unlikely to contain more than one percent (1%) asbestos by weight, and therefore are not an asbestos-containing material (ACM). Reference 40 CFR 763.83.

“Awareness training” (typically 2 hours) and possibly respiratory protection will be required for all Contractor Personnel who will be disturbing the dusts. The extent of the training and protective measures will depend upon the airborne concentrations measured during air monitoring of the contractors work force, which depends on the means and methods employed to control the dusts. The air monitoring may be discontinued following a “negative exposure assessment” showing that worker exposures are below the OSHA permissible exposure limits for the type of work and means and methods employed. Previous air monitoring from similar jobs with similar conditions may be used as historical data to establish a “negative exposure assessment”.

B. BUILDING DESCRIPTION

Wrangell Capital Facilities Building was previously used by the military as the National Guard Armory and it is unknown when the original construction occurred. Judging by the buildings non-permanent foundation, it looks like it was prefabricated and moved to this location. Judging from the materials found, it is likely that the building was constructed in the early to mid 1980's.

The building was of framed construction. The interior walls were of gypsum wallboard and wood veneer paneling. The floors were 12"x12" vinyl tile throughout. The ceilings in the large open area were exposed beam, high ceiling, with a plywood finish over the roof joists and insulation. The offices, bathroom and shop all had framed in flat ceilings of gypsum wallboard.

The exterior had siding of sheet metal panels, corrugated metal roof and corrugated metal skirting below the floor level of the exterior. The structure was supported by large beams, sitting on top of creosote treated large timbers similar to railroad ties.

The building had an oil-fired heater in the main open area, with electric heat in the bathroom, and no ventilation system other than an exhaust fan in the bathroom.

C. SAMPLING AND ANALYSIS

1. Asbestos-Containing Materials

The survey included sampling of suspect ACM materials as no prior asbestos surveys are known to have occurred. This hazardous materials assessment should be kept with the building records, and maintained until the potentially hazardous materials have been completely removed.

The samples were analyzed for the presence of asbestos by polarized light microscopy (PLM), the method of analysis recommended by the U.S. Environmental Protection Agency (EPA) to determine the composition of suspected asbestos-containing materials (EPA method 600/M4-82-020). Only materials containing more than 1% total asbestos were classified as “asbestos-containing” based on EPA and the Occupational Safety and Health Administration (OSHA) criteria. Samples that were analyzed to have less than 10% asbestos were “point-counted” by the laboratory for more accuracy. Samples that are listed as having a “Trace by Point Count” had asbestos fibers found in the material, but the fibers were not present at the counting grids. Table 1 in Part D below contains a summary list of the asbestos bulk samples and the applicable results.

The Bulk Asbestos samples were analyzed for asbestos content by International Asbestos Testing Laboratories (IATL), Mt. Laurel, New Jersey a National Voluntary Laboratory Accreditation Program - (NVLAP) accredited laboratory.

EPA regulations under 40 CFR 763 requires the use of Polarized Light Microscopy (PLM) to determine whether or not a material contains asbestos. While PLM analysis does a good job for most materials, it does have some limitations, both in the size of the fibers that are visible under a standard optical microscope, and because the organic matrix that the fibers are bound within can obscure the fibers. At the discretion of the building inspector and the client, some types of samples may be analyzed or re-analyzed by what is called TEM NOB, or Transmission Electron Microscopy for Non-Friable Organically

Bound materials ELAP 198.4, EPA-600/R-93/116 Section 2.5 for “asbestos in bulk building materials by TEM Gravimetry”. TEM NOB is the definitive method for determining if asbestos is present, but TEM NOB use is not required by the EPA. TEM NOB analysis was not done for this project.

Field survey data sheets and laboratory reports of the bulk samples are included in Appendix A. Drawings showing sample locations are included as Appendix C.

2. Lead-Containing Materials

Nearly all surfaces in the building were coated with paint and most surfaces had been repainted. EHS-Alaska tested representative paints throughout the affected areas of the building using an Heuresis Pb200i X-Ray Fluorescence (XRF) lead paint analyzer (Serial # 1770 with software version 4.0-21). The lead testing conducted was not a Lead-Based Paint Inspection or Screening as defined by HUD or EPA regulations, but was done to test surfaces that may be representative of those likely to be affected by this project. If surfaces and materials other than those tested are identified, the Contractor shall test and treat appropriately. Refer to the Lead Analyzer Test Results Table in Appendix B that identifies the surfaces tested, and the results. All surfaces affected by this project may not have been tested and therefore additional sampling may be required to refute the presence of lead-based paints in child occupied facilities regulated by 40 CFR 745. The Lead Test Locations are shown in Appendix C.

EPA and the Department of Housing and Urban Development (HUD) have defined lead-based paint as any paint or other surface coating that contains lead equal to or in excess of 1.0 milligram per square centimeter (mg/cm²) or 0.5 percent by weight. XRF results are classified as positive (lead is present at 1.0 mg/cm² or greater), negative (less than 1.0 mg/cm² of lead was present) or inconclusive (the XRF could not make a conclusive positive or negative determination). Tests that were invalid due to operator error are shown as void tests.

A Performance Characteristic Sheet (PCS) for the Heuresis Pb200i is available upon request. This PCS data provides supplemental information to be used in conjunction with Chapter 7 of the “HUD Guidelines”. Performance parameters provided in the PCS are applicable when operating the instrument using the manufacturer’s instructions and the procedures described in Chapter 7 of the “HUD Guidelines”. The instrument was operated in accordance with manufacturer’s instructions and Chapter 7 of the HUD Guidelines. No substrate correction is required for this instrument. There is no inconclusive classification for this instrument when using the 1.0 mg/cm² threshold.

D. SURVEY RESULTS

1. Asbestos-Containing Materials

The following Table 1A lists the samples taken in September 2020, and the results of the laboratory analysis. Asbestos field survey data sheets and laboratory reports are included as Appendix A. Refer to Appendix C for sample locations.

TABLE 1A

SAMPLE NUMBER	MATERIAL	LOCATION	ASBESTOS CONTENT
WNG920-A01	Black tar paper	Exterior SE Corner, South side of building under metal siding. Photo R1638	None Detected
WNG920-A02	Sticky black foam seal (1" wide)	Exterior SE Corner, South side of building under metal siding. Appears to be factory supplied. Photo R1636	None Detected both layers

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SAMPLE NUMBER	MATERIAL	LOCATION	ASBESTOS CONTENT
WNG920-A03	Clear w gray weathering sealant at hole	Exterior SE Corner, East side of building, on metal siding. Photo R1641	None Detected both layers
WNG920-A04	Clear w gray weathering sealant at door trim	Exterior NE Corner, East side of building, at rotten wood door trim. Photo R1642	None Detected
WNG920-A05	Sticky black foam seal (1/4" wide)	At ridge of metal roofing. Appears to be factory supplied. Photo R1643	None Detected
WNG920-A06	Clear w gray weathering sealant at window trim	Exterior S side of building, at W side window. Photo B221	None Detected
WNG920-A07	Ice & Water Shield under metal roofing	Under metal roofing over plywood. Photo R1644	None Detected
WNG920-A08	White sealant between window frame and window trim	Exterior S side of building, at E side window. Photo B222	None Detected
WNG920-A09	Clear w gray weathering sealant at roof stack flashing	Roof at SE corner, at furnace stack. Photo R1645	None Detected
WNG920-A10	"Grout" at rock walls with GB paper	Fireplace/furnace alcove at SE corner of main room. Photo R1772	None Detected
WNG920-A11	"Grout" at rock walls with gypsum wall board	Fireplace/furnace alcove at SE corner of main room. Photo R1773	None Detected both layers
WNG920-A12	FT-1. Tan 12 x 12 with brown & light brown smears, black mastic	Floor at SE corner of main room. By E wall. Photo R1774	1.1% chrysotile in tile, 2.7% chrysotile mastic
WNG920-A13	Dark Brown cove base mastic & black cove base	Floor at SE corner of main room. By E wall. Photo R1774	None Detected both layers
WNG920-A14	FT-1. Tan 12 x 12 with brown & light brown smears, black mastic	Floor in Bathroom, South side. Photo R1783	1.2% chrysotile in tile, 2.2% chrysotile mastic
WNG920-A15	Dark Brown cove base mastic & black cove base	On Marlite in Bathroom, South side. Photo R1783	None Detected three layers
WNG920-A16	Marlite (no marlite mastic to GWB) and dark brown cove base mastic	On Marlite in Bathroom, South side. Photo R1784	None Detected both layers
WNG920-A17	Gypsum board, joint compound, tape & brown cove base mastic	Center office, at NE Corner, Photo R1786	None Detected both layers
WNG920-A18	Gypsum board, joint compound, tape	Director's office at NW side. Photo B225	None Detected three layers
WNG920-A19	Swirly texture on ceiling	Director's office, north side, E side of windows. Photo B226	None Detected
WNG920-A20	Swirly texture on ceiling	Director's office, north side, E side center, near door. Photo B227	None Detected

SAMPLE NUMBER	MATERIAL	LOCATION	ASBESTOS CONTENT
WNG920-A21	Swirly texture on ceiling	Director's office, north side, W side of windows. Photo B228	None Detected
The testing method used (polarized light microscopy [PLM]) is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Before this material can be considered or treated as non-asbestos containing, confirmation should be made by quantitative transmission electron microscopy (TEM).			

