

LIMITED ASBESTOS & LEAD INSPECTION REPORT

Building 455
Fort Richardson, AK 99505

Prepared for
673 CES CENMP
730 Quartermaster Road
JBER, AK 99505

Prepared by



AK Environmental Consultants, Inc.
5700 Old Seward Highway, Suite 205
Anchorage, AK 99518

September 20, 2022

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OVERVIEW

AK Environmental Consultants, Inc. (AKEC) conducted a limited asbestos & lead inspection of Building 455 located at Fort Richardson, AK 99505 on September 7, 2022. The inspection was not AHERA or NESHAP compliant at the client's request. The sampling was conducted by AHERA-accredited asbestos building inspector, Travis Hubbard. Accessible interior and exterior components were surveyed and homogeneous areas of suspect asbestos-containing materials (ACM) were visually identified and documented. Although reasonable effort was made to survey all accessible suspect materials, additional suspect but unsampled materials may be present in walls, voids, or other inaccessible areas of the building.

All suspect ACM samples were delivered to an accredited laboratory for analysis by polarized light microscopy (PLM).

ASBESTOS INSPECTION PROCEDURES

The inspection was conducted by Travis Hubbard, AHERA-accredited asbestos building inspector, on September 7, 2022. A copy of the inspector license is attached as Appendix C. The inspection began with a walk through of the eight-plex. Building materials identified as glass, wood, or metal are not considered suspect ACM.

Based on results of the visual observation, bulk samples of suspect ACM were collected in accordance with the client's budgetary constraints. No sampling or assessment of the roof was performed at the client's request. Samples were placed in sealable containers and labeled with unique sample numbers using an indelible marker. Suspect materials identified and sampled include, exterior fiber board, foundation damp proofing, canopy vapor barrier, sheet vinyl, cove base mastic, sink undercoat, joint compound, wall texture, ceiling texture, stair tread mastic, drywall, and gasket.

ASBESTOS ANALYSIS RESULTS

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 R-93/116, 1993). 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 and found to have less than 10% asbestos were "point-counted" by the laboratory for more accuracy. The table below contains a list of the building material that was found to contain asbestos.

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. Appendix A contains the results of all bulk samples and collection sheets.



SAMPLE NUMBER	MATERIAL	SAMPLE LOCATION	ASBESTOS CONTENT
455-18	Joint Compound	Unit C, Basement, Top of Stairwell	1.3%

The following material was found to contain asbestos in this survey.

- Joint Compound

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

Joint Compound:

Joint compound on gypsum board walls and ceilings throughout the basement stairwells of the eight-plex is presumed asbestos containing material. AKEC recommends that all joint compound in the basement stairwells be treated as asbestos containing material. Joint compound is considered a Class II asbestos containing material by OSHA. Any disturbance of asbestos-containing materials should only be performed by state certified asbestos abatement personnel.

LEAD INSPECTION PROCEDURES

On September 7, 2022, a limited lead paint inspection was conducted by AKEC employee, Travis Hubbard, at Building 455 located at Fort Richardson, AK 99505. Appendix B contains the results of the paint samples. EPA lead risk assessor certification for the inspector is in Appendix C.

AKEC collected ten samples of paints suspected to be lead containing. Paints containing 5,000 ppm or greater of lead are classified as Lead Based Paint (LBP). LBP is regulated by EPA and OSHA. Paints containing less than 5,000 ppm are classified as Lead Containing Paint (LCP). LCP is regulated by OSHA. Paints sampled that were not reported to have detectable concentrations of lead above the Limit of Detection (LOD) are not classified as lead paint. Samples were analyzed by EPA Method SW846-7000B.

LEAD ANALYSIS RESULTS

The paint chip samples were collected and submitted to International Asbestos Testing Laboratories (IATL), Mt. Laurel, New Jersey for analysis by flame atomic absorption spectroscopy per EPA Method SW846-3050B: 7000B. IATL is an American Industrial Hygiene Association (AIHA) ELPAT and NLLAP accredited laboratory.



Lead in Paint Samples

Sample ID #	Sampling Location	Results, parts per million (ppm) Total Lead	Lead Based Paint (LBP) Lead Containing Paint (LCP) < Limit of Detection (<LOD)
455P-01	Exterior, Siding, South Side of Building	61,000	Lead Based Paint
455P-02	Exterior, Porch Railing, South Side of Building	<65	< Limit of Detection
455P-03	Unit A, Base Trim, Dining Room	<37	< Limit of Detection
455P-04	Unit A, Wall, Kitchen	<65	< Limit of Detection
455P-05	Unit B, Basement, Wall	22,000	Lead Based Paint
455P-06	Unit B, Windowsill, Dining Room	<53	< Limit of Detection
455P-07	Unit C, Floor, Basement	270	Lead Containing Paint
455P-08	Unit D, Windowsill, Level 2 South Bedroom	<35	< Limit of Detection
455P-09	Unit F, Wall, Living Room	<79	< Limit of Detection
455P-10	Unit G, Windowsill, Living Room	<69	< Limit of Detection

Detectable levels of lead were found in three of the samples collected. Toxic Characteristic Leaching Procedure (TCLP) is required to assess the project waste stream for disposal. Lead safe work practices should be utilized.

HAZARDOUS MATERIALS

During the September 7, 2022 inspection the following potentially, hazardous materials were observed at Building 455 Fort Richardson, AK 99505.

Lead-Containing Materials

Lead based paint was found to be present at exterior siding of the building and concrete basement walls and lead containing paint was found to be present on basement floors. Lead solder at copper piping, and poured lead sealants at bell and spigot joints of waste and vent piping may be present.

PCB-Containing Materials

Light Ballasts

EPA regulation (40 CFR Part 761) covers the proper handling and disposal of Poly Chlorinated Biphenyls



(PCB)-containing materials. PCB-containing light ballasts were found in the building, any removed PCB-containing equipment is 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.

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. All lights shall be inspected during removal. 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.

Mercury-Containing 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. 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.

Glycol

Propylene glycol is presumed to be present in the buildings heating system. Prior to demolition or dismantling of the buildings heating system it should be drained and tested for the presence of glycol.

Soil Contamination

The scope of work for AK Environmental Consultants, Inc. did not include investigation of soils for petroleum or other contaminations.

REGULATORY OVERVIEW

Asbestos

The asbestos NESHAP (40 CFR Part 61, Subpart M) regulates asbestos fiber emissions and asbestos waste disposal practices. It also requires the identification and classification of existing asbestos-containing material (ACM) according to friability prior to demolition or renovation activity. Friable ACM is a material containing more than 1 percent (%) asbestos that, when dry, may be crumbled, pulverized or reduced to powder by hand pressure. All friable ACM is considered regulated asbestos-containing material (RACM).

The NESHAP regulation classifies ACM as either RACM, Category I non-friable ACM or Category II nonfriable ACM. RACM includes friable ACM, along with Category I non-friable ACM that has become friable or will be or has been subjected to sanding, grinding, cutting or abrading, and Category II nonfriable ACM that has a high



probability of becoming or has become crumbled, pulverized, or reduced to powder during renovation or demolition activity. Category I non-friable ACMs are exclusively asbestos-containing packings, gaskets, resilient floor coverings, floor coverings and associated mastic, and asphalt roofing products that contain more than 1% asbestos. Category II non-friable ACM are all other non-friable materials other than Category I non-friable ACM that contain more than 1% asbestos. RACM must be removed prior to renovation or demolition activities.

The NESHAP requirements are administered by the EPA, and states that the owner, operator or the contractor must provide the EPA with written notification at least 10 working days prior to beginning any friable abatement project. Removal of RACM must be conducted by a State licensed asbestos abatement contractor.

The OSHA Asbestos standard for construction (29 CFR 1926.1101) and the State of Alaska Department of Labor (8 AAC 61) regulates workplace exposure to asbestos. The OSHA standard requires that employee exposure to airborne asbestos fibers be maintained below 0.1 asbestos fibers per cubic centimeter of air (0.1 f/cc) as an eight-hour time weighted average. The OSHA standard classifies construction and maintenance activities which could disturb ACM and specifies work practices and precautions which employers must follow when engaging in each class of regulated work.

Lead

Lead is regulated by Federal OSHA (29 CFR 1926.62) and the State of Alaska (8 AAC Chapter 61). The EPA regulates lead use, removal, and disposal, and OSHA regulates lead exposure to workers. The EPA defines LBP as paint, varnish, stain, or other applied coating that contains lead equal to or greater than 1.0 mg/cm², 5,000 mg/kg, or 0.5% by dry weight as determined by laboratory analysis. For the purpose of the OSHA lead standard, lead includes metallic lead, all inorganic lead compounds, and organic lead soaps. A synopsis of the OSHA regulations (29 CFR 1926.62) and the applicability are as follows:

The OSHA *Interim Lead Standard for Construction* (29 CFR 1926.62) applies to all construction work where an employee may be occupationally exposed to lead. All work related to construction, alteration, or repair (including painting and decorating) is included. The lead-in-construction standard applies to any detectable concentration of lead in paint, as even small concentrations of lead can result in unacceptable employee exposures depending upon on the method of removal and other workplace conditions. Under this standard, construction includes, but is not limited to, the following:

- Demolition or salvage of structures where lead or materials containing lead are present
- Removal or encapsulation of materials containing lead
- New construction, alteration, repair, or renovation of structures, substrates, or portions containing lead, or materials containing lead
- Installation of products containing lead
- Lead contamination/emergency clean-up
- Transportation, disposal, storage, or containment of lead or materials containing lead on the site or location at which construction activities are performed
- Maintenance operations associated with construction activities described above

29 CFR 1926.62 established an "Action Level" for lead concentrations in air of 30 micrograms per cubic meter of air (µg/m³) and a permissible exposure level (PEL) for lead concentrations in air of 50 µg/m³ as an eight-hour



time weighted average. At this time, OSHA has not established limits for lead content in bulk paint (non-airborne). Their interpretation on this issue is that any amount of lead may cause airborne concentrations above the established limits. Detectable levels of lead were found in three of the samples collected. Toxic Characteristic Leaching Procedure (TCLP) is required to assess the project waste stream for disposal.

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 standards and practices and are subject to the following inherent limitations:

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, AK Environmental Consultants, Inc. reserves the right to amend or revise its conclusions, opinions, and/or recommendations.

This limited survey did not include investigation of the entire site and is not valid outside the survey area. Sampling or assessment of roofing materials was excluded at the client's request. The intent of this survey was to identify common asbestos and lead containing materials that may be disturbed during demolition. This survey is not intended to be utilized as the sole design document for abatement. 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 asbestos and lead hazards only. The demolition contractor is responsible for assessment of potential chemical hazards.

Variations may occur between materials and items that appear to be the same but are of different construction or materials. Non-destructive testing was performed as the building was occupied at the time of inspection. Other asbestos-containing or potentially hazardous materials may be present in the project area that were concealed by debris, structural members, walls, ceilings or floor coverings, or in materials where testing was not conducted. Any other suspect materials discovered but not tested in this limited inspection should be assumed to contain asbestos and treated as such until further sampling shows materials do not contain asbestos.

The removal and disposal of asbestos containing material is highly regulated, it is anticipated that removal and disposal of asbestos will be conducted by a contractor who is qualified for such removal. It is anticipated that the contractor will be able to conduct their work using engineering controls and work practices to control worker exposure.

 9/20/2022

Travis Hubbard

EPA AHERA Inspector Certificate # T-30171-831

EPA Lead Risk Assessor Certification # LBP-R-I175670-2

Appendix A

Bulk Asbestos Analytical Report / Sample Collection Forms

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/19/2022
Report No.: 668776 - PLM
Project: Bldg 455 JBER AK
Project No.: 22-136

Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7492933
Client No.: 455-01

Analyst Observation: Tan Fiberboard
Client Description: Exterior Fiber Board

Location: South Side of Building - Under
Metal Siding

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
98 Cellulose

Facility:
Percent Non-Fibrous Material:
2

Lab No.: 7492934
Client No.: 455-02

Analyst Observation: Black Tar
Client Description: Damp Proofing

Location: South Side of Building - At
Foundation

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
10 Fibrous Glass

Facility:
Percent Non-Fibrous Material:
90

Lab No.: 7492935
Client No.: 455-03

Analyst Observation: Black Tar Paper
Client Description: Vapor Barrier

Location: Canopy at Unit D - Entryway
Roof

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
60 Cellulose

Facility:
Percent Non-Fibrous Material:
40

Lab No.: 7492936
Client No.: 455-04

Analyst Observation: Tan Vinyl Sheet Flooring
Client Description: Sheet Vinyl

Location: Unit A - Level 2 Bath
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
20 Cellulose

Percent Non-Fibrous Material:
80

Note: Insufficient mastic provided for analysis.

Lab No.: 7492937
Client No.: 455-05

Analyst Observation: Tan Mastic
Client Description: Cove Base Mastic

Location: Unit A - Level 2 Bath
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7492938
Client No.: 455-06

Analyst Observation: White Joint Compound
Client Description: Joint Compound

Location: Unit A - Level 2 Bath
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100


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

Date Received: 9/12/2022

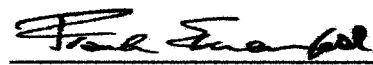
Date Analyzed: 09/19/2022

Signature:

Analyst:


Rebecca Hargrove

Approved By:


Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.

PO Box 211994

Anchorage AK 99521

Client: AKE001

Report Date: 9/19/2022

Report No.: 668776 - PLM

Project: Bldg 455 JBER AK

Project No.: 22-136

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7492939

Client No.: 455-07

Percent Asbestos:

None Detected

Analyst Observation: Beige Sink Undercoating

Client Description: Sink Undercoat

Percent Non-Asbestos Fibrous Material:

20 Cellulose

Location: Unit A - Kitchen

Facility:

Percent Non-Fibrous Material:

80

Lab No.: 7492940

Client No.: 455-08

Percent Asbestos:

None Detected

Analyst Observation: Tan/White Vinyl Sheet Flooring

Client Description: Sheet Vinyl

Percent Non-Asbestos Fibrous Material:

20 Cellulose

Location: Unit A - Kitchen

Facility:

Percent Non-Fibrous Material:

80

Note: Insufficient mastic provided for analysis.