The following materials have been found to contain asbestos in this survey, or were assumed to contain asbestos.

1. Tan 12" x 12" Floor tile and black mastic (confirmed ACM).
2. Patching Tars at roof (assumed ACM).

The effects of the above asbestos-containing materials are discussed below.

Floor Tile and Mastic

The tan, 12" x 12" vinyl floor tiles and black flooring mastic throughout the building contain asbestos. The floor tiles and mastics were mostly in good condition with a few localized areas of damage. The tile and mastic was not friable, and if disturbed, is required to be removed and disposed of as an asbestos-containing material.

Roofing Material

Although not noted, roofing patch tars are one of the materials that commonly contain asbestos, even today. Because the entire roof was not accessed, it is assumed that there may be some roof patching tars present at the metal roof. These materials are not friable and would typically not be required to be removed, except during replacement of the roof.

2. Asbestos in Dusts

The settled and concealed dusts were examined by an EPA Certified Building Inspector but no samples for asbestos in dusts were authorized for this project. Based on their visual inspection and experience from similar buildings, the inspector determined that the typical settled and concealed dusts are not "asbestos debris" from an asbestos-containing building material (ACBM). Based on similar sampling from similar buildings, the inspector also determined that the dusts are unlikely to contain more than one percent (1%) asbestos by weight, and therefore are not an asbestos-containing material (ACM).

3. Lead-Containing Materials

Lead-Testing

EHS-Alaska tested paint and other representative materials throughout the building using a Heuresis XRF lead paint analyzer. Lead in paints tested varied from a trace amount to 0.25 mg/cm². Lead in other materials tested varied from a trace amount to 0.26 mg/cm². Refer to the Lead Analyzer Test Results Table in Appendix B that identifies the surfaces tested, and the results. The Lead Test Locations are shown in the Drawings in Appendix C.

Paints

There were varying lead contents found in the paints, based on what surfaces they are on, with most surfaces containing little lead (but are still classified as lead-containing materials by OSHA). The highest levels of lead were found on miscellaneous steel, with lower levels on walls and other painted surfaces, and lowest levels on pre-finished materials.

Lead based paints (paint containing more than 1.0 mg/cm² of lead) were not identified in the building. Lead was detected at very low levels in most of the painted floor, wall and ceiling surfaces. XRF testing is not able to "prove" that "no" lead exists in the paint. Low levels of lead found by XRF testing does not

mean that the paints are free of lead, the paints may contain lead. However, these paints may not present a hazard to occupants or workers performing renovation or demolition if lead-safe work practices are followed.

Plastic Components

Relatively high concentrations of lead were found in plastic components, such as "Formica" plastic laminate panels. The concentrations of lead in plastic compounds should not be compared to lead-based paint criteria. Lead in plastic compounds may have surface deterioration and if not cleaned regularly, lead may be present in dusts or on surfaces, where it can be ingested. Lead in plastic compounds may not pose a hazard to occupants, or workers performing renovation or demolition if good work practices are followed.

Metallic Lead in Batteries, Pipe Solder and Flashing

Metallic lead items identified in the building included lead solder at copper piping, and poured lead sealants at bell and spigot joints of waste and vent piping and lead acid batteries in emergency lights and other battery backup equipment. If removed during renovation or demolition they should be recycled or disposed of as hazardous waste.

Lead Dusts

The settled and concealed dusts were examined but no samples for lead in dusts were authorized for this project. Based on their visual inspection and similar sampling from similar buildings, the inspector also determined that the dusts are likely to have measurable concentrations of lead in the dusts.

4. PCB-Containing Materials

Light Ballasts

Older fluorescent lights typically have PCB-containing ballasts. PCB-containing ballasts in fluorescent lights were banned in 1978, but manufacturers were allowed to use up existing stocks, and lights may have been reused from other facilities. The survey included examination of what were considered to be representative light fixtures, but not all fixtures were able to be accessed. All lights shall be inspected during removal or relocation. Unless ballasts were marked "No PCBs," they must be assumed to contain PCBs and must be disposed of as a hazardous waste when removed for disposal. Only fluorescent light fixtures marked "No PCBs" were found in the building.

Bulk Products

Some older paints, sealants and other building materials may contain measurable amounts of PCB's. PCB use in paints and sealants was supposed to have been discontinued in 1979. The EPA does not require the sampling of bulk products, and no sampling of "Bulk Products" were authorized for this project.

5. Mercury-Containing Materials

Fluorescent Lamps

Fluorescent lamps use mercury to excite the phosphor crystals that coat the inside of the lamp. These lamps contain from 15 to 48 milligrams of mercury depending on their age and manufacturer. Fluorescent light fixtures should be disposed of in accordance with the Universal Waste Regulations.

All mercury-containing items being removed by this project are required to be disposed of as hazardous waste or recycled.

6. Other Hazardous Materials

Smoke Detectors

Several radioactive smoke detectors were found in the building. If any radioactive items are removed by this project, they are required be disposed of as hazardous waste or recycled.

Soil Contamination

The scope of work for EHS-Alaska, Inc. did not include investigation of soils for petroleum or other contaminations.

Refrigerants

No refrigerators or other equipment was identified in the building that may contain ozone depleting refrigerants. Ozone depleting substances (ODS) are regulated by the EPA and if present, must be removed by certified technicians prior to equipment disposal.

E. REGULATORY CONSTRAINTS**1. Asbestos-Containing Materials**

The Federal Occupational Safety and Health Administration (29 CFR 1926.1101) and the State of Alaska Department of Labor (8 AAC 61) have promulgated regulations requiring testing for airborne asbestos fibers; setting allowable exposure limits for workers potentially exposed to airborne asbestos fibers; establishing contamination controls, work practices, and medical surveillance; and setting worker certification and protection requirements. These regulations apply to all workplace activities involving asbestos-containing materials.

The EPA regulations, issued as Title 40 of the Code of Federal Regulations, Part 61 (40 CFR 61), Subpart M under the National Emission Standards for Hazardous Air Pollutants (NESHAP), established procedures for handling ACM during asbestos removal and waste disposal. These regulations required an owner (or the owner's contractor) to notify the EPA of asbestos removal operations and to establish responsibility for the removal, transportation, and disposal of asbestos. It is recommended that clearance sampling which complies with the EPA's Asbestos Hazard Emergency Response Act (AHERA) protocol be required following removal of asbestos-containing materials to document that the asbestos has been properly removed.

The EPA regulations require an owner (or the owner's contractor) to notify the EPA of asbestos removal operations and to establish responsibility for the removal, transportation, and disposal of asbestos-containing materials.

The disposal of asbestos waste is regulated by the EPA, the Alaska Department of Environmental Conservation, and the disposal site operator. Wastes being transported to the disposal site must be sealed in leak tight containers prior to disposal and must be accompanied by disposal permits and waste manifests.

2. Dusts with Asbestos

Settled and concealed dusts above ceilings, and at other areas that are not routinely cleaned (such as inside ducts and at roofs, etc.) are assumed to have measurable concentrations of asbestos. Based on sampling of similar settled and concealed dusts at similar buildings, those dusts are assumed to contain less than 1 percent asbestos. Normal settled and concealed dusts are distinct and treated differently from debris resulting from damaged asbestos-containing materials.

Background levels of asbestos in dusts for a particular location will depend on many factors, including whether or not asbestos occurs naturally in soils in the area.

Likely sources of asbestos in dusts include natural occurrences of asbestos

The types of asbestos found in settled and concealed dusts often contain actinolite, anthophyllite and tremolite forms of asbestos which are not commonly found in bulk samples taken of materials from buildings. Those forms of asbestos may come from natural occurrences of asbestos in an outside source, such as rock or ore deposits, which appear to be common in Alaska.

Because the type of disturbance, concentration of asbestos in the dusts, cohesiveness of the dusts and room sizes will change, the airborne asbestos levels expected during the project will depend on the contractor's means and methods of conducting the work. The mere presence of asbestos in the dusts does not necessarily imply that a "hazard" exists which would require the use of specially trained workers to "abate" the "hazard". All dusts will likely be required to be removed from the areas where asbestos-containing materials are being removed (abatement areas) in order to achieve clearances. The dusts in the other areas are to be controlled so as to limit worker exposures and prevent contamination of occupied areas of the building.

There is no established correlation between settled or adhered dusts with measurable concentrations of asbestos and airborne concentrations. The definition in the OSHA regulations of asbestos-containing materials as those materials that contain 1 percent or more asbestos by weight, apply to cohesive materials and not to dusts. The OSHA regulations are essentially "performance based", if workers are exposed above the permissible exposure limits, then all of the requirements in the regulations become effective.

3. Lead-Containing Materials

The EPA Standard 40 CFR 745, Lead-Based Paint Poisoning Prevention in Certain Residential Structures, defines lead-based paint hazards and regulates lead based paint activities in target housing and child-occupied facilities. The requirements of this regulation include training certification, pre-work notifications, work practice standards and record keeping. Areas typically classified as child occupied facilities may include but are not limited to: day care facilities, preschools, kindergarten classrooms, restrooms, multipurpose rooms, cafeterias, gyms, libraries and other areas routinely used by children under 6 years of age. Training requirements for Firms (Contractors) and Renovators (Workers) became effective on April 22, 2010. The building is not classified as a child occupied facility, therefore the requirements of 40 CFR 745 do not apply.

Federal OSHA (29 CFR 1926.62) and the State of Alaska (8 AAC Chapter 61) have promulgated regulations that apply to all construction work where employees may be exposed to lead. The disturbance of any surfaces painted with lead-containing paint requires lead-trained personnel, personnel protective procedures, and air monitoring until exposure levels can be determined. If initial monitoring verifies that the work practices being used are not exposing workers, monitoring and protection procedures may be relaxed. Experience has shown that some paints in most buildings will contain low concentrations of lead and disturbance of those paints are still regulated under the OSHA lead standard, 29 CFR 1926.62. Low levels of lead found by XRF testing does not mean that the paints are free of lead, the paints may contain lead, and OSHA regulations apply anytime measurable amounts of lead are present in paints.

Settled and concealed dust above ceilings, and at other areas that are not routinely cleaned are assumed to have measurable concentrations of lead. Background levels of lead in dusts for a particular location will depend on many factors, including whether or not engines utilizing leaded gasoline were run in or near a building, and upon the age of the building, and thus the age of the dusts. Because the type of disturbance, quantity of lead dusts, cohesiveness of the dusts and room sizes will change, the airborne lead levels expected during the project will depend on the contractor's means and methods of conducting the work. The mere presence of lead in the dusts does not necessarily imply that a "hazard" exists which would require the use of specially trained workers to "abate" the "hazard".

There is no established correlation between settled or adhered lead dust concentrations and airborne concentrations. The OSHA regulations are essentially "performance based", if workers are exposed above the permissible exposure limits, then all of the requirements in the regulations become effective.

The EPA requires that actual construction or demolition debris that contains lead or lead-containing paint or other heavy metals be tested using the TCLP test to determine if the waste must be treated as

hazardous waste. All federal, state and local standards regulating lead and lead-containing wastes are required to be followed during the renovation or demolition of portions of this building.

If the TCLP tests done on the waste stream(s) that are produced by the contractor are found to be classified as hazardous wastes, then those waste stream(s) will have to be packaged for shipping and disposal in accordance with hazardous waste and transportation regulations. Because there are no hazardous waste landfills in Alaska, this report assumes that disposal will take place in Seattle or elsewhere in the Pacific Northwest.

4. PCB-Containing Materials

The EPA has promulgated regulations (40 CFR Part 761) that cover the proper handling and disposal of PCB-containing materials. If any PCB-containing equipment is discovered and if they will be removed, those materials are required to be disposed of at fully permitted hazardous waste facilities. The EPA regulates liquid PCBs differently from non-liquid materials. Workers who remove or handle PCB-containing or PCB-contaminated materials or who transport or dispose of PCB wastes must be trained and certified in hazardous waste operations and emergency response (HAZWOPER) as required by 29 CFR 1910.120 and the State of Alaska Department of Labor (8 AAC 61). The Department of Transportation under 49 CFR Parts 100-199 regulates the marking, packaging, handling and transportation of hazardous materials. All federal, state and local standards regulating PCBs and PCB waste must be followed during this project.

5. Mercury-Containing Materials

Thermostats and mercury-containing lamps are classified by the EPA as Universal Wastes. The EPA encourages that all Universal Wastes be recycled in accordance with 40 CFR 273. Mercury and mercury-containing products are considered hazardous waste if TCLP testing of the waste for mercury confirms the mercury content to be greater than the EPA criteria of 0.2 mg/l.

6. Other Hazardous Materials

Refrigerants

Typically, refrigeration systems with ODS shall be maintained in order to prevent discharge of ODS. If present, systems that are to be removed, or dismantled shall have refrigerants containing ODS recovered and disposed of or recycled in accordance with 40 CFR 82.

Chemical Hazards

The EPA has promulgated regulations (40 CFR Parts 260 to 299 amongst others) that cover the proper handling and disposal of waste chemicals, including listed wastes, which are ignitable, corrosive, reactive, toxic, or an acute hazardous waste or wastes that exhibit the characteristics of toxicity. All construction workers who are required to remove or handle chemical hazards or to transport or dispose of chemical wastes shall be trained and certified as required by the U.S. Department of Labor (29 CFR 1910.120) and the State of Alaska Department of Labor (8 AAC 61). Transportation of chemical hazards are regulated by Department of Transportation regulations under 49 CFR Parts 171 to 178 amongst others.

Radioactive Materials

Smoke detectors were present in the building that may contain a radioactive material. If the detectors are of the ionization type they typically contain a small amount of Americium. If removed during renovation, the detectors should be returned to the owner for reuse or returned to the manufacturer for disposal or recycling. There are no licensed disposal facilities for radioactive wastes in Alaska.

F. RECOMMENDATIONS

Disposal of hazardous materials is often difficult and expensive in Rural Alaska. It is possible to obtain a one-time permit to dispose of non-friable, non-RACM asbestos materials from the Alaska Department of Environmental Conservation, however that process is neither fast nor inexpensive, and is highly

dependent on getting permission for an asbestos monofill from a landowner, and may not be financially feasible at many locations. Because Wrangell receives barge services, it is likely to be less expensive to barge out asbestos materials. Lead-containing materials, if they are not also asbestos-containing materials are often possible to dispose of locally, but in general, painted materials, with lead at measurable concentrations, are not allowed to be burned. Lead-containing materials which have been classified as hazardous waste, and chemical hazards are required to be disposed of at permitted landfills, which will require air freight or barge for disposal.

1. Asbestos-Containing Materials

The asbestos-containing materials identified in the building are typically in intact condition and are classified as non-friable ACM. All asbestos-containing materials that will be disturbed by the planned renovation work are required to be removed by trained asbestos workers. If any asbestos-containing materials are found that will be disturbed by future renovations or other work, they are required to be removed by trained asbestos workers.

2. Dusts with Asbestos

Dusts with measurable concentrations of asbestos were found are assumed to be present, but are not classified as asbestos-containing materials, or as debris from asbestos-containing materials. Workers disturbing dusts are required to have hazard communication training in accordance with OSHA regulations, but are not required to receive 40 hours of training, which is required for asbestos workers. The contractor will need to choose means and methods to control worker exposures to airborne contaminants. At least an initial exposure assessment or data from previous air monitoring is needed to show that worker exposures are maintained below the OSHA permissible exposure limits (PELs).

3. Lead-Containing Materials

Federal OSHA (29 CFR 1926.62) and the State of Alaska (8 AAC Chapter 61) have promulgated regulations that apply to all construction work where employees may be exposed to lead, including disturbance of paints with low concentrations of lead.

The EPA Standard 40 CFR 745, Lead-Based Paint Poisoning Prevention in Certain Residential Structures, defines lead-based paint hazards and regulates lead based paint activities in target housing and child-occupied facilities. Contractors disturbing lead-based paints in target housing and child occupied facilities must comply with 40 CFR 745.

Worker exposure to lead may be able to be controlled below the OSHA permissible exposure limit if proper engineering controls and procedures are used during renovation. Lead is a potentially hazardous waste and the EPA requires that all wastes that contains lead be tested to determine if they must be treated as hazardous waste. A TCLP test of the waste stream(s) produced by the Contractor's means and methods are required to be performed to determine if those wastes will be classified as hazardous or non-hazardous.