Lab No.: 7492941

Client No.: 455-09

Percent Asbestos:

None Detected

Analyst Observation: White Paint/Texture

Client Description: Wall Texture

Percent Non-Asbestos Fibrous Material:

None Detected

Location: Unit A - Kitchen

Facility:

Percent Non-Fibrous Material:

100

Lab No.: 7492942

Client No.: 455-10

Percent Asbestos:

None Detected

Analyst Observation: Off-White Texture

Client Description: Ceiling Texture

Percent Non-Asbestos Fibrous Material:

None Detected

Location: Unit A - Kitchen

Facility:

Percent Non-Fibrous Material:

100

Lab No.: 7492943

Client No.: 455-11

Percent Asbestos:

None Detected

Analyst Observation: Beige Mastic

Client Description: Stair Tread Mastic

Percent Non-Asbestos Fibrous Material:

None Detected

Location: Unit B - Basement

Facility:

Percent Non-Fibrous Material:

100

Lab No.: 7492944

Client No.: 455-12

Percent Asbestos:

None Detected

Analyst Observation: Tan Vinyl Sheet Flooring

Client Description: Sheet Vinyl

Percent Non-Asbestos Fibrous Material:

20 Cellulose

Location: Unit B - Level 2 Bath

Facility:

Percent Non-Fibrous Material:

80

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

Date Received: 9/12/2022

Date Analyzed: 09/19/2022

Signature:

Analyst:

Rebecca Hargrove

Rebecca Hargrove

Approved By:

Frank E. Ehrenfeld, III

Frank E. Ehrenfeld, III

Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
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Report Date: 9/19/2022
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Project No.: 22-136

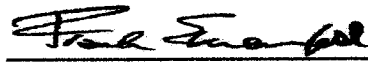
Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7492944(L2) Client No.: 455-12	Analyst Observation: Tan Mastic Client Description: Sheet Vinyl	Location: Unit B - Level 2 Bath Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7492945 Client No.: 455-13	Analyst Observation: Off-White Texture Client Description: Ceiling Texture	Location: Unit B - Level 2 North Bedrooms Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7492946 Client No.: 455-14	Analyst Observation: White Texture Client Description: Wall Texture	Location: Unit B - Level 2 North Bedrooms Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7492947 Client No.: 455-15	Analyst Observation: Off-White Texture Client Description: Joint Compound	Location: Unit B - Dining Room Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7492948 Client No.: 455-16	Analyst Observation: White Drywall Client Description: Drywall	Location: Unit B - Dining Room Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> 15 Cellulose 2 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 83
Note: Joint Compound not present.		
Lab No.: 7492949 Client No.: 455-17	Analyst Observation: Tan/White Vinyl Sheet Flooring Client Description: Sheet Vinyl	Location: Unit B - Kitchen Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> 20 Cellulose	<u>Percent Non-Fibrous Material:</u> 80

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

Date Received: 9/12/2022
Date Analyzed: 09/19/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Client: AKE001

Report Date: 9/19/2022
Report No.: 668776 - PLM
Project: Bldg 455 JBER AK
Project No.: 22-136

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7492949(L2)	Analyst Observation: Yellow Mastic	Location: Unit B - Kitchen
Client No.: 455-17	Client Description: Sheet Vinyl	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7492950	Analyst Observation: Tan Joint Compound	Location: Unit C - Basement, Top of
Client No.: 455-18	Client Description: Joint Compound	Stairwell
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Facility:</u>
<i>PC I.3 Chrysotile</i>	None Detected	<u>Percent Non-Fibrous Material:</u>
		98.7

Lab No.: 7492951	Analyst Observation: Tan Vinyl Sheet Flooring	Location: Unit C - Level 2, Laundry
Client No.: 455-19	Client Description: Sheet Vinyl and Mastic	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	20 Cellulose	80

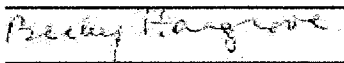
Lab No.: 7492951(L2)	Analyst Observation: Tan Mastic	Location: Unit C - Level 2, Laundry
Client No.: 455-19	Client Description: Sheet Vinyl and Mastic	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7492952	Analyst Observation: Tan/White Vinyl Sheet Flooring	Location: Unit C - Level 1, Rear Entryway
Client No.: 455-20	Client Description: Sheet Vinyl	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	20 Cellulose	80

Lab No.: 7492952(L2)	Analyst Observation: Tan/Grey Mastic/Leveling Compound	Location: Unit C - Level 1, Rear Entryway
Client No.: 455-20	Client Description: Sheet Vinyl	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Layers not separable.

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

Date Received: 9/12/2022
Date Analyzed: 09/19/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/19/2022
Report No.: 668776 - PLM
Project: Bldg 455 JBER AK
Project No.: 22-136

Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7492953
Client No.: 455-21
Percent Asbestos:
None Detected

Analyst Observation: White Texture
Client Description: Wall Texture
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Unit C - Dining Room
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7492954
Client No.: 455-22
Percent Asbestos:
None Detected

Analyst Observation: White Joint Compound
Client Description: Joint Compound
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Unit D - Level 2, Bath
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7492955
Client No.: 455-23
Percent Asbestos:
None Detected

Analyst Observation: Tan Vinyl Sheet Flooring
Client Description: Sheet Vinyl and Mastic
Percent Non-Asbestos Fibrous Material:
20 Cellulose

Location: Unit D - Level 2, Bath
Facility:
Percent Non-Fibrous Material:
80

Lab No.: 7492955(L2)
Client No.: 455-23
Percent Asbestos:
None Detected

Analyst Observation: Tan/Grey Mastic/Leveling Compound
Client Description: Sheet Vinyl and Mastic
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Unit D - Level 2, Bath
Facility:
Percent Non-Fibrous Material:
100

Layers not separable.

Lab No.: 7492956
Client No.: 455-24
Percent Asbestos:
None Detected

Analyst Observation: White Texture
Client Description: Ceiling Texture
Percent Non-Asbestos Fibrous Material:
None Detected


Location: Unit D - Level 2, South Bedroom
Facility:
Percent Non-Fibrous Material:
100

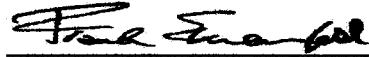
Lab No.: 7492957
Client No.: 455-25
Percent Asbestos:
None Detected

Analyst Observation: White Texture
Client Description: Wall Texture
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Unit D - Level 2, South Bedroom
Facility:
Percent Non-Fibrous Material:
100

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

Date Received: 9/12/2022
Date Analyzed: 09/19/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
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Report Date: 9/19/2022
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Project No.: 22-136

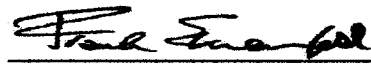
Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7492958 Client No.: 455-26	Analyst Observation: White Joint Compound Client Description: Joint Compound	Location: Unit D - Basement Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7492959 Client No.: 455-27	Analyst Observation: Tan/White Vinyl Sheet Flooring Client Description: Sheet Vinyl	Location: Unit D - Kitchen Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> 20 Cellulose	<u>Percent Non-Fibrous Material:</u> 80
Note: Mastic not present.		
Lab No.: 7492960 Client No.: 455-28	Analyst Observation: White Sealant Client Description: Seam Sealant	Location: Exterior at Mech Room Door Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7492961 Client No.: 455-29	Analyst Observation: Grey Gasket Client Description: Gasket	Location: Mech Room, Pump # 1 Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> 60 Synthetic 5 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 35
Lab No.: 7492962 Client No.: 455-30	Analyst Observation: Off-White Joint Compound Client Description: Joint Compound	Location: Mech Room - East Wall Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7492963 Client No.: 455-31	Analyst Observation: Tan Vinyl Sheet Flooring Client Description: Sheet Vinyl and Mastic	Location: Unit E - Laundry Room, Level 2 Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> 20 Cellulose	<u>Percent Non-Fibrous Material:</u> 80

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

Date Received: 9/12/2022
Date Analyzed: 09/19/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521
Client: AKE001

Report Date: 9/19/2022
Report No.: 668776 - PLM
Project: Bldg 455 JBER AK
Project No.: 22-136

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7492963(L2)	Analyst Observation: Tan Mastic	Location: Unit E - Laundry Room, Level 2
Client No.: 455-31	Client Description: Sheet Vinyl and Mastic	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	None Detected	100

Lab No.: 7492964	Analyst Observation: Lt Grey Vinyl Sheet Flooring	Location: Unit E - Kitchen, Top Layer
Client No.: 455-32	Client Description: Sheet Vinyl	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	20 Cellulose	80

Note: Insufficient mastic provided for analysis.


Lab No.: 7492965	Analyst Observation: Tan Vinyl Sheet Flooring	Location: Unit E - Kitchen, Bottom Layer
Client No.: 455-33	Client Description: Sheet Vinyl and Mastic	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	20 Cellulose 1 Fibrous Glass	79


Lab No.: 7492965(L2)	Analyst Observation: Tan Mastic	Location: Unit E - Kitchen, Bottom Layer
Client No.: 455-33	Client Description: Sheet Vinyl and Mastic	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	None Detected	100

Lab No.: 7492965(L3)	Analyst Observation: Off-White Mastic	Location: Unit E - Kitchen, Bottom Layer
Client No.: 455-33	Client Description: Sheet Vinyl and Mastic	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	None Detected	100

Lab No.: 7492966	Analyst Observation: White Texture	Location: Unit F - Living Room
Client No.: 455-34	Client Description: Joint Compound	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	None Detected	100

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

Date Received: 9/12/2022
Date Analyzed: 09/19/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS


Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521
Client: AKE001

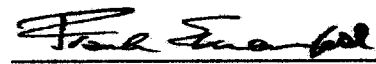
Report Date: 9/19/2022
Report No.: 668776 - PLM
Project: Bldg 455 JBER AK
Project No.: 22-136

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7492966(L2) Client No.: 455-34 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Joint Compound Client Description: Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Unit F - Living Room Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7492967 Client No.: 455-35 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Off-White Texture Client Description: Wall Texture <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Unit F - Living Room Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7492968 Client No.: 455-36 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Texture Client Description: Wall Texture <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Unit G - Kitchen Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7492969 Client No.: 455-37 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Texture Client Description: Ceiling Texture <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Unit G - Kitchen Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7492970 Client No.: 455-38 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Texture Client Description: Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Unit G - Entryway Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7492970(L2) Client No.: 455-38 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Off-White Joint Compound Client Description: Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Unit G - Entryway Facility: <u>Percent Non-Fibrous Material:</u> 100

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

Date Received: 9/12/2022
Date Analyzed: 09/19/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/19/2022
Report No.: 668776 - PLM
Project: Bldg 455 JBER AK
Project No.: 22-136

Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7492971
Client No.: 455-39
Percent Asbestos:
None Detected

Analyst Observation: Tan/White Vinyl Sheet Flooring
Client Description: Sheet Vinyl
Percent Non-Asbestos Fibrous Material:
20 Cellulose
1 Fibrous Glass

Location: Unit H - Kitchen
Facility:
Percent Non-Fibrous Material:
79

Lab No.: 7492971(L2)
Client No.: 455-39
Percent Asbestos:
None Detected

Analyst Observation: Tan Mastic
Client Description: Sheet Vinyl
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Unit H - Kitchen
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7492972
Client No.: 455-40
Percent Asbestos:
None Detected

Analyst Observation: White Texture
Client Description: Joint Compound
Percent Non-Asbestos Fibrous Material:
None Detected


Location: Unit H - Level 2, Laundry
Facility:
Percent Non-Fibrous Material:
100

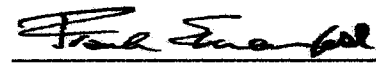
Lab No.: 7492972(L2)
Client No.: 455-40
Percent Asbestos:
None Detected

Analyst Observation: Off-White Joint Compound
Client Description: Joint Compound
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Unit H - Level 2, Laundry
Facility:
Percent Non-Fibrous Material:
100

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

Date Received: 9/12/2022
Date Analyzed: 09/19/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/19/2022
Report No.: 668776 - PLM
Project: Bldg 455 JBER AK
Project No.: 22-136

Client: AKE001

Appendix to Analytical Report

Customer Contact: Travis Hubbard

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 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: Kelly Klippel

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) See additional information at the end of this appendix.

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/19/2022
Report No.: 668776 - PLM
Project: Bldg 455 JBER AK
Project No.: 22-136

Client: AKE001

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 gangue, 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.



9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Client: AKE001

Report Date: 9/19/2022
Report No.: 668776 - PLM
Project: Bldg 455 JBER AK
Project No.: 22-136

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).

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

Chain of Custody

–Bulk Asbestos–

Contact Information

Client Company: AK Environmental Consultants, Inc
Office Address: 5700 Old Seward Hwy, Suite 205
City, State, Zip: Anchorage, AK 99518
Fax Number: _____
Email Address: travis@akenviro.com

Project Number: 22-136
Project Name: Building 455 JBER, AK
Primary Contact: Travis Hubbard
Office Phone: 907-561-2532
Cell Phone: 907-330-9282

PLM Instructions:

- ☒ PLM: Bulk Asbestos Building Materials EPA 600 R-93/116, 1993
- ☐ PLM: Bulk Asbestos Building Materials EPA 600 M-4/82-020, 1982
- ☐ PLM: Bulk Asbestos Building Materials NIOSH 9002, 1985
- ☐ PLM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.1, 2002
- ☐ PLM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.6, 2010
- ☐ TEM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.4, 2009
- ☐ PLM: Point Counting
 - ☐ PC: via ELAP 198.1
 - ☐ PC: 400 Points
 - ☐ PC: 800 Points *
 - ☐ PC: 1600 Points *
- ☒ PLM: Instructions for Multi-Layered Samples
 - ☒ Analyze and Report All Separable Layers per EPA 600
 - ☐ Report Composite for Drywall Systems per NESHAP
 - ☐ Report All Layers and Composite Where Applicable
 - ☐ Only Analyze and Report Specifically Noted Layer
- ☐ PLM: Analyze Until Positive (Positive Stop)
 - ☐ AUP: by Homogenous Area as Noted
 - ☐ AUP: by Material Type as Noted
- ☐ PLM: NOB via 198.6
 - ☐ PLM: Friable via EPA 600 2.3
 - ☐ If <1% by PLM, to TEM via 198.4 *
 - ☐ If <1% by PLM, Hold for Instructions
- ☐ PLM: Non-Building Material*** (Dust, Wipe, Tape)
 - ☐ Soil or Vermiculite Analysis
 - ☐ CARB 435

Special Instructions:

* Additional charge and turnaround may be required ** Alternative Method (ex: EPA 600/R-04/004) may be recommended by Laboratory

Turnaround Time

Preliminary Results Requested Date: _____
☐ Verbal ☒ Email ☐ Fax
 _____ Specific date / time
☐ 10 Day ☒ 5 Day ☐ 3 Day ☐ 2 Day ☐ 1 Day* ☐ 12 Hour** ☐ 6 Hour** ☐ RUSH**

* End of next business day unless otherwise specified. ** Matrix Dependent. ***Please notify the lab before shipping

Chain of Custody

Relinquished (Name/Organization): [Signature] Date: 9/9/2022 Time: 12:30pm
 Received (Name / iATL): _____ Date: _____ Time: _____
 Sample Login (Name / iATL): _____ Date: _____ Time: _____
 Analysis(Name(s) / iATL): [Signature] Date: 9-19-22 Time: _____
 QA/QC Review (Name / iATL): _____ Date: _____ Time: _____
 Archived / Released: _____ QA/QC InterLAB Use: _____ Date: _____ Time: _____



AK Environmental Consultants, Inc.
5700 Old Seward Highway, Suite 205
Anchorage, AK 99518

Project Title Building 455
Location Building 455 Fort Richardson, AK 99505
Client 673 CES GENMP Project # 22-136

Bulk Sample Log

Analytical Method Requested <u>EPA 813-R-93/116, 117</u>	Turnaround Time <u>5 Day</u>	Sample Count <u>40</u>	Collection Date <u>9/7/2022</u>
Collected By (Printed Name and Signature) <u>Travis Hubbard</u>	Client Project # <u>Bldg. 455</u>		
Relinquished By <u>Travis Hubbard</u>	Date / Time <u>9/9/2022</u>	Samples Received By	Date / Time

Project Notes

- Fluorescent lights and smoke detectors present in Bldg. 455
- Accessible thermal system insulation is fiberglass

Sample Number	Material Sampled	Sample Location and Notes
455-01 749293	Exterior Fiber Board	South Side of Bldg. Under Metal Siding
455-02 749293	Damp Proofing	South Side of Bldg. at Foundation
455-03 749293	Vapor Barrier	Canopy at Unit D, Entryway, Roof
455-04 749293	Sheet Vinyl	Unit A, Level 2, Bath
455-05 749293	Base Mastie	Unit A, Level 2, Bath
455-06 749293	Joint Compound	Unit A, Level 2, Bath
455-07 749293	Sink Undercoat	Unit A, Kitchen
455-08 749293	Sheet Vinyl	
455-09 749293	Wall Texture	
455-10 749293	Ceiling Texture	
455-11 749293	Stair Tread Mastie	Unit B, Basement
455-12 749293	Sheet Vinyl	Unit B, Level 2, Bath
455-13 749293	Ceiling Texture	Unit B, Level 2, North Bedroom
455-14 749293	Wall Texture	
455-15 749293	Joint Compound	Unit B, Dining Room
455-16 749293	Drywall	
455-17 749293	Sheet Vinyl	Unit B, Kitchen