4. PCB-Containing Materials

If any PCB-containing ballasts are discovered, and they are removed or replaced, they will need to be removed, handled, packaged and disposed of in accordance with all regulations.

5. Mercury-Containing Materials

If any mercury-containing materials are removed or replaced, they will need to be removed, handled, packaged and disposed of in accordance with all regulations. If mercury-containing lamps and thermostats are handled and disposed of in accordance with the Universal Waste Regulations, no TCLP test is required. If the Contractor chooses to perform a TCLP test of fluorescent lamps, the test shall be conducted in accordance with the requirements of ANSI/NEMA Standard Procedure for Fluorescent

Lamp Sample Preparation and Toxicity Characteristic Leaching Procedure, C78.LL 1256-2003 or latest version.

6. Other Hazardous Materials

If any radioactive materials are removed or replaced, they will need to be removed, handled, packaged and disposed of in accordance with all regulations. .

If any ODS are removed or replaced, they will need to be removed, handled, packaged and disposed of in accordance with all regulations.

G. LIMITATIONS

The conclusions and recommendations contained in this report are based upon professional opinions with regard to the subject matter. These opinions have been arrived at in accordance with currently accepted environmental consulting and engineering standards and practices and are subject to the following inherent limitations:

1. Accuracy of Information

The laboratory reports utilized in this assessment were provided by the accredited laboratories cited in this report. Although the conclusions, opinions, and recommendations are based in part, on such information, our services did not include the verification of accuracy or authenticity of such reports. Should such information provided be found to be inaccurate or unreliable, EHS-Alaska, Inc. reserves the right to amend or revise its conclusions, opinions, and/or recommendations.

2. Site Conditions

The intent of this survey was to identify common hazardous materials that may be disturbed during routine maintenance or renovations. This survey is not intended to be utilized as the sole design document for abatement. This survey was conducted while the site was occupied. All inspections were performed with furniture, equipment and/or stored items in place. The scope of work for this survey did not include identification of all potentially hazardous materials that may be present at this site, and was limited to the scope of work agreed upon with our client. Although a concerted effort was made to identify those common hazardous materials likely to be affected by this project, some hazardous materials may have been hidden by furniture, equipment or stored items and may not have been identified. The survey investigated representative materials and items, such as lights and mechanical components. Variations may occur between materials and items that appear to be the same, but are actually of different construction or materials. Other asbestos-containing or potentially hazardous materials may be present in the facilities that were concealed by structural members, walls, ceilings or floor coverings, or in materials where testing was not conducted.

3. Changing Regulatory Constraints

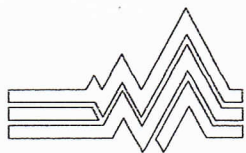
The regulations concerning hazardous materials are constantly changing, including the interpretations of the regulations by the local and national regulating agencies. Should the regulations or their interpretation be changed from our current understanding, EHS-Alaska, Inc. reserves the right to amend or revise its conclusions, opinions, and/or recommendations.

APPENDIX A

Asbestos Bulk Sample Field Survey Data Sheets and Laboratory Reports

RECEIVED

OCT 08 2020



EHS-ALASKA, INC.

EHS ALASKA
INCORPORATED

EHS-Alaska, Inc.

11901 Business Blvd., Suite 208, Eagle River, AK 99577

(907) 694-1383 • (907) 694-1382 fax

e-mail • ehsak@ehs-alaska.com

PROJECT NO: 7795-04	PROJECT NAME: Wrangell Capital Facilities Bldg	FACILITY: Wrangell National Guard Armory	COLLECTION DATE: 09/17/2020
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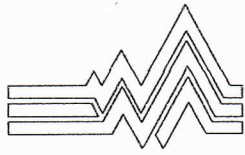
CHAIN OF CUSTODY RECORD

ANALYSIS REQUESTED:	<input checked="" type="checkbox"/> PLM BULK <input type="checkbox"/> LEAD DUST <input type="checkbox"/> TEM MICROVAC DUST (ASTM 5756)	<input type="checkbox"/> PLM DUST <input type="checkbox"/> LEAD TCLP	<input type="checkbox"/> TEM BULK <input type="checkbox"/> LEAD PPM	TYPE: <input checked="" type="checkbox"/> ASBESTOS <input type="checkbox"/> LEAD	TURNAROUND: 3 DAYS	DISPOSAL: NORMAL	QUANTITY: 21
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<p><i>Robert A. French</i> COLLECTED BY (signature)</p> <p>Robert A. French PRINTED NAME</p> <p>1564 88IMP-0028 CERT# / AHERA#</p> <p>Fed Ex SHIPPING METHOD</p> <p>7716 1864 9898 COURIER (signature)</p> <p>9-24-20 DATE/TIME</p>	<p>IATL SELECTED LABORATORY</p> <p>SAMPLES ACCEPTED BY <i>5 21020</i></p> <p>DATE/TIME <i>9-24-20</i></p> <p>ANALYST'S SIGNATURE <i>Robert A. French</i></p> <p>DATE <i>9/24/20</i></p>	<p>SPECIAL INSTRUCTIONS / COMMENTS:</p> <p>LAB: RETURN A SIGNED COPY OF THIS FORM WITH THE FINAL REPORT TO EHS-ALASKA, INC.</p> <p>See sample location drawing for more detailed explanation of exact locations.</p> <p><i>90 Asbestos</i></p>
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FIELD SURVEY DATA

EHS SAMPLE NO. LAB ID NO	SAMPLE DESCRIPTION, (COLOR, MATERIAL TYPE, LAYERS, FRIABILITY)	LOCATION/COMMENTS (INCLUDING PHOTO/XREF)	RESULTS FOR EHS-ALASKA USE ONLY
WNG920-A01 7067247	Black tar paper	Exterior SE Corner, South side of building under metal siding. Photo R1638	<i>None Detected</i>
WNG920-A02 7067248	Sticky black foam seal (1" wide)	Exterior SE Corner, South side of building under metal siding. Appears to be factory supplied. Photo R1636	<i>None Detected both layers</i>
WNG920-A03 7067249	Clear w gray weathering sealant at hole	Exterior SE Corner, East side of building, on metal siding. Photo R1641	<i>None Detected both layers</i>
WNG920-A04 7067250	Clear w gray weathering sealant at door trim	Exterior NE Corner, East side of building, at rotten wood door trim. Photo R1642	<i>None Detected</i>
WNG920-A05 7067251	Sticky black foam seal (1/4" wide)	At ridge of metal roofing. Appears to be factory supplied. Photo R1643	<i>None Detected</i>
WNG920-A06 7067252	Clear w gray weathering sealant at window trim	Exterior S side of building, at W side window. Photo B221	<i>None Detected</i>
WNG920-A07 7067253	Ice & Water Shield under metal roofing	Under metal roofing over plywood. Photo R1644	<i>None Detected</i>
WNG920-A08 7067254	White sealant between window frame and window trim	Exterior S side of building, at E side window. Photo B222	<i>None Detected</i>
WNG920-A09 7067255	Clear w gray weathering sealant at roof stack flashing	Roof at SE corner, at furnace stack. Photo R1645	<i>None Detected</i>



EHS ALASKA
INCORPORATED

EHS Alaska, Inc.

11901 Business Blvd., Suite 208, Eagle River, AK 99577

(907) 694-1383 • (907) 694-1382 fax

e-mail • ehsak@ehs-alaska.com

PROJECT NO: 7795-04	PROJECT NAME: Wrangell Capital Facilities Bldg	FACILITY: Wrangell National Guard Armory	COLLECTION DATE: 09/17/2020
-------------------------------	--	--	---------------------------------------

FIELD SURVEY DATA

EHS SAMPLE NO. LAB ID NO	SAMPLE DESCRIPTION, (COLOR, MATERIAL TYPE, LAYERS, FRIABILITY)	LOCATION/COMMENTS (INCLUDING PHOTO/XREF)	RESULTS FOR EHS-ALASKA USE ONLY
WNG920-A10 7067256	"Grout" at rock walls with GB paper	Fireplace/furnace alcove at SE corner of main room. Photo R1772	None Detected
WNG920-A11 7067257	"Grout" at rock walls with gypsum wall board	Fireplace/furnace alcove at SE corner of main room. Photo R1773	None Detected both layers
WNG920-A12 7067258	FT-1. Tan 12 x 12 with brown & light brown smears, black mastic	Floor at SE corner of main room. By E wall. Photo R1774	1.1% Chrys in tile 2.7% chrys-mastic
WNG920-A13 7067259	Dark Brown cove base mastic & black cove base	Floor at SE corner of main room. By E wall. Photo R1774	None Detected both layers
WNG920-A14 7067260	FT-1. Tan 12 x 12 with brown & light brown smears, black mastic	Floor in Bathroom, South side. Photo R1783	1.2% Chrys in tile. 2.2% chrys mastic
WNG920-A15 7067261	Dark Brown cove base mastic & black cove base	On Marlite in Bathroom, South side. Photo R1783	None Detected 3 layers
WNG920-A16 7067262	Marlite (no marlite mastic to GWB) and dark brown cove base mastic	On Marlite in Bathroom, South side. Photo R1784	None Detected both layers
WNG920-A17 7067263	Gypsum board, joint compound, tape & brown cove base mastic	Center office, at NE Corner, Photo R1786	None Detected both layers
WNG920-A18 7067264	Gypsum board, joint compound, tape	Director's office at NW side. Photo B225	None Detected 3 layers
WNG920-A19 7067265	Swirly texture on ceiling	Director's office, north side, E side of windows. Photo B226	None Detected
WNG920-A20 7067266	Swirly texture on ceiling	Director's office, north side, E side center, near door. Photo B227	None Detected
WNG920-A21 7067267	Swirly texture on ceiling	Director's office, north side, W side of windows. Photo B228	None Detected
	END		

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577	Report Date: 9/28/2020 Report No.: 620076 - PLM Project: Wrangell Capital Facilities Building Project No.: 7795-04
Client: EHS511	

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7067247 Client No.: WNG920-A01	Analyst Observation: Black Tar Paper Client Description: Black Tar Paper	Location: Exterior SE Corner, South Side of Building Under Metal Siding. Photo R1638 Facility: Percent Non-Fibrous Material: 20
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 80 Cellulose	

Lab No.: 7067248 Client No.: WNG920-A02	Analyst Observation: Black Foam Client Description: Sticky Black Foam Seal (1" Wide)	Location: Exterior SE Corner, South Side of Building Under Metal Siding. Appears to be Factory Supplied. Photo Facility: Percent Non-Fibrous Material: 100
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	

Lab No.: 7067248(L2) Client No.: WNG920-A02	Analyst Observation: Clear Mastic Client Description: Sticky Black Foam Seal (1" Wide)	Location: Exterior SE Corner, South Side of Building Under Metal Siding. Appears to be Factory Supplied. Photo Facility: Percent Non-Fibrous Material: 100
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	

Lab No.: 7067249 Client No.: WNG920-A03	Analyst Observation: Clear/Grey Caulk Client Description: Clear With Grey Weathering Sealant at Hole	Location: Exterior SE Corner, South Side of Building, on Metal Siding. Photo 1641 Facility: Percent Non-Fibrous Material: 100
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	

Lab No.: 7067249(L2) Client No.: WNG920-A03	Analyst Observation: White Caulk Client Description: Clear With Grey Weathering Sealant at Hole	Location: Exterior SE Corner, South Side of Building, on Metal Siding. Photo 1641 Facility: Percent Non-Fibrous Material: 100
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 9/25/2020
Date Analyzed: 09/28/2020
Signature: *David Hayes*
Analyst: David Hayes

Approved By: *Frank E. Ehrenfeld, III*
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577	Report Date: 9/28/2020 Report No.: 620076 - PLM Project: Wrangell Capital Facilities Building Project No.: 7795-04
Client: EHS511	

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7067250 Client No.: WNG920-A04	Analyst Observation: Clear/Grey Caulk Client Description: Clear With Grey Weathering Sealant at Door Trim	Location: Exterior NE Corner, East Side of Building, at Rotten Wood Door Trim. Photo R1642 Facility: Percent Non-Fibrous Material:
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<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
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Lab No.: 7067251 Client No.: WNG920-A05	Analyst Observation: Black Foam Client Description: Sticky Black Foam Seal (1/4" Wide)	Location: At Ridge of Metal Roofing. Appears to be Factory Supplied. Photo R1643 Facility: Percent Non-Fibrous Material:
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<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
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Lab No.: 7067252 Client No.: WNG920-A06	Analyst Observation: Clear/White Caulk Client Description: Clear With Grey Weathering Sealant at Window Trim	Location: Exterior S Side of Building, at W Side Window. Photo B221 Facility: Percent Non-Fibrous Material:
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<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
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Lab No.: 7067253 Client No.: WNG920-A07	Analyst Observation: Black Roof Material Client Description: Ice and Water Shield Under Metal Roofing	Location: Under Metal Roofing Over Plywood. Photo R1644 Facility: Percent Non-Fibrous Material:
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<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 15 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 85
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Lab No.: 7067254 Client No.: WNG920-A08	Analyst Observation: White Caulk Client Description: White Sealant Between Window Frame and Window Trim	Location: Exterior S Side of Building, at E Side Window. Photo B222 Facility: Percent Non-Fibrous Material:
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<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
--	--	---

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 9/25/2020
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Signature: *David Hayes*
Analyst: David Hayes

Approved By: *Frank E. Ehrenfeld*
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577	Report Date: 9/28/2020 Report No.: 620076 - PLM Project: Wrangell Capital Facilities Building Project No.: 7795-04
Client: EHS511	

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7067255 Client No.: WNG920-A09	Analyst Observation: Clear/Grey Caulk Client Description: Clear With Grey Weathering Sealant at Roof Stack Flashing	Location: Roof at SE Corner, at Furnace Stack. Photo R1645 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 7067256 Client No.: WNG920-A10	Analyst Observation: Grey Grout Client Description: "Grout" at Rock Walls With GB Paper	Location: Fireplace/Furnace Alcove at SE Corner of Main Room. Photo R1772 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 25 Cellulose 3 Synthetic	<u>Percent Non-Fibrous Material:</u> 72

Lab No.: 7067257 Client No.: WNG920-A11	Analyst Observation: Grey Mortar Client Description: "Grout" at Rock Walls With Gypsum Wall Board	Location: Fireplace/Furnace Alcove at SE Corner of Main Room. Photo R1773 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 25 Cellulose 3 Synthetic	<u>Percent Non-Fibrous Material:</u> 72

Lab No.: 7067257(L2) Client No.: WNG920-A11	Analyst Observation: White Drywall Client Description: "Grout" at Rock Walls With Gypsum Wall Board	Location: Fireplace/Furnace Alcove at SE Corner of Main Room. Photo R1773 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 10 Cellulose 2 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 88

Lab No.: 7067258 Client No.: WNG920-A12	Analyst Observation: Tan Floor Tile Client Description: FT-1. Tan 12x12 With Brown and Light Brown Smears, Black Mastic	Location: Floor at SE Corner of Main Room. By E Wall. Photo R1774 Facility:
<u>Percent Asbestos:</u> <i>PC 1.1 Chrysotile</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 98.9

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 9/25/2020
Date Analyzed: 09/28/2020
Signature: *David Hayes*
Analyst: David Hayes

Approved By: *Frank E. Ehrenfeld, III*
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577	Report Date: 9/28/2020 Report No.: 620076 - PLM Project: Wrangell Capital Facilities Building Project No.: 7795-04
Client: EHS511	

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7067258(L2) Client No.: WNG920-A12	Analyst Observation: Black Mastic Client Description: FT-1. Tan 12x12 With Brown and Light Brown Smears, Black Mastic	Location: Floor at SE Corner of Main Room. By E Wall. Photo R1774
<u>Percent Asbestos:</u> PC 2.7 Chrysotile	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Facility: <u>Percent Non-Fibrous Material:</u> 97.3

Lab No.: 7067259 Client No.: WNG920-A13	Analyst Observation: Dk Brown Cove Base Client Description: Dark Brown Cove Base Mastic and Black Cove Base	Location: Floor at SE Corner of Main Room. By E Wall. Photo R1774
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Facility: <u>Percent Non-Fibrous Material:</u> 100

Lab No.: 7067259(L2) Client No.: WNG920-A13	Analyst Observation: Brown Mastic Client Description: Dark Brown Cove Base Mastic and Black Cove Base	Location: Floor at SE Corner of Main Room. By E Wall. Photo R1774
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Facility: <u>Percent Non-Fibrous Material:</u> 100

Lab No.: 7067260 Client No.: WNG920-A14	Analyst Observation: Tan Floor Tile Client Description: FT-1. Tan 12x12 With Brown and Light Brown Smears, Black Mastic	Location: Floor in Bathroom, South Side. Photo R1738
<u>Percent Asbestos:</u> PC 1.2 Chrysotile	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Facility: <u>Percent Non-Fibrous Material:</u> 98.8

Lab No.: 7067260(L2) Client No.: WNG920-A14	Analyst Observation: Black Mastic Client Description: FT-1. Tan 12x12 With Brown and Light Brown Smears, Black Mastic	Location: Floor in Bathroom, South Side. Photo R1738
<u>Percent Asbestos:</u> PC 2.2 Chrysotile	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Facility: <u>Percent Non-Fibrous Material:</u> 97.8