AK Environmental Consultants, Inc.
5700 Old Seward Highway, Suite 205
Anchorage, AK 99518

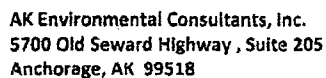
Project Title Building 455
Location Building 455 Fort Richardson AK 99505
Client 673 CES CENMP Project # 22-136

Bulk Sample Log

Analytical Method Requested <u>EPA 600 R-93/116, 1913</u>	Turnaround Time <u>3 Day</u>	Sample Count <u>40</u>	Collection Date <u>9/7/2022</u>
Collected By (Printed Name and Signature) <u>Travis Hubbard</u>	Client Project # <u>Bldg. 455</u>		
Relinquished By <u>[Signature]</u>	Date/Time <u>9/9/2022</u>	Samples Received By	Date/Time

Project Notes

Sample Number	Material Sampled	Sample Location and Notes
455-18 7492950	Joint Compound	Unit C, Basement, Top of Stairwell
455-19 7492951	Sheet Vinyl & Mastic	Unit C, Level 2, Laundry
455-20 7492952	Sheet Vinyl	Unit C, Level 2, Rear Entryway
455-21 7492953	Wall Texture	Unit C, Dining Room
455-22 7492954	Joint Compound	Unit D, Level 2, Bath
455-23 7492955	Sheet Vinyl & Mastic	<u>L</u>
455-24 7492956	Ceiling Texture	Unit D, Level 2, South Bedroom
455-25 7492957	Wall Texture	<u>L</u>
455-26 7492958	Joint Compound	Unit D, Basement
455-27 7492959	Sheet Vinyl	Unit D, Kitchen
455-28 7492960	Seam Sealant	Exterior at Mech Room Door
455-29 7492961	Gasket	Mech Room, Pump #1
455-30 7492962	Joint Compound	Mech Room, East Wall
455-31 7492963	Sheet Vinyl & Mastic	Unit E, Laundry Room, Level 2
455-32 7492964	Sheet Vinyl	Unit E, Kitchen, Top Layer
455-33 7492965	Sheet Vinyl & Mastic	Unit E, Kitchen, Bottom Layer
455-34 7492966	Joint Compound	Unit F, Living Room



Project Title Building 455
Location Building 455 Fort Richardson, AK 99505
Client 673 CES CENMP Project # 21-136

[illegible]

100/83



2202/16
977/2022

100% FOR SUBMITTAL CONSTRUCTION

Appendix B

Lead Paint Analytical Report / Sample Collection Forms



9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

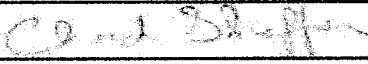
Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521
Client: AKE001

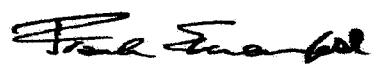
Report Date: 9/19/2022
Report No.: 668765 - Lead Paint
Project: Building 455 JBER AK
Project No.: 22-136

LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 7492736 Client No.: 455 P-01	Description: Paint Location: Exterior, Siding, South Side Of Bldg	Result (% by Weight): 6.1 Result (ppm): 61000 Comments:
Lab No.: 7492737 Client No.: 455 P-02	Description: Paint Location: Exterior, Porch Railing, S Side Of Bldg	Result (% by Weight): <0.0065 Result (ppm): <65 Comments:
Lab No.: 7492738 Client No.: 455 P-03	Description: Paint Location: Unit A, Trim, Dining Rm, Baseboard	Result (% by Weight): <0.0037 Result (ppm): <37 Comments:
Lab No.: 7492739 Client No.: 455 P-04	Description: Paint Location: Unit A, Wall, Kitchen	Result (% by Weight): <0.0065 Result (ppm): <65 Comments:
Lab No.: 7492740 Client No.: 455 P-05	Description: Paint Location: Unit B, Basement, Wall, CMU	Result (% by Weight): 2.2 Result (ppm): 22000 Comments:
Lab No.: 7492741 Client No.: 455 P-06	Description: Paint Location: Unit B, Dining Rm, Window Sill	Result (% by Weight): <0.0053 Result (ppm): <53 Comments:
Lab No.: 7492742 Client No.: 455 P-07	Description: Paint Location: Unit C, Basement Floor	Result (% by Weight): 0.027 Result (ppm): 270 Comments:
Lab No.: 7492743 Client No.: 455 P-08	Description: Paint Location: Unit D, Window Sill, Level 2 S Bedroom	Result (% by Weight): <0.0035 Result (ppm): <35 Comments:

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

Date Received: 9/12/2022
Date Analyzed: 09/19/2022
Signature: 
Analyst: Chad Shaffer

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director



9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Client: AKE001

Report Date: 9/19/2022
Report No.: 668765 - Lead Paint
Project: Building 455 JBER AK
Project No.: 22-136

LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 7492744
Client No.: 455 P-09

Description: Paint
Location: Unit F, Wall, Living Rm

Result (% by Weight): <0.0079
Result (ppm): <79
Comments:

Lab No.: 7492745
Client No.: 455 P-10

Description: Paint
Location: Unit G, Living Rm, Window Sill

Result (% by Weight): <0.0069
Result (ppm): <69
Comments:

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

Date Received: 9/12/2022

Date Analyzed: 09/19/2022

Signature:

Analyst: Chad Shaffer

Approved By:

Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/19/2022
Report No.: 668765 - Lead Paint
Project: Building 455 JBER AK
Project No.: 22-136

Client: AKE001

Appendix to Analytical Report:

Customer Contact: Travis Hubbard

Method: ASTM D3335-85a, US EPA SW846 3050B:7000B

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: Kelly Klippel

Sample Login Notes: See Batch Sheet Attached

Sample Matrix: Paint

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 ASTM D3335-85a by AAS

Certification:

- National Lead Laboratory Program (NLLAP): AIHA-LAP, LLC No. 100188

- NYSDOH-ELAP No. 11021

This report meets the standards set forth in the EPA's National Lead Laboratory Accreditation Program (NLLAP) through the Laboratory Quality System Requirements (LQSR) Revision 3.0 November 5, 2007. All Environmental Lead Proficiency Analytical Testing (ELPAT) is through the AIHA-PAT established program.

Regulatory limit is 0.5% lead by weight (EPA/HUD guidelines). Recommend multiple sampling for all samples less than regulatory limit for confirmation.

All results are based on the samples as received at the lab. iATL assumes that appropriate sampling methods have been used and that the data upon which these results are based have been accurately supplied by the client.

Method Detection Limit (MDL) per EPA Method 40CFR Part 136 Appendix B.

Reporting Limit (RL) based upon Lowest Standard Determined (LSD) in accordance with AIHA-ELLAP policies.

LSD=0.2 ppm MDL=0.006% by weight. RL= 0.010% by weight (based upon 100 mg sampled).

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 complete list with highlighted disclaimers pertinent to this project. For a full explanation of these and other disclaimers, please inquire at customerservice@iatl.com.



9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/19/2022
Report No.: 668765 - Lead Paint
Project: Building 455 JBER AK
Project No.: 22-136

Client: AKE001

- * Insufficient sample provided to perform QC reanalysis (<200 mg)
- ** Not enough sample provided to analyze (<50 mg)
- *** Matrix / substrate interference possible.

< less than sign, signifies none-detected below the empirical value based upon sub-sampled mass. This is often below the Reporting Limit (see above).

Chain of Custody

– Environmental Lead –

Contact Information

Client Company: AK Environmental Consultants, Inc.

Office Address: 5700 Old Seward Hwy, Suite 205

City, State, Zip: Anchorage, AK 99518

Fax Number:

Email Address: travis@akenviro.com

Project Number: 22-136

Project Name: Building 455 JBER, AK

Primary Contact: Travis Hubbard

Office Phone: 907-561-2532

Cell Phone: 907-330-9282

iATL is accredited by the National Lead Laboratory Accreditation Program (NLLAP) to perform analytical testing of environmental samples for lead (Pb). The accreditation is through AIHA-LAP, LLC and several other nationally recognized state programs.

Matrix/Method:

- ☒ Paint by AAS: ASTM D3335-85a, 2009
☐ Wipe/Dust by AAS: SW 846: 3050B: 700B, 2010
☐ Air by AAS: NIOSH 7082, 1994
☐ Soil by AAS: EPA SW 846 (Soil)
☐ Water by AAS-GF: ASTM D3559-03D, US EPA 200.9
☐ Other Metals (Cd, Zn, Cr) by AAS
☐ Toxicity Characteristic Leaching Procedure (TCLP) by AAS: US EPA 1311
☐ Other _____

Special Instructions:

Turnaround Time

Preliminary Results Requested Date: _____

Specific date / time

☐ Verbal ☒ Email ☐ Fax

☐ 10 Day ☒ 5 Day ☐ 3 Day ☐ 2 Day ☐ 1 Day* ☐ 12 Hour** ☐ 6 Hour** ☐ RUSH**

* End of next business day unless otherwise specified. ** Matrix Dependent. ***Please notify the lab before shipping***

Chain of Custody

Relinquished (Name/Organization): Z Hubbard

Received (Name / iATL): _____

Sample Login (Name / iATL): _____

Analysis(Name(s) / iATL): 9/9/22

QA/QC Review (Name / iATL): 9/16/22

Archived / Released: _____ QA/QC InterLAB Use: _____

Date: 9/9/2022

Date: _____

Date: _____

Date: _____

Date: _____

Date: _____

Time: 12:30pm

Time: _____

Time: _____

Time: _____

Time: _____

Time: _____



AK Environmental Consultants, Inc.
5700 Old Seward Highway, Suite 205
Anchorage, AK 99518

Project Title Building 455
Location Building 455 Fort Richardson AK 99505
Client 673 CES CENMP Project # 22-136

Bulk Sample Log

Analytical Method Requested <u>ASTM D3335-05a / not</u>	Turnaround Time <u>5 Day</u>	Sample Count <u>10</u>	Collection Date <u>9/17/2022</u>
Collected By (Printed Name and Signature) <u>Travis Hubbard / [Signature]</u>	Client Project # <u>Bldg. 455</u>		
Relinquished By <u>[Signature]</u>	Date / Time <u>9/19/2022</u>	Samples Received By	Date / Time

Project Notes

Sample Number	Material Sampled	Sample Location and Notes
45SP-01	Paint 7492736	Exterior, Siding, South Side of Bldg.
45SP-02	Paint 7492737	Exterior, Porch Railings S. Side of Bldg.
45SP-03	Paint 7492739	Unit A, Trim, Dining Room, Base Board
45SP-04	Paint 7492738	Unit A, Wall, Kitchen
45SP-05	Paint 7492740	Unit B, Basement, Wall, CMU.
45SP-06	Paint 7492741	Unit B, Dining Room, Window Sill
45SP-07	Paint 7492742	Unit C, Basement Floor
45SP-08	Paint 7492743	Unit D, Window Sill, Level 2 S. Bedroom
45SP-09	Paint 7492744	Unit E, Wall, Living Room
45SP-10	Paint 7492745	Unit G, Living Room, Window Sill

LIMITED ASBESTOS & LEAD INSPECTION REPORT

Building 456
Fort Richardson, AK 99505

Prepared for
673 CES CENMP
730 Quartermaster Road
JBER, AK 99505

Prepared by



AK Environmental Consultants, Inc.
5700 Old Seward Highway, Suite 205
Anchorage, AK 99518

September 22, 2022

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- Appendix B: Lead Paint Analytical Report / Sample Collection Forms
- Appendix C: Inspectors Certifications
- Appendix D: Laboratory Certification



OVERVIEW

AK Environmental Consultants, Inc. (AKEC) conducted a limited asbestos & lead inspection of Building 456 located at Fort Richardson, AK 99505 on September 8, 2022. The inspection was not AHERA or NESHAP compliant at the client's request. The sampling was conducted by AHERA-accredited asbestos building inspector, Travis Hubbard. Accessible interior and exterior components were surveyed, and homogeneous areas of suspect asbestos-containing materials (ACM) were visually identified and documented. Although reasonable effort was made to survey all accessible suspect materials, additional suspect but unsampled materials may be present in walls, voids, or other inaccessible areas of the building.

All suspect ACM samples were delivered to an accredited laboratory for analysis by polarized light microscopy (PLM).

ASBESTOS INSPECTION PROCEDURES

The inspection was conducted by Travis Hubbard, AHERA-accredited asbestos building inspector, on September 8, 2022. A copy of the inspector license is attached as Appendix C. The inspection began with a walk through of the eight-plex. Building materials identified as glass, wood, or metal are not considered suspect ACM.

Based on results of the visual observation, bulk samples of suspect ACM were collected in accordance with the client's budgetary constraints. No sampling or assessment of the roof was performed at the client's request. Samples were placed in sealable containers and labeled with unique sample numbers using an indelible marker. Suspect materials identified and sampled include, exterior fiber board, foundation damp proofing, canopy vapor barrier, sheet vinyl, cove base mastic, sink undercoat, joint compound, wall texture, ceiling texture, stair tread mastic, drywall, and gasket.

ASBESTOS ANALYSIS RESULTS

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 R-93/116, 1993). 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 and found to have less than 10% asbestos were "point-counted" by the laboratory for more accuracy. The table below contains a list of the building material that was found to contain asbestos.

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. Appendix A contains the results of all bulk samples and collection sheets.



SAMPLE NUMBER	MATERIAL	SAMPLE LOCATION	ASBESTOS CONTENT
456-15	Joint Compound	Unit B, Basement, Top of Stairwell	Trace

The following material was found to contain asbestos in this survey.

- Joint Compound

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

Joint Compound:

Joint compound on gypsum board walls and ceilings throughout the basement stairwells of the eight-plex is presumed asbestos containing material. AKEC recommends that all joint compound in the basement stairwells be treated as asbestos containing material unless additional sampling proves otherwise. Joint compound is considered a Class II asbestos containing material by OSHA. Any disturbance of asbestos-containing materials should only be performed by state certified asbestos abatement personnel.

LEAD INSPECTION PROCEDURES

On September 8, 2022, a limited lead paint inspection was conducted by AKEC employee, Travis Hubbard, at Building 456 located at Fort Richardson, AK 99505. Appendix B contains the results of the paint samples. EPA lead risk assessor certification for the inspector is in Appendix C.

AKEC collected ten samples of paints suspected to be lead containing. Paints containing 5,000 ppm or greater of lead are classified as Lead Based Paint (LBP). LBP is regulated by EPA and OSHA. Paints containing less than 5,000 ppm are classified as Lead Containing Paint (LCP). LCP is regulated by OSHA. Paints sampled that were not reported to have detectable concentrations of lead above the Limit of Detection (LOD) are not classified as lead paint. Samples were analyzed by EPA Method SW846-7000B.

LEAD ANALYSIS RESULTS

The paint chip samples were collected and submitted to International Asbestos Testing Laboratories (IATL), Mt. Laurel, New Jersey for analysis by flame atomic absorption spectroscopy per EPA Method SW846-3050B: 7000B. IATL is an American Industrial Hygiene Association (AIHA) ELPAT and NLLAP accredited laboratory.