Lab No.: 7067261 Client No.: WNG920-A15	Analyst Observation: Dk Brown Cove Base Client Description: Dark Brown Cove Base Mastic and Black Cove Base	Location: On Marlite in Bathroom, South Side. Photo 1783
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Facility: <u>Percent Non-Fibrous Material:</u> 100

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 9/25/2020
Date Analyzed: 09/28/2020
Signature: *David Hayes*
Analyst: David Hayes

Approved By: *Frank E. Ehrenfeld*
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577	Report Date: 9/28/2020 Report No.: 620076 - PLM Project: Wrangell Capital Facilities Building Project No.: 7795-04
Client: EHS511	

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7067261(L2) Client No.: WNG920-A15	Analyst Observation: Brown Mastic Client Description: Dark Brown Cove Base Mastic and Black Cove Base	Location: On Marlite in Bathroom, South Side. Photo 1783 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 7067261(L3) Client No.: WNG920-A15	Analyst Observation: Off-White Mastic Client Description: Dark Brown Cove Base Mastic and Black Cove Base	Location: On Marlite in Bathroom, South Side. Photo 1783 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 7067262 Client No.: WNG920-A16	Analyst Observation: White/Brown Fiberboard Client Description: Marlite (No Marlite Mastic to GWB) and Dark Brown Cove Base Mastic	Location: On Marlite in Bathroom, South Side. Photo 1784 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 85 Cellulose	<u>Percent Non-Fibrous Material:</u> 15

Lab No.: 7067262(L2) Client No.: WNG920-A16	Analyst Observation: Brown/Off-White Mastic Client Description: Marlite (No Marlite Mastic to GWB) and Dark Brown Cove Base Mastic	Location: On Marlite in Bathroom, South Side. Photo 1784 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 7067263 Client No.: WNG920-A17	Analyst Observation: White Drywall Client Description: Gypsum Board, Joint Compound, Tape and Brown Cove Base Mastic	Location: Center Office, at NE Corner. Photo R1786 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 10 Cellulose 2 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 88

Lab No.: 7067263(L2) Client No.: WNG920-A17	Analyst Observation: White Joint Compound Client Description: Gypsum Board, Joint Compound, Tape and Brown Cove Base Mastic	Location: Center Office, at NE Corner. Photo R1786 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 9/25/2020
Date Analyzed: 09/28/2020
Signature: *David Hayes*
Analyst: David Hayes

Approved By: *Frank E. Ehrenfeld, III*
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577	Report Date: 9/28/2020 Report No.: 620076 - PLM Project: Wrangell Capital Facilities Building Project No.: 7795-04
Client: EHS511	

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7067264 Client No.: WNG920-A18	Analyst Observation: White Drywall Client Description: Gypsum Board, Joint Compound, Tape	Location: Director's Office at NW Side. Photo B225 Facility: Percent Non-Fibrous Material: 90
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 10 Cellulose	

Lab No.: 7067264(L2) Client No.: WNG920-A18	Analyst Observation: Client Description: Gypsum Board, Joint Compound, Tape	Location: Director's Office at NW Side. Photo B225 Facility: Percent Non-Fibrous Material:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	

Lab No.: 7067264(L2) Client No.: WNG920-A18	Analyst Observation: White Texture Client Description: Gypsum Board, Joint Compound, Tape	Location: Director's Office at NW Side. Photo B225 Facility: Percent Non-Fibrous Material: 100
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	

Lab No.: 7067265 Client No.: WNG920-A19	Analyst Observation: White Ceiling Texture Client Description: Swirly Texture on Ceiling	Location: Director's Office, North Side, E of Windows. Photo B226 Facility: Percent Non-Fibrous Material: 100
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	

Lab No.: 7067266 Client No.: WNG920-A20	Analyst Observation: White Ceiling Texture Client Description: Swirly Texture on Ceiling	Location: Director's Office, North Side, E Side Center, Near Door. Photo B227 Facility: Percent Non-Fibrous Material: 100
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	

Lab No.: 7067267 Client No.: WNG920-A21	Analyst Observation: White Ceiling Texture Client Description: Swirly Texture on Ceiling	Location: Director's Office, North Side, W Side of Windows. Photo B228 Facility: Percent Non-Fibrous Material: 100
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 9/25/2020
Date Analyzed: 09/28/2020
Signature: *David Hayes*
Analyst: David Hayes

Approved By: *Frank E. Ehrenfeld*
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
11901 Business Blvd., Ste 208
Eagle River AK 99577

Report Date: 9/28/2020
Report No.: 620076 - PLM
Project: Wrangell Capital Facilities Building
Project No.: 7795-04

Client: EHS511

Appendix to Analytical Report

Customer Contact: Cali Swatowski

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, and USEPA 600, R93-116 as needed.

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Semih Kocahasan

Sample Login Notes: See Batch Sheet Attached

Sample Matrix: Bulk Building Materials

Exceptions Noted: See Following Pages

General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at www.iATL.com and in our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

This report shall not be reproduced except in full, without written approval of the laboratory.

Information Pertinent to this Report:

Analysis by US EPA 600 93-116: Determination of Asbestos in Bulk Building Materials by Polarized Light Microscopy (PLM).

Certifications:

- NIST-NVLAP No. 101165-0
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. PC Trace represents a <0.25% amount. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

Analytical Methodology Alternatives: Your initial request for analysis may not have accounted for recent advances in regulatory requirements or advances in technology that are routinely used in similar situations for other qualified projects. You may have the option to explore additional analysis for further information. Below are a few options, listed as the matrix followed by the appropriate methodology. Also included are links to more information on our website.

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB)

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
11901 Business Blvd., Ste 208
Eagle River AK 99577

Report Date: 9/28/2020
Report No.: 620076 - PLM
Project: Wrangell Capital Facilities Building
Project No.: 7795-04

Client: EHS511

Loose Fill Vermiculite Insulation, Attic Insulation, Zonolite (copyright), etc.: US EPA 600 R-4/004 (multi-tiered analytical process)
Sprayed On Insulation/Fireproofing with Vermiculite (SOF-V): ELAP 198.8 (PLM-SOF-V)

Soil, sludge, sediment, aggregate, and like materials analyzed for asbestos or other elongated mineral particles (ex. erionite, etc.): ASTM D7521, CARB 435, and other options available

Asbestos in Surface Dust according to one of ASTM's Methods (very dependent on sampling collection technique – by TEM): ASTM D 5755, D5756, or D6480

Various other asbestos matrices (air, water, etc.) and analytical methods are available.

Disclaimers / Qualifiers:

There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a list with highlighted disclaimers that may be pertinent to this project. For a full explanation of these and other disclaimers, please inquire at customerservice@iatl.com.

- 1) Note: No mastic provided for analysis.
- 2) Note: Insufficient mastic provided for analysis.
- 3) Note: Insufficient material provided for analysis.
- 4) Note: Insufficient sample provided for QC reanalysis.
- 5) Note: Different material than indicated on Sample Log / Description.
- 6) Note: Sample not submitted.
- 7) Note: Attached to asbestos containing material.
- 8) Note: Received wet.
- 9) Note: Possible surface contamination.
- 10) Note: Not building material. 1% threshold may not apply.
- 11) Note: Recommend TEM-NOB analysis as per EPA recommendations.
- 12) Note: Asbestos detected but not quantifiable.
- 13) Note: Multiple identical samples submitted, only one analyzed.
- 14) Note: Analyzed by EPA 600/R-93/116. Point Counting detection limit at 0.080%.
- 15) Note: Analyzed by EPA 600/R-93/116. Point Counting detection limit at 0.125%.
- 16) Note: This sample contains >10% vermiculite mineral. See Appendix for Recommendations for Vermiculite Analysis.

Recommendations for Vermiculite Analysis:

Several analytical protocols exist for the analysis of asbestos in vermiculite. These analytical approaches vary depending upon the nature of the vermiculite mineral being tested (e.g. un-processed gange, homogeneous exfoliated books of mica, or mixed mineral composites). Please contact your client representative for pricing and turnaround time options available.

iATL recommends initial testing using the EPA 600/R-93/116 method. This method is specifically designed for the analysis of asbestos in bulk building materials. It provides an acceptable starting point for primary screening of vermiculite for possible asbestos.

Results from this testing may be inconclusive. EPA suggests proceeding to a multi-tiered analysis involving wet separation techniques in conjunction with PLM and TEM gravimetric analysis (EPA 600/R-04/004).