Lead in Paint Samples

Sample ID #	Sampling Location	Results, parts per million (ppm) Total Lead	Lead Based Paint (LBP) Lead Containing Paint (LCP) < Limit of Detection (<LOD)
456P-01	Exterior Siding, Unit A	20,000	Lead Based Paint
456P-02	Porch Railing, Unit B	<77	< Limit of Detection
456P-03	Base Trim, Unit A, Dining Room	<55	< Limit of Detection
456P-04	Stairs, Unit A, Basement	2,500	Lead Containing Paint
456P-05	Windowsill, Unit B, Dining Room	<66	< Limit of Detection
456P-06	Wall, Unit B, Kitchen	<67	< Limit of Detection
456P-07	Floor, Unit B, Basement	27,000	Lead Based Paint
456P-08	Wall, Unit E, Bath	<56	< Limit of Detection
456P-09	Windowsill, Unit F, West Bedroom	<41	< Limit of Detection
456P-10	Wall, Unit H, Dining Room	<75	< Limit of Detection

Detectable levels of lead were found in three of the samples collected. Toxic Characteristic Leaching Procedure (TCLP) is required to assess the project waste stream for disposal. Lead safe work practices should be utilized.

HAZARDOUS MATERIALS

During the September 8, 2022 inspection the following potentially, hazardous materials were observed at Building 456 Fort Richardson, AK 99505.

Lead-Containing Materials

Lead based paint was found to be present at exterior siding of the building and concrete basement floor and lead containing paint was found to be present on basement stairs. Lead solder at copper piping and poured lead sealants at bell and spigot joints of waste and vent piping may be present.

PCB-Containing Materials

Light Ballasts

EPA regulation (40 CFR Part 761) covers the proper handling and disposal of Poly Chlorinated Biphenyls



(PCB)-containing materials. PCB-containing light ballasts were found in the building, any removed PCB-containing equipment is 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.

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. All lights shall be inspected during removal. 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.

Mercury-Containing 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. 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.

Glycol

Propylene glycol is presumed to be present in the buildings heating system. Prior to demolition or dismantling of the buildings heating system it should be drained and tested for the presence of glycol.

Soil Contamination

The scope of work for AK Environmental Consultants, Inc. did not include investigation of soils for petroleum or other contaminations.

REGULATORY OVERVIEW

Asbestos

The asbestos NESHAP (40 CFR Part 61, Subpart M) regulates asbestos fiber emissions and asbestos waste disposal practices. It also requires the identification and classification of existing asbestos-containing material (ACM) according to friability prior to demolition or renovation activity. Friable ACM is a material containing more than 1 percent (%) asbestos that, when dry, may be crumbled, pulverized or reduced to powder by hand pressure. All friable ACM is considered regulated asbestos-containing material (RACM).

The NESHAP regulation classifies ACM as either RACM, Category I non-friable ACM or Category II nonfriable ACM. RACM includes friable ACM, along with Category I non-friable ACM that has become friable or will be or has been subjected to sanding, grinding, cutting or abrading, and Category II nonfriable ACM that has a high



probability of becoming or has become crumbled, pulverized, or reduced to powder during renovation or demolition activity. Category I non-friable ACMs are exclusively asbestos-containing packings, gaskets, resilient floor coverings, floor coverings and associated mastic, and asphalt roofing products that contain more than 1% asbestos. Category II non-friable ACM are all other non-friable materials other than Category I non-friable ACM that contain more than 1% asbestos. RACM must be removed prior to renovation or demolition activities.

The NESHAP requirements are administered by the EPA, and states that the owner, operator or the contractor must provide the EPA with written notification at least 10 working days prior to beginning any friable abatement project. Removal of RACM must be conducted by a State licensed asbestos abatement contractor.

The OSHA Asbestos standard for construction (29 CFR 1926.1101) and the State of Alaska Department of Labor (8 AAC 61) regulates workplace exposure to asbestos. The OSHA standard requires that employee exposure to airborne asbestos fibers be maintained below 0.1 asbestos fibers per cubic centimeter of air (0.1 f/cc) as an eight-hour time weighted average. The OSHA standard classifies construction and maintenance activities which could disturb ACM and specifies work practices and precautions which employers must follow when engaging in each class of regulated work.

Lead

Lead is regulated by Federal OSHA (29 CFR 1926.62) and the State of Alaska (8 AAC Chapter 61). The EPA regulates lead use, removal, and disposal, and OSHA regulates lead exposure to workers. The EPA defines LBP as paint, varnish, stain, or other applied coating that contains lead equal to or greater than 1.0 mg/cm², 5,000 mg/kg, or 0.5% by dry weight as determined by laboratory analysis. For the purpose of the OSHA lead standard, lead includes metallic lead, all inorganic lead compounds, and organic lead soaps. A synopsis of the OSHA regulations (29 CFR 1926.62) and the applicability are as follows:

The OSHA *Interim Lead Standard for Construction* (29 CFR 1926.62) applies to all construction work where an employee may be occupationally exposed to lead. All work related to construction, alteration, or repair (including painting and decorating) is included. The lead-in- construction standard applies to any detectable concentration of lead in paint, as even small concentrations of lead can result in unacceptable employee exposures depending upon on the method of removal and other workplace conditions. Under this standard, construction includes, but is not limited to, the following:

- Demolition or salvage of structures where lead or materials containing lead are present
- Removal or encapsulation of materials containing lead
- New construction, alteration, repair, or renovation of structures, substrates, or portions containing lead, or materials containing lead
- Installation of products containing lead
- Lead contamination/emergency clean-up
- Transportation, disposal, storage, or containment of lead or materials containing lead on the site or location at which construction activities are performed
- Maintenance operations associated with construction activities described above

29 CFR 1926.62 established an "Action Level" for lead concentrations in air of 30 micrograms per cubic meter of air (µg/m³) and a permissible exposure level (PEL) for lead concentrations in air of 50 µg/m³ as an eight-hour



time weighted average. At this time, OSHA has not established limits for lead content in bulk paint (non-airborne). Their interpretation on this issue is that any amount of lead may cause airborne concentrations above the established limits. Detectable levels of lead were found in three of the samples collected. Toxic Characteristic Leaching Procedure (TCLP) is required to assess the project waste stream for disposal.

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 standards and practices and are subject to the following inherent limitations:

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, AK Environmental Consultants, Inc. reserves the right to amend or revise its conclusions, opinions, and/or recommendations.

This limited survey did not include investigation of the entire site and is not valid outside the survey area. Sampling or assessment of roofing materials was excluded at the client's request. The intent of this survey was to identify common asbestos and lead containing materials that may be disturbed during demolition. This survey is not intended to be utilized as the sole design document for abatement. 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 asbestos and lead hazards only. The demolition contractor is responsible for assessment of potential chemical hazards.

Variations may occur between materials and items that appear to be the same but are of different construction or materials. Non-destructive testing was performed. Other asbestos-containing or potentially hazardous materials may be present in the project area that were concealed by debris, structural members, walls, ceilings or floor coverings, or in materials where testing was not conducted. Any other suspect materials discovered but not tested in this limited inspection should be assumed to contain asbestos and treated as such until further sampling shows materials do not contain asbestos.

The removal and disposal of asbestos containing material is highly regulated, it is anticipated that removal and disposal of asbestos will be conducted by a contractor who is qualified for such removal. It is anticipated that the contractor will be able to conduct their work using engineering controls and work practices to control worker exposure.

 9/22/2022

Travis Hubbard

EPA AHERA Inspector Certificate # T-30171-831

EPA Lead Risk Assessor Certification # LBP-R-1175670-2

Appendix A

Bulk Asbestos Analytical Report / Sample Collection Forms

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/19/2022
Report No.: 668777 - PLM
Project: Bldg 456 JBER AK
Project No.: 22-136

Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7492973	Analyst Observation: Black Vapor Barrier	Location: Roof Canopy at Unit D
Client No.: 456-01	Client Description: Vapor Barrier	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	75 Cellulose	25

Lab No.: 7492974	Analyst Observation: White Wall Texture	Location: Unit A - Dining Room
Client No.: 456-02	Client Description: Wall Texture	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7492975	Analyst Observation: White Ceiling Texture	Location: Unit A - Dining Room
Client No.: 456-03	Client Description: Ceiling Texture	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7492976	Analyst Observation: White Joint Compound	Location: Unit A - Kitchen
Client No.: 456-04	Client Description: Joint Compound	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

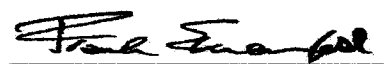
Note: Drywall not present.

Lab No.: 7492977	Analyst Observation: Tan Vinyl Sheet Flooring	Location: Unit A - Kitchen
Client No.: 456-05	Client Description: Sheet Vinyl and Mastic	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	10 Cellulose 1 Fibrous Glass	89

Lab No.: 7492977(L2)	Analyst Observation: Tan Mastic	Location: Unit A - Kitchen
Client No.: 456-05	Client Description: Sheet Vinyl and Mastic	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	1 Cellulose	99

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

Date Received: 9/12/2022
Date Analyzed: 09/19/2022
Signature: 
Analyst: Ellen Smith

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/19/2022
Report No.: 668777 - PLM
Project: Bldg 456 JBER AK
Project No.: 22-136

Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7492978	Analyst Observation: Tan Mastic	Location: Unit A - Basement
Client No.: 456-06	Client Description: Stair Tread Mastic	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	1 Cellulose	99

Lab No.: 7492979	Analyst Observation: Tan Vinyl Sheet Flooring	Location: Unit A - Bath
Client No.: 456-07	Client Description: Sheet Vinyl	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	13 Cellulose 1 Fibrous Glass	86

Lab No.: 7492980	Analyst Observation: Off-White Mastic	Location: Unit B - Laundry
Client No.: 456-08	Client Description: Cove Base Mastic	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7492981	Analyst Observation: White Wall Texture	Location: Unit B - Laundry
Client No.: 456-09	Client Description: Wall Texture	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7492982	Analyst Observation: White Ceiling Texture	Location: Unit B - Laundry
Client No.: 456-10	Client Description: Ceiling Texture	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7492983	Analyst Observation: White Joint Compound	Location: Unit B - Laundry
Client No.: 456-11	Client Description: Joint Compound	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Note: Drywall not present.

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

Date Received: 9/12/2022
Date Analyzed: 09/19/2022
Signature: 
Analyst: Ellen Smith

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/19/2022
Report No.: 668777 - PLM
Project: Bldg 456 JBER AK
Project No.: 22-136

Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7492984 Client No.: 456-12	Analyst Observation: Tan Vinyl Sheet Flooring Client Description: Sheet Vinyl and Mastic	Location: Unit B - Laundry Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 13 Cellulose 2 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 85

Lab No.: 7492984(L2) Client No.: 456-12	Analyst Observation: Off-White/Grey Mastic/Leveling Compound Client Description: Sheet Vinyl and Mastic	Location: Unit B - Laundry Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 1 Cellulose	<u>Percent Non-Fibrous Material:</u> 99

Lab No.: 7492985 Client No.: 456-13	Analyst Observation: Lt Tan Sink Undercoating Client Description: Sink Undercoat	Location: Unit B - Kitchen Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 7 Cellulose	<u>Percent Non-Fibrous Material:</u> 93

Lab No.: 7492986 Client No.: 456-14	Analyst Observation: Tan Vinyl Sheet Flooring Client Description: Sheet Vinyl	Location: Unit B - Kitchen Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 13 Cellulose 2 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 85

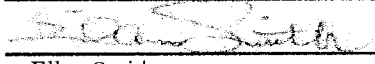
Note: Mastic not present.


Lab No.: 7492987 Client No.: 456-15	Analyst Observation: Off-White Joint Compound Client Description: Joint Compound	Location: Unit B - Basement Facility:
<u>Percent Asbestos:</u> <i>PC Trace Chrysotile</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Note: Drywall not present.

Lab No.: 7492988 Client No.: 456-16	Analyst Observation: Tan Vinyl Sheet Flooring Client Description: Sheet Vinyl and Mastic	Location: Unit B - Bath Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 13 Cellulose 2 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 85

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

Date Received: 9/12/2022
Date Analyzed: 09/19/2022
Signature: 
Analyst: Ellen Smith

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/19/2022
Report No.: 668777 - PLM
Project: Bldg 456 JBER AK
Project No.: 22-136

Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7492988(L2)
Client No.: 456-16

Analyst Observation: Tan Mastic
Client Description: Sheet Vinyl and Mastic

Location: Unit B - Bath
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
1 Cellulose

Percent Non-Fibrous Material:
99

Lab No.: 7492989
Client No.: 456-17

Analyst Observation: Tan Vinyl Sheet Flooring
Client Description: Sheet Vinyl

Location: Unit C - Rear Entry
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
13 Cellulose
1 Fibrous Glass

Percent Non-Fibrous Material:
86

Note: Mastic not present.

Lab No.: 7492990
Client No.: 456-18

Analyst Observation: Grey Vinyl Sheet Flooring
Client Description: Sheet Vinyl and Mastic

Location: Unit C - Rear Entryway, Bottom
Layer

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
15 Cellulose
2 Fibrous Glass

Facility:
Percent Non-Fibrous Material:
83

Lab No.: 7492990(L2)
Client No.: 456-18

Analyst Observation: Tan Mastic
Client Description: Sheet Vinyl and Mastic

Location: Unit C - Rear Entryway, Bottom
Layer

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
1 Cellulose

Facility:
Percent Non-Fibrous Material:
99

Lab No.: 7492991
Client No.: 456-19

Analyst Observation: White Joint Compound
Client Description: Joint Compound

Location: Unit C - Rear Entryway
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Note: Drywall not present.

Lab No.: 7492992
Client No.: 456-20

Analyst Observation: White Wall Texture
Client Description: Wall Texture

Location: Unit D - Kitchen
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

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

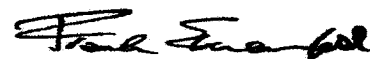
Date Received: 9/12/2022

Date Analyzed: 09/19/2022

Signature:

Analyst: Ellen Smith

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/19/2022
Report No.: 668777 - PLM
Project: Bldg 456 JBER AK
Project No.: 22-136

Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7492993
Client No.: 456-21
Percent Asbestos:
None Detected

Analyst Observation: White Ceiling Texture
Client Description: Ceiling Texture
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Unit D - Kitchen
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7492994
Client No.: 456-22
Percent Asbestos:
None Detected

Analyst Observation: Tan Vinyl Sheet Flooring
Client Description: Sheet Vinyl
Percent Non-Asbestos Fibrous Material:
13 Cellulose
2 Fibrous Glass

Location: Unit D - Dining Room
Facility:
Percent Non-Fibrous Material:
85

Note: Mastic not present.

Lab No.: 7492995
Client No.: 456-23
Percent Asbestos:
None Detected

Analyst Observation: White Joint Compound
Client Description: Joint Compound
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Unit D - Dining Room
Facility:
Percent Non-Fibrous Material:
100

Note: Drywall not present.

Lab No.: 7492996
Client No.: 456-24
Percent Asbestos:
None Detected

Analyst Observation: Beige Firestop
Client Description: Firestop
Percent Non-Asbestos Fibrous Material:
1 Cellulose

Location: Unit D - Basement, South Wall
Facility:
Percent Non-Fibrous Material:
99

Lab No.: 7492997
Client No.: 456-25
Percent Asbestos:
None Detected

Analyst Observation: White Joint Compound
Client Description: Joint Compound
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Mech Room - North Wall
Facility:
Percent Non-Fibrous Material:
100


Note: Drywall not present.

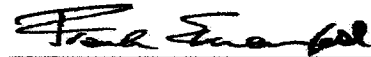
Lab No.: 7492998
Client No.: 456-26
Percent Asbestos:
None Detected

Analyst Observation: Grey Gasket
Client Description: Gasket
Percent Non-Asbestos Fibrous Material:
10 Cellulose

Location: Mech Room - Pump Wall
Facility:
Percent Non-Fibrous Material:
90

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

Date Received: 9/12/2022
Date Analyzed: 09/19/2022
Signature: 
Analyst: Ellen Smith

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/19/2022
Report No.: 668777 - PLM
Project: Bldg 456 JBER AK
Project No.: 22-136

Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7492999	Analyst Observation: Lt Tan Drywall	Location: Mech Room - South Wall
Client No.: 456-27	Client Description: Drywall	Facility:
Percent Asbestos:	Percent Non-Asbestos Fibrous Material:	Percent Non-Fibrous Material:
<i>None Detected</i>	10 Cellulose 1 Fibrous Glass	89

Note: Joint Compound not present.

Lab No.: 7493000	Analyst Observation: Off-White Sealant	Location: Mech Room - Access Hatch
Client No.: 456-28	Client Description: Seam Sealant	Facility:
Percent Asbestos:	Percent Non-Asbestos Fibrous Material:	Percent Non-Fibrous Material:
<i>None Detected</i>	None Detected	100

Lab No.: 7493001	Analyst Observation: Beige Fiberboard	Location: Exterior - Under Siding
Client No.: 456-29	Client Description: Fiber Board	Facility:
Percent Asbestos:	Percent Non-Asbestos Fibrous Material:	Percent Non-Fibrous Material:
<i>None Detected</i>	100 Cellulose	None Detected


Lab No.: 7493002	Analyst Observation: White Ceiling Panel	Location: Unit E - East Bedroom
Client No.: 456-30	Client Description: Ceiling Texture	Facility:
Percent Asbestos:	Percent Non-Asbestos Fibrous Material:	Percent Non-Fibrous Material:
<i>None Detected</i>	None Detected	100


Lab No.: 7493003	Analyst Observation: White Wall Texture	Location: Unit E - East Bedroom
Client No.: 456-31	Client Description: Wall Texture	Facility:
Percent Asbestos:	Percent Non-Asbestos Fibrous Material:	Percent Non-Fibrous Material:
<i>None Detected</i>	None Detected	100

Lab No.: 7493004	Analyst Observation: Tan Vinyl Sheet Flooring	Location: Unit E - Bath
Client No.: 456-32	Client Description: Sheet Vinyl	Facility:
Percent Asbestos:	Percent Non-Asbestos Fibrous Material:	Percent Non-Fibrous Material:
<i>None Detected</i>	10 Cellulose 1 Fibrous Glass	89

Note: Mastic not present.

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

Date Received: 9/12/2022
Date Analyzed: 09/19/2022
Signature: 
Analyst: Ellen Smith

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/19/2022
Report No.: 668777 - PLM
Project: Bldg 456 JBER AK
Project No.: 22-136

Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7493005
Client No.: 456-33
Percent Asbestos:
None Detected

Analyst Observation: Tan Vinyl Sheet Flooring
Client Description: Sheet Vinyl and Mastic
Percent Non-Asbestos Fibrous Material:
13 Cellulose
2 Fibrous Glass

Location: Unit F - Rear Entryway
Facility:
Percent Non-Fibrous Material:
85

Lab No.: 7493005(L2)
Client No.: 456-33
Percent Asbestos:
None Detected

Analyst Observation: Off-White/Tan Mastic
Client Description: Sheet Vinyl and Mastic
Percent Non-Asbestos Fibrous Material:
1 Cellulose

Location: Unit F - Rear Entryway
Facility:
Percent Non-Fibrous Material:
99

Lab No.: 7493006
Client No.: 456-34
Percent Asbestos:
None Detected

Analyst Observation: White Joint Compound
Client Description: Joint Compound
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Unit F - Dining Room
Facility:
Percent Non-Fibrous Material:
100

Note: Drywall not present.

Lab No.: 7493007
Client No.: 456-35
Percent Asbestos:
None Detected

Analyst Observation: White Joint Compound
Client Description: Joint Compound
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Unit G - Kitchen
Facility:
Percent Non-Fibrous Material:
100

Note: Drywall not present.

Lab No.: 7493008
Client No.: 456-36
Percent Asbestos:
None Detected

Analyst Observation: White Wall Texture
Client Description: Wall Texture
Percent Non-Asbestos Fibrous Material:
None Detected


Location: Unit G - Kitchen
Facility:
Percent Non-Fibrous Material:
100

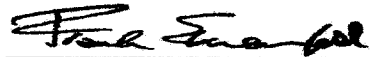
Lab No.: 7493009
Client No.: 456-37
Percent Asbestos:
None Detected

Analyst Observation: White Ceiling Texture
Client Description: Ceiling Texture
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Unit G - Kitchen
Facility:
Percent Non-Fibrous Material:
100

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

Date Received: 9/12/2022
Date Analyzed: 09/19/2022
Signature: 
Analyst: Ellen Smith

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Client: AKE001

Report Date: 9/19/2022
Report No.: 668777 - PLM
Project: Bldg 456 JBER AK
Project No.: 22-136

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7493010
Client No.: 456-38

Analyst Observation: White Joint Compound
Client Description: Joint Compound

Location: Unit H - Laundry
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Note: Drywall not present.

Lab No.: 7493011
Client No.: 456-39

Analyst Observation: Tan Vinyl Sheet Flooring
Client Description: Sheet Vinyl and Mastic

Location: Unit H - Sheet Vinyl and Mastic
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
13 Cellulose
2 Fibrous Glass

Percent Non-Fibrous Material:
85

Lab No.: 7493011(L2)
Client No.: 456-39

Analyst Observation: Lt Tan/Grey Mastic/Leveling Compound

Location: Unit H - Sheet Vinyl and Mastic
Facility:

Percent Asbestos:
None Detected

Client Description: Sheet Vinyl and Mastic
Percent Non-Asbestos Fibrous Material:
1 Cellulose

Percent Non-Fibrous Material:
99

Lab No.: 7493012
Client No.: 456-40

Analyst Observation: Tan Vinyl Sheet Flooring
Client Description: Sheet Vinyl

Location: Unit H - Kitchen
Facility:

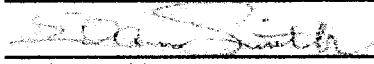
Percent Asbestos:
None Detected


Percent Non-Asbestos Fibrous Material:
10 Cellulose
1 Fibrous Glass

Percent Non-Fibrous Material:
89

Note: Drywall not present.

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

Date Received: 9/12/2022
Date Analyzed: 09/19/2022
Signature: 
Analyst: Ellen Smith

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Client: AKE001

Report Date: 9/19/2022
Report No.: 668777 - PLM
Project: Bldg 456 JBER AK
Project No.: 22-136

Appendix to Analytical Report

Customer Contact: Travis Hubbard

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 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: Kelly Klippel
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) See additional information at the end of this appendix.

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/19/2022
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Project No.: 22-136

Client: AKE001

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 gänge, 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/1198_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.



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Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

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PO Box 211994
Anchorage AK 99521

Report Date: 9/19/2022
Report No.: 668777 - PLM
Project: Bldg 456 JBER AK
Project No.: 22-136

Client: AKE001

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).

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

Chain of Custody

—Bulk Asbestos—

Contact Information

Client Company: AK Environmental Consultants, Inc
Office Address: 5700 Old Seward Hwy, Suite 205
City, State, Zip: Anchorage, AK 99518
Fax Number:
Email Address: travis@akenviro.com

Project Number: 22-136
Project Name: Building 456 JBER, AK
Primary Contact: Travis Hubbard
Office Phone: 907-561-2532
Cell Phone: 907-330-9282

PLM Instructions:

- ☒ PLM: Bulk Asbestos Building Materials EPA 600 R-93/116, 1993
☐ PLM: Bulk Asbestos Building Materials EPA 600 M-4/82-020, 1982
☐ PLM: Bulk Asbestos Building Materials NIOSH 9002, 1985
☐ PLM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.1, 2002
☐ PLM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.6, 2010
☐ TEM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.4, 2009
- ☐ PLM: Point Counting
☐ PC: via ELAP 198.1
☐ PC: 400 Points
☐ PC: 800 Points *
☐ PC: 1600 Points *
- ☒ PLM: Instructions for Multi-Layered Samples
☒ Analyze and Report All Separable Layers per EPA 600
☐ Report Composite for Drywall Systems per NESHAP
☐ Report All Layers and Composite Where Applicable
☐ Only Analyze and Report Specifically Noted Layer
- ☐ PLM: Analyze Until Positive (Positive Stop)
☐ AUP: by Homogenous Area as Noted
☐ AUP: by Material Type as Noted
☐ PLM: NOB via 198.6
☐ PLM: Friable via EPA 600 2.3
☐ If <1% by PLM, to TEM via 198.4 *
☐ If <1% by PLM, Hold for Instructions
- ☐ PLM: Non-Building Material*** (Dust, Wipe, Tape)
☐ Soil or Vermiculite Analysis
☐ CARB 435

Special Instructions:

* Additional charge and turnaround may be required

** Alternative Method (ex: EPA 600/R-04/004) may be recommended by Laboratory

Turnaround Time

Preliminary Results Requested Date: _____
Specific date / time
☐ 10 Day ☒ 5 Day ☐ 3 Day ☐ 2 Day ☐ 1 Day* ☐ 12 Hour** ☐ 6 Hour** ☐ RUSH**

* End of next business day unless otherwise specified. ** Matrix Dependent. ***Please notify the lab before shipping***

Chain of Custody

Relinquished (Name/Organization): Z. Hubbard Date: 9/9/2022 Time: 12:30pm
Received (Name / iATL): _____ Date: _____ Time: _____
Sample Login (Name / iATL): _____ Date: _____ Time: **RECEIVED**
Analysis(Name(s) / iATL): C. Smith Date: 9/19/22 Time: _____
QA/QC Review (Name / iATL): _____ Date: _____ Time: _____
Archived / Released: _____ QA/QC InterLAB Use: _____ Date: _____ Time: _____



AK Environmental Consultants, Inc.
5700 Old Seward Highway, Suite 205
Anchorage, AK 99518

Project Title Building 456
Location Building 456 Fort Richardson, AK 99505
Client 673 CES CENMP Project # 22-136

Bulk Sample Log

Analytical Method Requested <u>EPA 821-A-16, 1993</u>	Turnaround Time <u>5 Day</u>	Sample Count <u>40</u>	Collection Date <u>9/8/2022</u>
Collected By (Printed Name and Signature) <u>Travis Hubbard / [Signature]</u>	Client Project # <u>Bldg. 456</u>		
Relinquished By <u>[Signature]</u>	Date / Time <u>9/9/2022</u>	Samples Received By	Date / Time

Project Notes

* Fluorescent lights and smoke detectors present in building.

Sample Number	Material Sampled	Sample Location and Notes	
456-01	Vapor Barrier	Roof Canopy at Unit D	7492973
456-02	Wall Texture	Unit A, Dining Room	7492974
456-03	Ceiling Texture	<u>I</u>	7492975
456-04	Joint Compound	Unit A, Kitchen	7492976
456-05	Sheet Vinyl & Mastic	<u>I</u>	7492977
456-06	Stair Tread Mastic	Unit A, Basement	7492978
456-07	Sheet Vinyl	Unit A, Bath	7492979
456-08	Cove Base Mastic	<u>I</u>	7492980
456-09	Wall Texture	Unit B, Laundry	7492981
456-10	Ceiling Texture	<u>I</u>	7492982
456-11	Joint Compound	<u>I</u>	7492983
456-12	Sheet Vinyl & Mastic	<u>I</u>	7492984
456-13	Sink Undercoat	Unit B, Kitchen	7492985
456-14	Sheet Vinyl	<u>I</u>	7492986
456-15	Joint Compound	Unit B, Basement	7492987
456-16	Sheet Vinyl & Mastic	Unit C, Bath	7492988
456-17	Sheet Vinyl	Unit C, Rear Entryway, Top Layer	7492989



AK Environmental Consultants, Inc.
5700 Old Seward Highway, Suite 205
Anchorage, AK 99518

Project Title Building 456
Location Building 456 Fort Richardson, AK 99503
Client 673 CES EENMP Project # 22-136

Bulk Sample Log

Analytical Method Requested <u>EPA 600/3-93/116, 1993</u>	Turnaround Time <u>5 Day</u>	Sample Count <u>40</u>	Collection Date <u>9/8/2022</u>
Collected By (Printed Name and Signature) <u>Travis Hubbard / [Signature]</u>	Client Project # <u>Bldg. 456</u>		
Relinquished By <u>[Signature]</u>	Date / Time <u>9/9/2022</u>	Samples Received By	Date / Time
Project Notes			

Sample Number	Material Sampled	Sample Location and Notes
456-18	Sheet Vinyl & Mastix	Unit C, Rear Entryway, Bottom Layer 7492990
456-19	Joint Compound	Unit C, Rear Entryway 7492991
456-20	Wall Texture	Unit D, Kitchen 7492992
456-21	Ceiling Texture	<u>I</u> 7492993
456-22	Sheet Vinyl	Unit D, Dining Room 7492994
456-23	Joint Compound	<u>I</u> 7492995
456-24	Fire Stop	Unit D, Basement, South Wall 7492996
456-25	Joint Compound	Mech Room, North Wall 7492997
456-26	Gasket	Mech Room, Pump 1 7492998
456-27	Drywall	Mech Room, South Wall 7492999
456-28	Seam Sealant	Mech Room Access Hatch 7493000
456-29	Fiber Board	Exterior, Under Siding 7493001
456-30	Ceiling Texture	Unit E, the East Bedroom 7493002
456-31	Wall Texture	<u>I</u> 7493003
456-32	Sheet Vinyl	Unit E, Bath 7493004
456-33	Sheet Vinyl & Mastix	Unit F, Rear Entryway 7493005
456-34	Joint Compound	Unit F, Dining Room 7493006

Bulk Sample Log

Analytical Method Requested EPA 823-R-13/11/16/1993	Turnaround Time 5 Day	Sample Count 40	Collection Date 9/18/2022
Collected By (Printed Name and Signature) T. H. H. / [Signature]	Client Project # Bldg. 456		
Relinquished By [Signature]	Date / Time 9/19/2022	Samples Received By	Date / Time