For New York State customers, NYSDOH requires disclaimers and qualifiers for various vermiculite containing samples that direct analysis via ELAP198.6 and ELAP198.8 for samples that contain >10% vermiculite mineral where ELAP198.6 may be used to evaluate the asbestos content of the material. However, any test result using ELAP198.6 will be reported with the following disclaimer: "ELAP198.6 method does not remove vermiculite and may underestimate the level of asbestos present in a sample containing >10% vermiculite."

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite (https://www.wadsworth.org/sites/default/files/WebDoc/I198_8_02_2.pdf)

The following is a summary of the analytical process outlines in the EPA 600/R-04/004 Method:

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
11901 Business Blvd., Ste 208
Eagle River AK 99577

Report Date: 9/28/2020
Report No.: 620076 - PLM
Project: Wrangell Capital Facilities Building
Project No.: 7795-04

Client: EHS511

2)**Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Sinks" only.

3)**Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Floats" only.

4)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Sinks" only.

5)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Suspension" only.
*With advance notice and confirmation by the laboratory.

**Approximately 1 Liter of sample in double-bagged container (~9x6 inch bag of sample).

APPENDIX B

Lead Analyzer Test Results

LEAD ANALYZER TEST RESULTS

Heuresis Pb200i, Serial No. 1770

NO.	SITE	INSPECTOR	FLOOR	ROOM	COMPONENT	SUBSTRATE	CONDITION	COLOR	DURATION	TIME	RESULTS		
											LBP	mg/cm ²	+/- ERROR
READINGS PRIOR TO 248 ARE FROM A DIFFERENT FACILITY AND NOT INCLUDED HERE													
248	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	-	-	CALIBRATION	-	-	GREEN	5	9/17/20 23:20:04	POSITIVE	1	0.1
249	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	-	-	CALIBRATION	-	-	GREEN	5	9/17/20 23:20:17	POSITIVE	1.1	0.1
250	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	-	-	CALIBRATION	-	-	GREEN	5	9/17/20 23:20:30	POSITIVE	1	0.1
251	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	COMMON	DOOR	METAL	INTACT	WHITE	5.9	9/17/20 23:30:54	NEGATIVE	0.03	0.12
252	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	COMMON	DOOR FRAME	WOOD	INTACT	WHITE	5.9	9/17/20 23:31:53	NEGATIVE	0.16	0.12
253	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	COMMON	WINDOW TRIM	WOOD	INTACT	VARNISH	5.66	9/17/20 23:33:44	NEGATIVE	0.01	0.13
254	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	COMMON	WALL	WOOD	INTACT	VARNISH	5.83	9/17/20 23:35:00	NEGATIVE	0.12	0.12
255	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	COMMON	WINDOW SILL	WOOD	INTACT	VARNISH	5.79	9/17/20 23:35:50	NEGATIVE	0.1	0.12
256	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	OFFICE 2	AIR GRILLE	METAL	INTACT	WHITE	5.63	9/17/20 23:39:33	NEGATIVE	0.21	0.13
257	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	COMMON	AIR GRILLE	METAL	INTACT	WHITE	5.49	9/17/20 23:41:29	NEGATIVE	0.15	0.13
258	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	COMMON	DOOR	METAL	INTACT	TAN	5.64	9/17/20 23:50:00	NEGATIVE	0.25	0.13
259	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	COMMON	DOOR FRAME	METAL	INTACT	TAN	5.81	9/17/20 23:51:19	NEGATIVE	0.23	0.12
260	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	OFFICE 1	WALL	DRYWALL	INTACT	WHITE	5.69	9/17/20 23:53:01	NEGATIVE	0.12	0.13
261	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	OFFICE 1	ELECTRICAL PANEL	DRYWALL	INTACT	GRAY	5.8	9/17/20 23:54:41	NEGATIVE	0.24	0.12
262	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	COMMON	DOOR	WOOD	INTACT	VARNISH	5.66	9/17/20 23:56:56	NEGATIVE	0.04	0.13
263	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	TOILET ROOM	EQUIPMENT	METAL	INTACT	BEIGE	5.74	9/17/20 23:58:48	NEGATIVE	0.11	0.12
264	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	TOILET ROOM	WALL	MARLITE	INTACT	WHITE	5.62	9/18/20 00:05:17	NEGATIVE	0.15	0.13
265	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	SHOP	WALL	DRYWALL	INTACT	WHITE	4.61	9/18/20 00:08:30	NEGATIVE	0.18	0.14
266	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	SHOP	CABINET	FORMICA	INTACT	BROWN	5.61	9/18/20 00:09:48	NEGATIVE	0.26	0.13
267	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	ENTRY WAY	DOOR	METAL	INTACT	BROWN	5.52	9/18/20 00:12:38	NEGATIVE	0.21	0.13
268	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	OUTSIDE	DOOR	METAL	INTACT	WHITE	5.66	9/18/20 00:17:35	NEGATIVE	0.02	0.13
269	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	OUTSIDE	POST	METAL	PEELING	GREEN	5.72	9/18/20 00:20:45	NEGATIVE	0.09	0.13
270	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	OUTSIDE	WALL	METAL	PEELING	GREEN	5.31	9/18/20 00:21:50	NEGATIVE	0.3	0.13
271	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	OUTSIDE	WALL	METAL	PEELING	BROWN	5.87	9/18/20 00:22:48	NEGATIVE	0.19	0.12
272	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	OUTSIDE	HAND RAIL	METAL	PEELING	SILVER	5.6	9/18/20 00:24:04	NEGATIVE	0.25	0.13
273	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	OUTSIDE	WINDOW TRIM	WOOD	PEELING	WHITE	5.96	9/18/20 00:25:45	NEGATIVE	0.15	0.12
274	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	OUTSIDE	ELECTRICAL PANEL	METAL	PEELING	BROWN	5.49	9/18/20 00:27:18	NEGATIVE	0.17	0.13
275	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	OUTSIDE	TANK	METAL	PEELING	WHITE	6.03	9/18/20 00:29:18	NEGATIVE	0.1	0.12
276	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	FIRST	COMMON	BLACKBOARD	BK BD COATING	INTACT	BLACK	5.28	9/18/20 00:35:52	NEGATIVE	0.09	0.13
277	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	-	-	CALIBRATION	-	-	GREEN	5	9/18/20 00:38:16	POSITIVE	1	0.1
278	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	-	-	CALIBRATION	-	-	GREEN	5	9/18/20 00:38:28	NEGATIVE	0.9	0.1
279	WRANGELL CAPITAL FACILITIES BUILDING	FRENCH	-	-	CALIBRATION	-	-	GREEN	5	9/18/20 00:38:41	POSITIVE	1	0.1

Table Heading Descriptions:

Duration: This is the nominal time in "source" seconds that each sample was analyzed.

LBP: Results are shown as positive (POS \geq 1.0 mg/cm²) or negative (NEG < 1.0 mg/cm²). Positive results are shown in bold print.