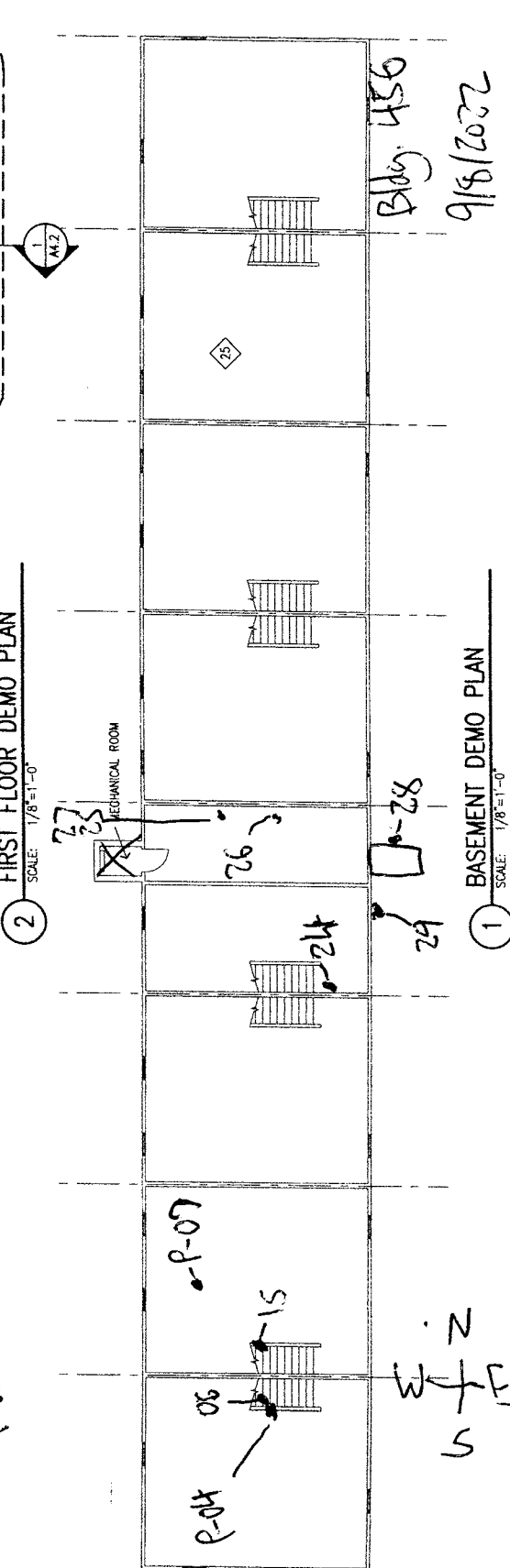
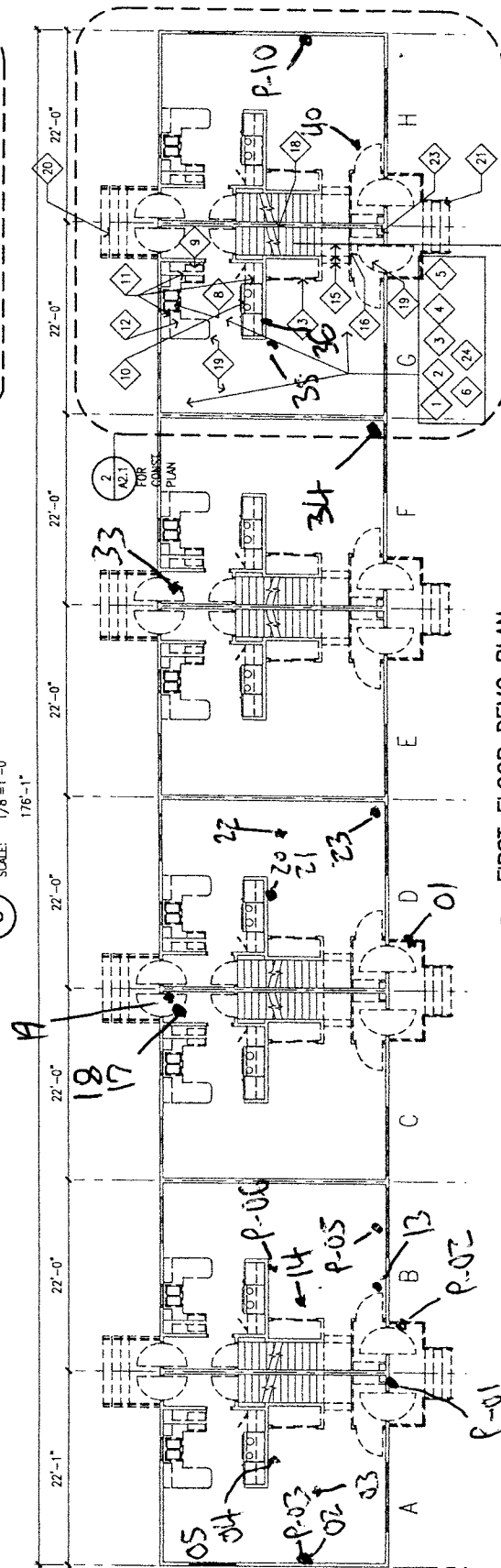
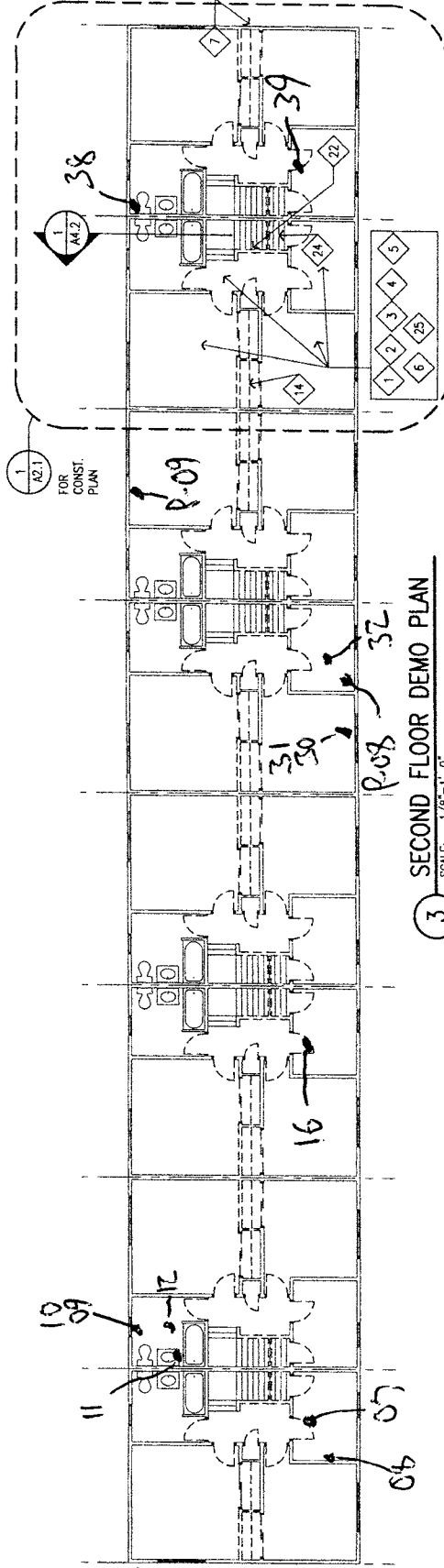
Project Notes

[illegible]

KEY NOTES

- 1 TYPICAL DEMO NOTE
APPLICABLE TO ALL UNITS UNLESS OTHERWISE NOTED
- 2 SPECIFIC UNIT DEMO NOTE
- 3 REMOVE ALL EXISTING DOORS AND ENLARGE OPENINGS TO P-09 FOR NEW TRANSOM LITES SHOWN ON 2/A5.2
- 4 REMOVE AND DISPOSE OF ALL INTERIOR AND EXTERIOR DOOR FRAMES, TRIM AND COMPONENTS (ASSUME BASED PAINT).
- 5 REMOVE BASEBOARDS AND CROWN MOLDING ALL EXCEPT BATHROOM (ASSUME LEAD BASED PAINT)
- 6 REMOVE AND DISPOSE OF GYPSUM BOARD WALLS AND CEILINGS IN ALL ROOMS EXCEPT THE BATHROOM. ALL GYPSUM BOARD HAS ASBESTOS-CONTAINING JOINT COMPOUND AND SHALL BE REMOVED AS CLASS II ASBESTOS WORK.
- 7 REMOVE EXISTING FLOORING, EXCEPT HARDWOOD IN GOOD CONDITION, IN ALL ROOMS EXCEPT BATHROOM. SEE NOTE 19 FOR SPECIFICS ON DINING, KITCHEN ENTRY AREAS
- 8 REMOVE EXISTING MINI BLINDS/ WINDOW COVERINGS
- 9 REMOVE ATTIC VENT LOUVER (TYPICAL EACH END OF BOTH BUILDINGS)
- 10 REMOVE EXISTING GARBAGE DISPOSAL
- 11 REMOVE EXISTING DISHWASHER (LOCATION VARIES)
- 12 REMOVE EXISTING RANGE HOOD
- 13 REMOVE EXISTING KITCHEN CABINETS
- 14 REMOVE EXISTING KITCHEN COUNTER TOPS AND SINKS
- 15 DEMO EXISTING COAT CLOSET
- 16 DEMO CLOSET IN OFFICE
- 17 DEMO STAIR LANDING AND BOTTOM 2 TREADS
- 18 DEMO INTERIOR WALLS OF ENTRY VESTIBULE
- 19 REMOVE EXISTING STAIR HAND RAIL
- 20 REMOVE AND DISPOSE OF ASBESTOS-CONTAINING VESTIBULE FLOORING AND FLOORING MASTICS FROM KITCHEN, ROOM, AND ENTRY AREAS. FLOORS MAY CONTAIN LAYERS OF SHEET VINYL, TILE AND MASTICS. BIDS BE BASED ON SQUARE FOOTAGE OF FLOOR AREA REGARDLESS OF LAYERS.
- 21 DEMO EXISTING CONCRETE STEPS AND STOOP INCLUDING STEEL RAILING. EXISTING CEDAR FENCE WILL REQUIRE REMOVAL AND RESTORATION TO PROVIDE ACCESS TO PROPERTY.
- 22 DEMO EXISTING CONCRETE STEPS AND STOOP INCLUDING STEEL RAILING. EXISTING CEDAR FENCE WILL REQUIRE REMOVAL AND RESTORATION TO PROVIDE ACCESS TO PROPERTY.
- 23 REMOVE EXISTING HALF WALL AND TRIM (ASSUME LEAD BASED PAINT IN TRIM)
- 24 REMOVE EXISTING PIPE CHASE
- 25 DEMO EXISTING CLOSET IN LAUNDRY ROOM
- 26 BUILDINGS WILL BE TURNED OVER TO CONTRACTOR IN GOOD CONDITION. ALL SELF HELP WORK IN THE BASEMENT WILL BE REMOVED BY FT. RICHARDSON DPW PRIOR TO CONSTRUCTION START

100%
SUBMITTAL
CONSTRUCTION



W.F. 2
5

Blkg. 456
9/8/2022

Appendix B

Lead Paint Analytical Report / Sample Collection Forms

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

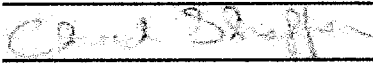
Report Date: 9/19/2022
Report No.: 668764 - Lead Paint
Project: Building 456 JBER AK
Project No.: 22-136

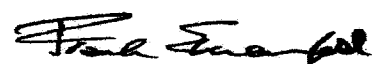
Client: AKE001

LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 7492726	Description: Paint	Result (% by Weight): 2.0
Client No.: 456 P-01	Location: Exterior Siding, Unit A	Result (ppm): 20000
		Comments:
Lab No.: 7492727	Description: Paint	Result (% by Weight): <0.0077
Client No.: 456 P-02	Location: Porch Railing, Unit B	Result (ppm): <77
		Comments:
Lab No.: 7492728	Description: Paint	Result (% by Weight): <0.0055
Client No.: 456 P-03	Location: Base Trim, Unit A, Dining Rm	Result (ppm): <55
		Comments:
Lab No.: 7492729	Description: Paint	Result (% by Weight): 0.25
Client No.: 456 P-04	Location: Stairs, Unit A, Basement	Result (ppm): 2500
		Comments: ***
Lab No.: 7492730	Description: Paint	Result (% by Weight): <0.0066
Client No.: 456 P-05	Location: Window Sill, Unit B, Dining Rm	Result (ppm): <66
		Comments: ***
Lab No.: 7492731	Description: Paint	Result (% by Weight): <0.0067
Client No.: 456 P-06	Location: Wall, Unit B, Kitchen	Result (ppm): <67
		Comments: ***
Lab No.: 7492732	Description: Paint	Result (% by Weight): 2.7
Client No.: 456 P-07	Location: Floor, Unit B, Basement	Result (ppm): 27000
		Comments:
Lab No.: 7492733	Description: Paint	Result (% by Weight): <0.0056
Client No.: 456 P-08	Location: Wall, Unit E, Bath	Result (ppm): <56
		Comments:

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

Date Received: 9/12/2022
Date Analyzed: 09/19/2022
Signature: 
Analyst: Chad Shaffer

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director



9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Client: AKE001

Report Date: 9/19/2022
Report No.: 668764 - Lead Paint
Project: Building 456 JBER AK
Project No.: 22-136

LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 7492734
Client No.: 456 P-09

Description: Paint
Location: Window Sill, Unit F, West Bedroom


Result (% by Weight): <0.0041
Result (ppm): <41
Comments:

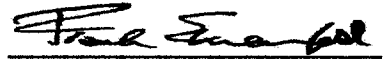
Lab No.: 7492735
Client No.: 456 P-10

Description: Paint
Location: Wall, Unit H, Dining Rm

Result (% by Weight): <0.0075
Result (ppm): <75
Comments:

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

Date Received: 9/12/2022
Date Analyzed: 09/19/2022
Signature: 
Analyst: Chad Shaffer

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/19/2022
Report No.: 668764 - Lead Paint
Project: Building 456 JBER AK
Project No.: 22-136

Client: AKE001

Appendix to Analytical Report:

Customer Contact: Travis Hubbard

Method: ASTM D3335-85a, US EPA SW846 3050B:7000B

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: Kelly Klippel

Sample Login Notes: See Batch Sheet Attached

Sample Matrix: Paint

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 ASTM D3335-85a by AAS

Certification:

- National Lead Laboratory Program (NLLAP): AIHA-LAP, LLC No. 100188

- NYSDOH-ELAP No. 11021

This report meets the standards set forth in the EPA's National Lead Laboratory Accreditation Program (NLLAP) through the Laboratory Quality System Requirements (LQSR) Revision 3.0 November 5, 2007. All Environmental Lead Proficiency Analytical Testing (ELPAT) is through the AIHA-PAT established program.

Regulatory limit is 0.5% lead by weight (EPA/HUD guidelines). Recommend multiple sampling for all samples less than regulatory limit for confirmation.

All results are based on the samples as received at the lab. iATL assumes that appropriate sampling methods have been used and that the data upon which these results are based have been accurately supplied by the client.

Method Detection Limit (MDL) per EPA Method 40CFR Part 136 Appendix B.

Reporting Limit (RL) based upon Lowest Standard Determined (LSD) in accordance with AIHA-ELLAP policies.

LSD=0.2 ppm MDL=0.006% by weight. RL= 0.010% by weight (based upon 100 mg sampled).

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 complete list with highlighted disclaimers pertinent to this project. For a full explanation of these and other disclaimers, please inquire at customerservice@iatl.com.



9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/19/2022
Report No.: 668764 - Lead Paint
Project: Building 456 JBER AK
Project No.: 22-136

Client: AKE001

- * Insufficient sample provided to perform QC reanalysis (<200 mg)
- ** Not enough sample provided to analyze (<50 mg)
- *** Matrix / substrate interference possible.

< less than sign, signifies none-detected below the empirical value based upon sub-sampled mass. This is often below the Reporting Limit (see above).

Chain of Custody

– Environmental Lead –

Contact Information

Client Company: AK Environmental Consultants, Inc.

Office Address: 5700 Old Seward Hwy, Suite 205

City, State, Zip: Anchorage, AK 99518

Fax Number:

Email Address: travis@akenviro.com

Project Number: 22-136

Project Name: Building 456 JBER, AK

Primary Contact: Travis Hubbard

Office Phone: 907-561-2532

Cell Phone: 907-330-9282

iATL is accredited by the National Lead Laboratory Accreditation Program (NLLAP) to perform analytical testing of environmental samples for lead (Pb). The accreditation is through AIHA-LAP, LLC and several other nationally recognized state programs.