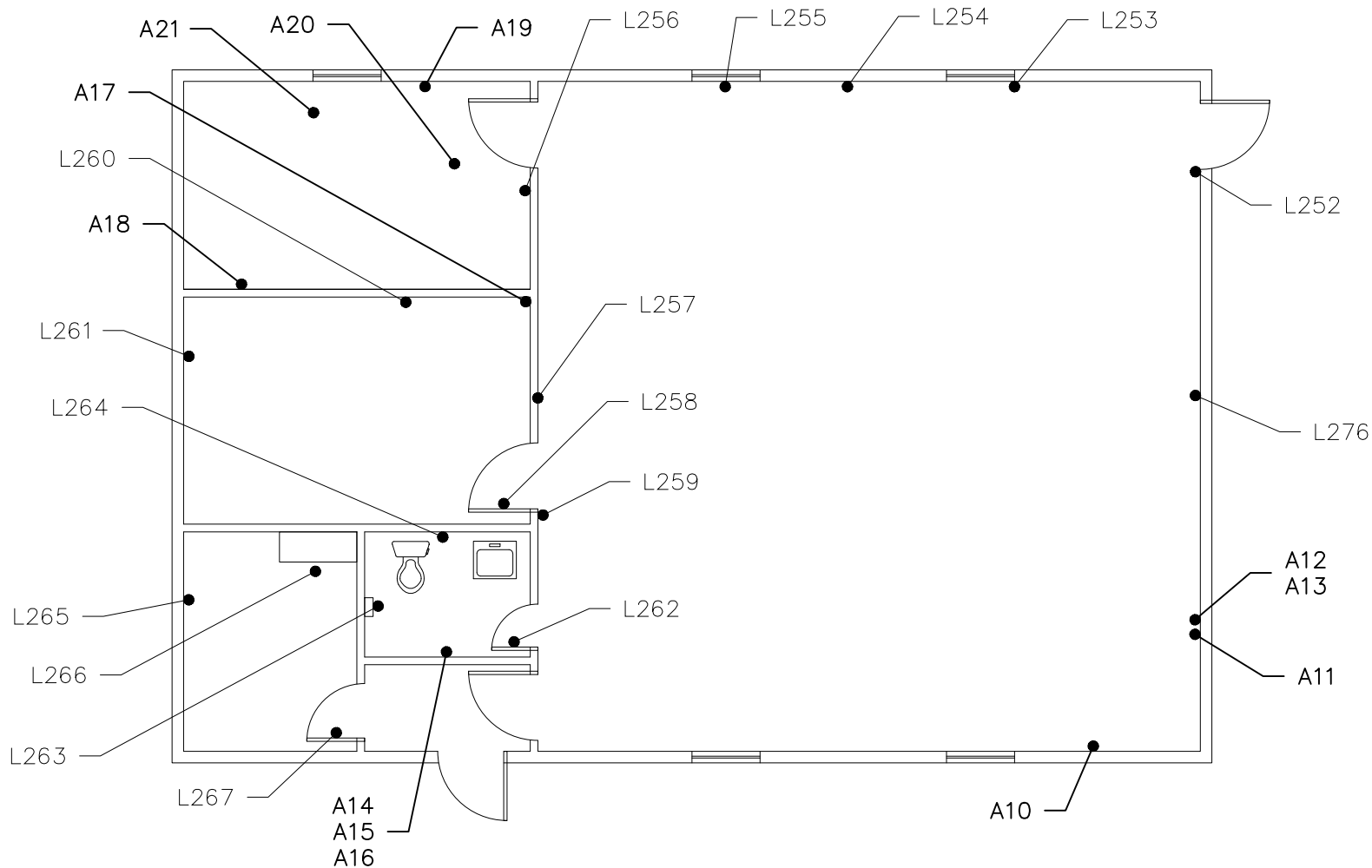
mg/cm²: This is the testing results produced by the Heuresis Pb200i instrument in milligrams of lead per square centimeter (mg/cm²). The EPA defines lead based paint as paint containing lead at 1.0 mg/cm² or greater. A negative number is a result of an internal computation made by the instrument and should be interpreted as zero. Even though paint may be termed negative (less than 1.0 mg/cm²) by EPA definition, disturbance of the paint may still be regulated by OSHA under 29 CFR 1926.62. Where lead is present at any level, appropriate engineering controls, work practices and personal protective equipment should be used until a negative exposure assessment can be determined. <LOD indicates that the lead present was less than the limits of detection of the instrument (very little or no lead present).

VOID: This indicates that the test was intentionally terminated by the operator due to operator error (e.g. - operator moved analyzer while testing).

Substrate: Where ceramic is shown as a substrate, lead content is typically from the glazing on the tile unless the tile is painted.

APPENDIX C

Drawings of Sample Locations



1
C-1

OFFICE – INTERIOR
NTS



LEGEND

- LXX LEAD TEST LOCATION
 - LXX LEAD TEST CLASSIFIED AS LEAD BASED PAINT
- REFER TO TESTING SUMMARY IN REPORT FOR FULL DETAILS.

LEGEND

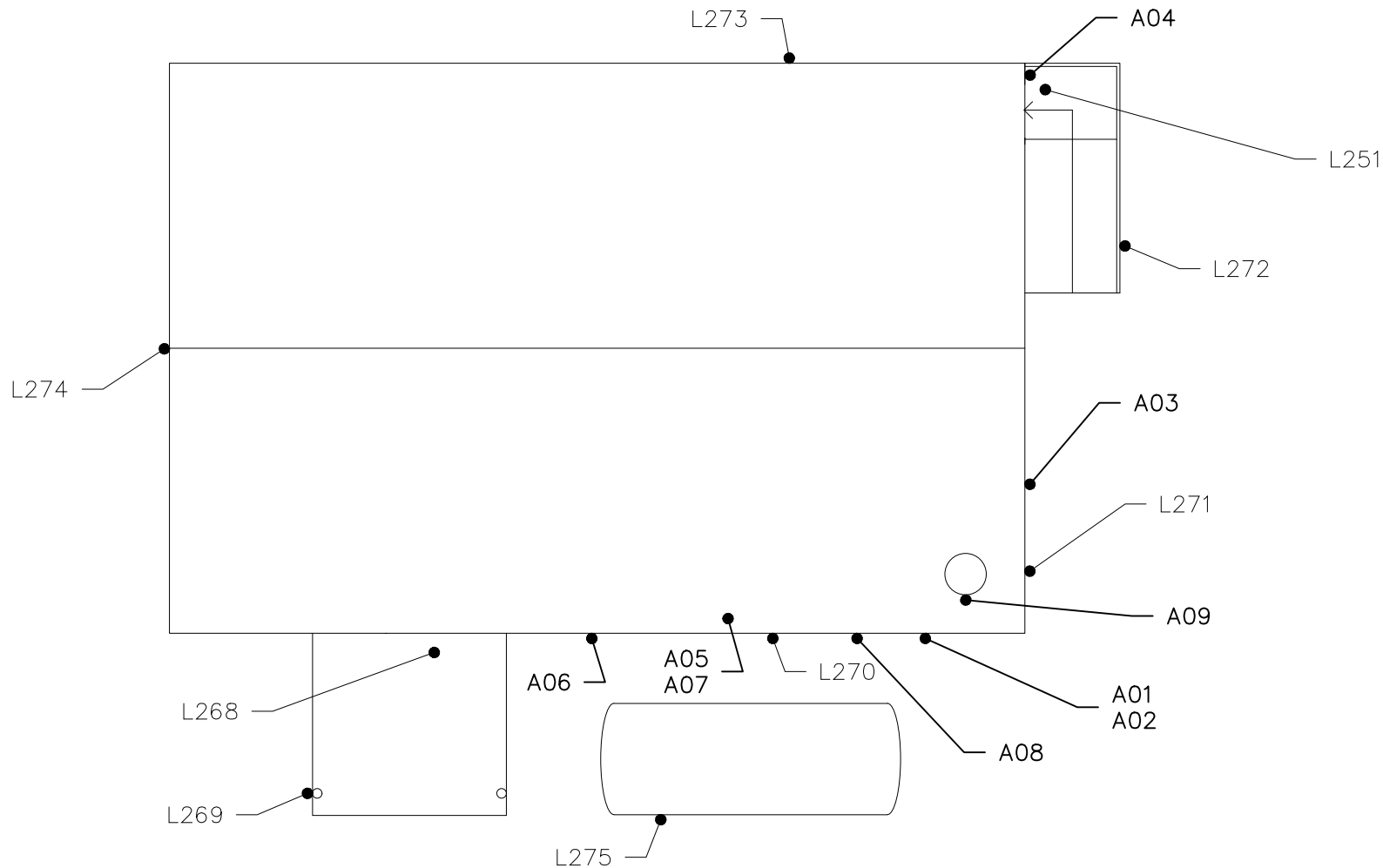
- AXX ASBESTOS TEST LOCATION
 - AXX LAB TEST RESULTS POSITIVE FOR ASBESTOS
- REFER TO TESTING SUMMARY IN REPORT FOR FULL DETAILS. ALL SAMPLES HAVE WNG920- PREFIX.

WRANGELL
CAPITAL FACILITIES
DEPARTMENT

OLD NATIONAL GUARD BUILDING
WRANGELL, ALASKA
ASBESTOS & LEAD SAMPLE LOCATIONS



DRAWN: BWH	DATE: 09/17/2020
CHECK: RAF	
FILE #:	DWG.NO:
7795-04-SL	C-1



LEGEND

- LXX LEAD TEST LOCATION
- LXX LEAD TEST CLASSIFIED AS LEAD BASED PAINT

REFER TO TESTING SUMMARY IN REPORT FOR FULL DETAILS.

1
C-2

OFFICE – EXTERIOR
NTS



LEGEND

- AXX ASBESTOS TEST LOCATION
- AXX LAB TEST RESULTS POSITIVE FOR ASBESTOS

REFER TO TESTING SUMMARY IN REPORT FOR FULL DETAILS. ALL SAMPLES HAVE WNG920- PREFIX.

**WRANGELL
CAPITAL FACILITIES
DEPARTMENT**

**OLD NATIONAL GUARD BUILDING
WRANGELL, ALASKA
ASBESTOS & LEAD SAMPLE LOCATIONS**



DRAWN: BWH	DATE: 09/17/2020
CHECK: RAF	
FILE #:	DWG.NO:
7795-04-SL	C-2