Matrix/Method:

- ☒ Paint by AAS: ASTM D3335-85a, 2009
☐ Wipe/Dust by AAS: SW 846: 3050B: 700B, 2010
☐ Air by AAS: NIOSH 7082, 1994
☐ Soil by AAS: EPA SW 846 (Soil)
☐ Water by AAS-GF: ASTM D3559-03D, US EPA 200.9
☐ Other Metals (Cd, Zn, Cr) by AAS
☐ Toxicity Characteristic Leaching Procedure (TCLP) by AAS: US EPA 1311
☐ Other _____

Special Instructions:

Turnaround Time

Preliminary Results Requested Date: _____

Specific date / time

☐ Verbal ☒ Email ☐ Fax

☐ 10 Day ☒ 5 Day ☐ 3 Day ☐ 2 Day ☐ 1 Day* ☐ 12 Hour** ☐ 6 Hour** ☐ RUSH**

* End of next business day unless otherwise specified. ** Matrix Dependent. ***Please notify the lab before shipping***

Chain of Custody

Relinquished (Name/Organization): E. Hubbard

Received (Name / iATL): _____

Sample Login (Name / iATL): _____

Analysis(Name(s) / iATL): initial

QA/QC Review (Name / iATL): L. Allen

Archived / Released: _____ QA/QC InterLAB Use: _____

Date: 9/9/2022

Time: 12:30pm

Date: _____

Time: _____

Date: _____

Time: _____

Date: _____

Time: _____

Date: _____

Time: _____

Date: _____

Time: _____



AK Environmental Consultants, Inc.
5700 Old Seward Highway, Suite 205
Anchorage, AK 99518

Project Title Building 456
Location Building 456 Fort Richardson, AK 99505
Client 673 CES CENMP Project # 82-136

Bulk Sample Log

Analytical Method Requested <u>ASTM D3335-65a, 2009</u>	Turnaround Time <u>5 Day</u>	Sample Count <u>10</u>	Collection Date <u>9/8/2022</u>
Collected By (Printed Name and Signature) <u>Tyler Hubbard</u>	Client Project # <u>Bldg. 456</u>		
Relinquished By <u>Tyler Hubbard</u>	Date / Time <u>9/9/2022</u>	Samples Received By	Date / Time

Project Notes

* Paint

Sample Number	Material Sampled	Sample Location and Notes
456 P-01	Paint 7492726	Exterior Siding, Unit A
456 P-02	Paint 7492727	Porch Railing, Unit B
456 P-03	Paint 7492728	Base Trim, Unit A, Kit Dining Room
456 P-04	Paint 7492729	Stairs, Unit A, Basement
456 P-05	Paint 7492730	Window Sill, Unit B, Dining Room
456 P-06	Paint 7492731	Wall, Unit B, Kitchen
456 P-07	Paint 7492732	Floor, Unit B, Basement
456 P-08	Paint 7492733	Wall, Unit E, Bath
456 P-09	Paint 7492734	Window Sill, Unit F, West Bedroom
456 P-10	Paint 7492735	Wall, Unit H, Dining Room

LIMITED ASBESTOS & LEAD INSPECTION REPORT

Building 457
Fort Richardson, AK 99505

Prepared for
673 CES CENMP
730 Quartermaster Road
JBER, AK 99505

Prepared by



AK Environmental Consultants, Inc.
5700 Old Seward Highway, Suite 205
Anchorage, AK 99518

September 27, 2022

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REGULATORY OVERVIEW..... 4

LIMITATIONS 6

- Appendix A: Bulk Asbestos Analytical Report / Sample Collection Forms**
- Appendix B: Lead Paint Analytical Report / Sample Collection Forms**
- Appendix C: Inspectors Certifications**
- Appendix D: Laboratory Certification**



OVERVIEW

AK Environmental Consultants, Inc. (AKEC) conducted a limited asbestos & lead Inspection of Building 457 located at Fort Richardson, AK 99505 on September 15, 2022. The inspection was not AHERA or NESHAP compliant at the client's request. The sampling was conducted by AHERA-accredited asbestos building inspector, Travis Hubbard. Accessible interior and exterior components were surveyed, and homogeneous areas of suspect asbestos-containing materials (ACM) were visually identified and documented. Although reasonable effort was made to survey all accessible suspect materials, additional suspect but unsampled materials may be present in walls, voids, or other inaccessible areas of the building.

All suspect ACM samples were delivered to an accredited laboratory for analysis by polarized light microscopy (PLM).

ASBESTOS INSPECTION PROCEDURES

The inspection was conducted by Travis Hubbard, AHERA-accredited asbestos building inspector, on September 15, 2022. A copy of the inspector license is attached as Appendix C. The inspection began with a walk through of the eight-plex. Building materials identified as glass, wood, or metal are not considered suspect ACM.

Based on results of the visual observation, bulk samples of suspect ACM were collected in accordance with the client's budgetary constraints. No sampling or assessment of the roof was performed at the client's request. Samples were placed in sealable containers and labeled with unique sample numbers using an indelible marker. Suspect materials identified and sampled include, exterior fiber board, foundation damp proofing, canopy vapor barrier, sheet vinyl, cove base mastic, sink undercoat, joint compound, wall texture, ceiling texture, stair tread mastic, drywall, and gasket.

ASBESTOS ANALYSIS RESULTS

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 R-93/116, 1993). 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 and found to have less than 10% asbestos were "point-counted" by the laboratory for more accuracy. The table below contains a list of the building material that was found to contain asbestos.

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. Appendix A contains the results of all bulk samples and collection sheets.



SAMPLE NUMBER	MATERIAL	SAMPLE LOCATION	ASBESTOS CONTENT
457-21	Joint Compound	Unit C, Basement, Top of Stairwell	1.6%
457-33	Joint Compound	Unit E, Basement, Top of Stairwell	1.6%
457-36	Joint Compound	Unit F, Basement Ceiling	3.4%
457-38	Joint Compound	Unit G, Basement Stairwell	2.8%

The following material was found to contain asbestos in this survey.

- Joint Compound

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

Joint Compound:

Joint compound on gypsum board walls and ceilings throughout the basement stairwells and Unit F basement ceiling of the eight-plex is presumed asbestos containing material. AKEC recommends that all joint compound in the basement stairwells be treated as asbestos containing material. Joint compound is considered a Class II asbestos containing material by OSHA. Any disturbance of asbestos-containing materials should only be performed by state certified asbestos abatement personnel.

LEAD INSPECTION PROCEDURES

On September 15, 2022, a limited lead paint inspection was conducted by AKEC employee, Travis Hubbard, at Building 457 located at Fort Richardson, AK 99505. Appendix B contains the results of the paint samples. EPA lead risk assessor certification for the inspector is in Appendix C.

AKEC collected ten samples of paints suspected to be lead containing. Paints containing 5,000 ppm or greater of lead are classified as Lead Based Paint (LBP). LBP is regulated by EPA and OSHA. Paints containing less than 5,000 ppm are classified as Lead Containing Paint (LCP). LCP is regulated by OSHA. Paints sampled that were not reported to have detectable concentrations of lead above the Limit of Detection (LOD) are not classified as lead paint. Samples were analyzed by EPA Method SW846-7000B.

LEAD ANALYSIS RESULTS

The paint chip samples were collected and submitted to International Asbestos Testing Laboratories (IATL), Mt. Laurel, New Jersey for analysis by flame atomic absorption spectroscopy per EPA Method SW846-3050B: 7000B. IATL is an American Industrial Hygiene Association (AIHA) ELPAT and NLLAP accredited laboratory.



Lead in Paint Samples

Sample ID #	Sampling Location	Results, parts per million (ppm) Total Lead	Lead Based Paint (LBP) Lead Containing Paint (LCP) < Limit of Detection (<LOD)
457P-01	Exterior Siding, Unit A, Entry	3,900	Lead Containing Paint
457P-02	Exterior, Deck Railing, Unit A	<64	< Limit of Detection
457P-03	Unit A, Kitchen, Wall	<71	< Limit of Detection
457P-04	Unit A, Basement Floor	930	Lead Containing Paint
457P-05	Unit B, Windowsill, Living Room	<70	< Limit of Detection
457P-06	Unit C, Wall, Dining Room	<60	< Limit of Detection
457P-07	Unit C, Base Trim, Dining Room	<81	< Limit of Detection
457P-08	Unit C, Basement Wall	1,100	Lead Containing Paint
457P-09	Unit E, Windowsill, South Bedroom	<56	< Limit of Detection
457P-10	Unit H, Windowsill, Dining Room	<62	< Limit of Detection

Detectable levels of lead were found in three of the samples collected. Toxic Characteristic Leaching Procedure (TCLP) is required to assess the project waste stream for disposal. Lead safe work practices should be utilized.

HAZARDOUS MATERIALS

During the September 15, 2022 inspection the following potentially, hazardous materials were observed at Building 457 Fort Richardson, AK 99505.

Lead-Containing Materials

Lead containing paint was found to be present at exterior siding of the building and concrete basement walls and basement floors. Lead solder at copper piping and poured lead sealants at bell and spigot joints of waste and vent piping may be present.

PCB-Containing Materials

Light Ballasts

EPA regulation (40 CFR Part 761) covers the proper handling and disposal of Poly Chlorinated Biphenyls (PCB)-containing materials. PCB-containing light ballasts were found in the building, any removed PCB-containing equipment is 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.

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. All lights shall be inspected during removal. 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.

Mercury-Containing 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. 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.

Glycol

Propylene glycol is presumed to be present in the buildings heating system. Prior to demolition or dismantling of the buildings heating system it should be drained and tested for the presence of glycol.

Soil Contamination

The scope of work for AK Environmental Consultants, Inc. did not include investigation of soils for petroleum or other contaminations.

REGULATORY OVERVIEW

Asbestos

The asbestos NESHAP (40 CFR Part 61, Subpart M) regulates asbestos fiber emissions and asbestos waste disposal practices. It also requires the identification and classification of existing asbestos-containing material (ACM) according to friability prior to demolition or renovation activity. Friable ACM is a material containing more than 1 percent (%) asbestos that, when dry, may be crumbled, pulverized or reduced to powder by hand pressure. All friable ACM is considered regulated asbestos-containing material (RACM).

The NESHAP regulation classifies ACM as either RACM, Category I non-friable ACM or Category II nonfriable ACM. RACM includes friable ACM, along with Category I non-friable ACM that has become friable or will be or has been subjected to sanding, grinding, cutting or abrading, and Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder during renovation or demolition activity. Category I non- friable ACMs are exclusively asbestos-containing packings, gaskets, resilient



floor coverings, floor coverings and associated mastic, and asphalt roofing products that contain more than 1% asbestos. Category II non-friable ACM are all other non-friable materials other than Category I non-friable ACM that contain more than 1% asbestos. RACM must be removed prior to renovation or demolition activities.

The NESHAP requirements are administered by the EPA, and states that the owner, operator or the contractor must provide the EPA with written notification at least 10 working days prior to beginning any friable abatement project. Removal of RACM must be conducted by a State licensed asbestos abatement contractor.

The OSHA Asbestos standard for construction (29 CFR 1926.1101) and the State of Alaska Department of Labor (8 AAC 61) regulates workplace exposure to asbestos. The OSHA standard requires that employee exposure to airborne asbestos fibers be maintained below 0.1 asbestos fibers per cubic centimeter of air (0.1 f/cc) as an eight-hour time weighted average. The OSHA standard classifies construction and maintenance activities which could disturb ACM and specifies work practices and precautions which employers must follow when engaging in each class of regulated work.

Lead

Lead is regulated by Federal OSHA (29 CFR 1926.62) and the State of Alaska (8 AAC Chapter 61). The EPA regulates lead use, removal, and disposal, and OSHA regulates lead exposure to workers. The EPA defines LBP as paint, varnish, stain, or other applied coating that contains lead equal to or greater than 1.0 mg/cm², 5,000 mg/kg, or 0.5% by dry weight as determined by laboratory analysis. For the purpose of the OSHA lead standard, lead includes metallic lead, all inorganic lead compounds, and organic lead soaps. A synopsis of the OSHA regulations (29 CFR 1926.62) and the applicability are as follows:

The OSHA *Interim Lead Standard for Construction* (29 CFR 1926.62) applies to all construction work where an employee may be occupationally exposed to lead. All work related to construction, alteration, or repair (including painting and decorating) is included. The lead-in- construction standard applies to any detectable concentration of lead in paint, as even small concentrations of lead can result in unacceptable employee exposures depending upon on the method of removal and other workplace conditions. Under this standard, construction includes, but is not limited to, the following:

- Demolition or salvage of structures where lead or materials containing lead are present
- Removal or encapsulation of materials containing lead
- New construction, alteration, repair, or renovation of structures, substrates, or portions containing lead, or materials containing lead
- Installation of products containing lead
- Lead contamination/emergency clean-up
- Transportation, disposal, storage, or containment of lead or materials containing lead on the site or location at which construction activities are performed
- Maintenance operations associated with construction activities described above

29 CFR 1926.62 established an “Action Level” for lead concentrations in air of 30 micrograms per cubic meter of air (µg/m³) and a permissible exposure level (PEL) for lead concentrations in air of 50 µg/m³ as an eight-hour time weighted average. At this time, OSHA has not established limits for lead content in bulk paint (non-airborne). Their interpretation on this issue is that any amount of lead may cause airborne concentrations above



the established limits. Detectable levels of lead were found in three of the samples collected. Toxic Characteristic Leaching Procedure (TCLP) is required to assess the project waste stream for disposal.

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 standards and practices and are subject to the following inherent limitations:

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, AK Environmental Consultants, Inc. reserves the right to amend or revise its conclusions, opinions, and/or recommendations.

This limited survey did not include investigation of the entire site and is not valid outside the survey area. Sampling or assessment of roofing materials was excluded at the client's request. The intent of this survey was to identify common asbestos and lead containing materials that may be disturbed during demolition. This survey is not intended to be utilized as the sole design document for abatement. 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 asbestos and lead hazards only. The demolition contractor is responsible for assessment of potential chemical hazards.

Variations may occur between materials and items that appear to be the same but are of different construction or materials. Non-destructive testing was performed. Other asbestos-containing or potentially hazardous materials may be present in the project area that were concealed by debris, structural members, walls, ceilings or floor coverings, or in materials where testing was not conducted. Any other suspect materials discovered but not tested in this limited inspection should be assumed to contain asbestos and treated as such until further sampling shows materials do not contain asbestos.

The removal and disposal of asbestos containing material is highly regulated, it is anticipated that removal and disposal of asbestos will be conducted by a contractor who is qualified for such removal. It is anticipated that the contractor will be able to conduct their work using engineering controls and work practices to control worker exposure.

 9/27/2022

Travis Hubbard

EPA AHERA Inspector Certificate # T-30171-831

EPA Lead Risk Assessor Certification # LBP-R-1175670-2

Appendix A

Bulk Asbestos Analytical Report / Sample Collection Forms

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/26/2022
Report No.: 669355 - PLM
Project: Building 457 JBER AK
Project No.: 22-136

Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7497840	Analyst Observation: Black Vapor Barrier	Location: Unit D, Entryway Canopy
Client No.: 457-01	Client Description: Vapor Barrier	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	90 Cellulose	10

Lab No.: 7497841	Analyst Observation: Black Tar	Location: Unit A, Foundation
Client No.: 457-02	Client Description: Damp Proofing	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	7 Fibrous Glass	93


Lab No.: 7497842	Analyst Observation: Beige Fiberboard	Location: Under Siding, Unit B
Client No.: 457-03	Client Description: Fiber Board	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	99 Cellulose	1

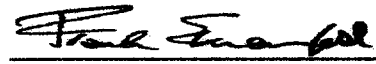
Lab No.: 7497843	Analyst Observation: Off-White Vinyl Sheet Flooring	Location: Unit A, Bath, Top Layer
Client No.: 457-04	Client Description: Sheet Vinyl	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	15 Cellulose 3 Fibrous Glass	82

Lab No.: 7497844	Analyst Observation: Off-White Vinyl Sheet Flooring	Location: Unit A, Bath, Bottom Layer
Client No.: 457-05	Client Description: Sheet Vinyl	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	17 Cellulose 3 Fibrous Glass	80

Lab No.: 7497844(L2)	Analyst Observation: Tan Mastic	Location: Unit A, Bath, Bottom Layer
Client No.: 457-05	Client Description: Sheet Vinyl	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
None Detected	1 Cellulose	99

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

Date Received: 9/20/2022
Date Analyzed: 09/26/2022
Signature: 
Analyst: Ellen Smith

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521


Report Date: 9/26/2022
Report No.: 669355 - PLM
Project: Building 457 JBER AK
Project No.: 22-136

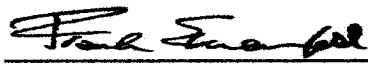
Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7497845 Client No.: 457-06 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Off-White Vinyl Sheet Flooring Client Description: Sheet Vinyl <u>Percent Non-Asbestos Fibrous Material:</u> 15 Cellulose 3 Fibrous Glass	Location: Unit A, Kitchen Facility: <u>Percent Non-Fibrous Material:</u> 82
Lab No.: 7497845(L2) Client No.: 457-06 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Yellow/Grey Mastic/Leveling Compound Client Description: Sheet Vinyl <u>Percent Non-Asbestos Fibrous Material:</u> 1 Cellulose	Location: Unit A, Kitchen Facility: <u>Percent Non-Fibrous Material:</u> 99
Lab No.: 7497846 Client No.: 457-07 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Joint Compound Client Description: Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Unit A, Dining Room Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7497847 Client No.: 457-08 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Wall Texture Client Description: Wall Texture <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Unit A, Kitchen Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7497848 Client No.: 457-09 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Ceiling Texture Client Description: Ceiling Texture <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Unit A, Living Room Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7497849 Client No.: 457-10 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Wall Texture Client Description: Wall Texture <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Unit B, Laundry Room Facility: <u>Percent Non-Fibrous Material:</u> 100

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

Date Received: 9/20/2022
Date Analyzed: 09/26/2022
Signature: 
Analyst: Ellen Smith

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/26/2022
Report No.: 669355 - PLM
Project: Building 457 JBER AK
Project No.: 22-136

Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7497850	Analyst Observation: Off-White/Green Vinyl Sheet Flooring	Location: Unit B, Bath
Client No.: 457-11	Client Description: Sheet Vinyl	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	13 Cellulose 3 Fibrous Glass	84

Lab No.: 7497851	Analyst Observation: White Joint Compound	Location: Unit B, Bath
Client No.: 457-12	Client Description: Joint Compound	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7497852	Analyst Observation: Off-White Mastic	Location: Unit B, Bath
Client No.: 457-13	Client Description: Cove Base Mastic	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

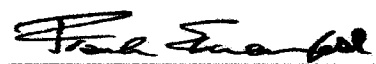
Lab No.: 7497853	Analyst Observation: Off-White Sink Undercoating	Location: Unit B, Kitchen
Client No.: 457-14	Client Description: Sink Undercoat	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	2 Cellulose	98

Lab No.: 7497854	Analyst Observation: Lt Tan Vinyl Sheet Flooring	Location: Unit B, Main Entry
Client No.: 457-15	Client Description: Sheet Vinyl	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	15 Cellulose 3 Fibrous Glass	82

Lab No.: 7497855	Analyst Observation: Off-White Vinyl Sheet Flooring	Location: Unit C, Kitchen, Top Layer
Client No.: 457-16	Client Description: Sheet Vinyl	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	15 Cellulose 3 Fibrous Glass	82

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

Date Received: 9/20/2022
Date Analyzed: 09/26/2022
Signature: 
Analyst: Ellen Smith

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Client: AKE001

Report Date: 9/26/2022
Report No.: 669355 - PLM
Project: Building 457 JBER AK
Project No.: 22-136

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7497856
Client No.: 457-17

Percent Asbestos:
None Detected

Analyst Observation: Off-White Vinyl Sheet Flooring
Client Description: Sheet Vinyl

Percent Non-Asbestos Fibrous Material:
15 Cellulose
3 Fibrous Glass

Location: Unit C, Kitchen, Bottom Layer
Facility:

Percent Non-Fibrous Material:
82

Lab No.: 7497856(L2)
Client No.: 457-17

Percent Asbestos:
None Detected

Analyst Observation: Off-White Mastic
Client Description: Sheet Vinyl

Percent Non-Asbestos Fibrous Material:
1 Cellulose


Location: Unit C, Kitchen, Bottom Layer
Facility:

Percent Non-Fibrous Material:
99

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

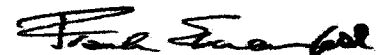
Date Received: 9/20/2022

Date Analyzed: 09/26/2022

Signature: 

Analyst: Ellen Smith

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/26/2022
Report No.: 669355 - PLM
Project: Building 457 JBER AK
Project No.: 22-136

Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7497857
Client No.: 457-18
Percent Asbestos:
None Detected

Analyst Observation: White Joint Compound
Client Description: Joint Compound
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Unit C, Dining Room
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7497858
Client No.: 457-19
Percent Asbestos:
None Detected

Analyst Observation: White Joint Compound
Client Description: Ceiling Texture
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Unit C, Kitchen
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7497859
Client No.: 457-20
Percent Asbestos:
None Detected

Analyst Observation: Beige/White Vinyl Sheet Flooring
Client Description: Sheet Vinyl And Mastic
Percent Non-Asbestos Fibrous Material:
10 Cellulose
2 Fibrous Glass

Location: Unit C, Bath
Facility:
Percent Non-Fibrous Material:
88

Lab No.: 7497859(L2)
Client No.: 457-20
Percent Asbestos:
None Detected

Analyst Observation: Yellow Mastic
Client Description: Sheet Vinyl And Mastic
Percent Non-Asbestos Fibrous Material:
2 Cellulose

Location: Unit C, Bath
Facility:
Percent Non-Fibrous Material:
98

Lab No.: 7497860
Client No.: 457-21
Percent Asbestos:
PC 1.6 Chrysotile

Analyst Observation: Off-White Joint Compound
Client Description: Joint Compound
Percent Non-Asbestos Fibrous Material:
None Detected


Location: Unit C, Basement Stairwell
Facility:
Percent Non-Fibrous Material:
98.4


Lab No.: 7497861
Client No.: 457-22
Percent Asbestos:
None Detected

Analyst Observation: Yellow Mastic
Client Description: Stair Mastic
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Unit C, Basement Stairwell
Facility:
Percent Non-Fibrous Material:
100

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

Date Received: 9/20/2022
Date Analyzed: 09/26/2022
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Client: AKE001

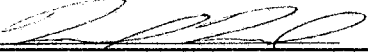
Report Date: 9/26/2022
Report No.: 669355 - PLM
Project: Building 457 JBER AK
Project No.: 22-136

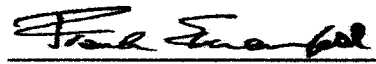
PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7497862 Client No.: 457-23 <u>Percent Asbestos:</u> None Detected	Analyst Observation: Off-White Vinyl Sheet Flooring Client Description: Sheet Vinyl <u>Percent Non-Asbestos Fibrous Material:</u> 10 Cellulose 2 Fibrous Glass	Location: Unit D, Laundry Facility: <u>Percent Non-Fibrous Material:</u> 88
Lab No.: 7497862(L2) Client No.: 457-23 <u>Percent Asbestos:</u> None Detected	Analyst Observation: Yellow Mastic Client Description: Sheet Vinyl <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Unit D, Laundry Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7497863 Client No.: 457-24 <u>Percent Asbestos:</u> None Detected	Analyst Observation: White Joint Compound Client Description: Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> 2 Cellulose	Location: Unit D, Laundry Facility: <u>Percent Non-Fibrous Material:</u> 98
Lab No.: 7497864 Client No.: 457-25 <u>Percent Asbestos:</u> None Detected	Analyst Observation: White Wall Texture Client Description: Wall Texture <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Unit D, Dining Room Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7497865 Client No.: 457-26 <u>Percent Asbestos:</u> None Detected	Analyst Observation: Tan Vinyl Sheet Flooring Client Description: Sheet Vinyl <u>Percent Non-Asbestos Fibrous Material:</u> 10 Cellulose 3 Fibrous Glass	Location: Unit D, Dining Room Facility: <u>Percent Non-Fibrous Material:</u> 87
Lab No.: 7497865(L2) Client No.: 457-26 <u>Percent Asbestos:</u> None Detected	Analyst Observation: Brown/Silver Mastic Client Description: Sheet Vinyl <u>Percent Non-Asbestos Fibrous Material:</u> 2 Cellulose	Location: Unit D, Dining Room Facility: <u>Percent Non-Fibrous Material:</u> 98

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

Date Received: 9/20/2022
Date Analyzed: 09/26/2022

Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/26/2022
Report No.: 669355 - PLM
Project: Building 457 JBER AK
Project No.: 22-136

Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7497866
Client No.: 457-27
Percent Asbestos:
None Detected

Analyst Observation: White Drywall
Client Description: Drywall
Percent Non-Asbestos Fibrous Material:
2 Fibrous Glass

Location: Mech Room
Facility:
Percent Non-Fibrous Material:
98

Lab No.: 7497867
Client No.: 457-28
Percent Asbestos:
None Detected

Analyst Observation: Yellow/Brown Gasket
Client Description: Gasket
Percent Non-Asbestos Fibrous Material:
10 Talc

Location: Mech Room, Pump 1
Facility:
Percent Non-Fibrous Material:
90

Lab No.: 7497868
Client No.: 457-29
Percent Asbestos:
None Detected

Analyst Observation: White/Off-White Joint Compound
Client Description: Joint Compound
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Mech Room
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7497869
Client No.: 457-30
Percent Asbestos:
None Detected

Analyst Observation: Beige Vinyl Sheet Flooring
Client Description: Sheet Vinyl
Percent Non-Asbestos Fibrous Material:
10 Cellulose
2 Fibrous Glass

Location: Unit E, Bath, Top Layer
Facility:
Percent Non-Fibrous Material:
88

Lab No.: 7497869(L2)
Client No.: 457-30
Percent Asbestos:
None Detected

Analyst Observation: Yellow Mastic
Client Description: Sheet Vinyl
Percent Non-Asbestos Fibrous Material:
2 Cellulose

Location: Unit E, Bath, Top Layer
Facility:
Percent Non-Fibrous Material:
98

Lab No.: 7497870
Client No.: 457-31
Percent Asbestos:
None Detected

Analyst Observation: White Vinyl Sheet Flooring
Client Description: Sheet Vinyl
Percent Non-Asbestos Fibrous Material:
10 Cellulose
2 Fibrous Glass

Location: Unit E, Bath, Bottom Layer
Facility:
Percent Non-Fibrous Material:
88

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

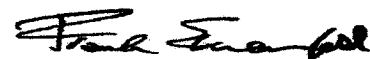
Date Received: 9/20/2022

Date Analyzed: 09/26/2022

Signature:

Analyst: Michael Moore

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/26/2022
Report No.: 669355 - PLM
Project: Building 457 JBER AK
Project No.: 22-136

Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7497870(L2)
Client No.: 457-31
Percent Asbestos:
None Detected

Analyst Observation: Yellow Mastic
Client Description: Sheet Vinyl
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Unit E, Bath, Bottom Layer
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7497871
Client No.: 457-32
Percent Asbestos:
None Detected

Analyst Observation: Off-White Vinyl Sheet Flooring
Client Description: Sheet Vinyl
Percent Non-Asbestos Fibrous Material:
10 Cellulose
2 Fibrous Glass

Location: Unit E, Rear Entryway, Bottom Layer
Facility:
Percent Non-Fibrous Material:
88

Lab No.: 7497871(L2)
Client No.: 457-32
Percent Asbestos:
None Detected

Analyst Observation: Yellow/Brown Mastic
Client Description: Sheet Vinyl
Percent Non-Asbestos Fibrous Material:
2 Cellulose

Location: Unit E, Rear Entryway, Bottom Layer
Facility:
Percent Non-Fibrous Material:
98

Lab No.: 7497872
Client No.: 457-33
Percent Asbestos:
PC 1.6 Chrysotile

Analyst Observation: Off-White Joint Compound
Client Description: Joint Compound
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Unit E, Basement Stairwell
Facility:
Percent Non-Fibrous Material:
98.4

Lab No.: 7497873
Client No.: 457-34
Percent Asbestos:
None Detected

Analyst Observation: White Wall Texture
Client Description: Wall Texture
Percent Non-Asbestos Fibrous Material:
None Detected

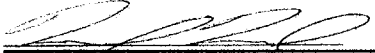
Location: Unit F, Kitchen
Facility:
Percent Non-Fibrous Material:
100


Lab No.: 7497874
Client No.: 457-35
Percent Asbestos:
None Detected

Analyst Observation: Off-White Vinyl Sheet Flooring
Client Description: Sheet Vinyl
Percent Non-Asbestos Fibrous Material:
5 Cellulose
2 Fibrous Glass

Location: Unit F, Bath
Facility:
Percent Non-Fibrous Material:
93

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

Date Received: 9/20/2022
Date Analyzed: 09/26/2022
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

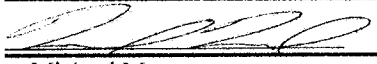
Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521
Client: AKE001

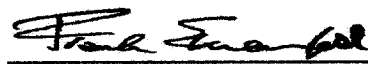
Report Date: 9/26/2022
Report No.: 669355 - PLM
Project: Building 457 JBER AK
Project No.: 22-136

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7497874(L2) Client No.: 457-35 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Yellow Mastic Client Description: Sheet Vinyl <u>Percent Non-Asbestos Fibrous Material:</u> 2 Cellulose	Location: Unit F, Bath Facility: <u>Percent Non-Fibrous Material:</u> 98
Lab No.: 7497875 Client No.: 457-36 <u>Percent Asbestos:</u> <i>PC 3.4 Chrysotile</i>	Analyst Observation: Off-White Joint Compound Client Description: Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Unit F, Basement Ceiling Facility: <u>Percent Non-Fibrous Material:</u> 96.6
Lab No.: 7497876 Client No.: 457-37 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Beige Vinyl Sheet Flooring Client Description: Sheet Vinyl <u>Percent Non-Asbestos Fibrous Material:</u> 10 Cellulose 2 Fibrous Glass	Location: Unit G, Bath Facility: <u>Percent Non-Fibrous Material:</u> 88
Lab No.: 7497876(L2) Client No.: 457-37 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Yellow Mastic Client Description: Sheet Vinyl <u>Percent Non-Asbestos Fibrous Material:</u> 2 Cellulose	Location: Unit G, Bath Facility: <u>Percent Non-Fibrous Material:</u> 98
Lab No.: 7497877 Client No.: 457-38 <u>Percent Asbestos:</u> <i>PC 2.8 Chrysotile</i>	Analyst Observation: Off-White Joint Compound Client Description: Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Unit G, Basement Stairwell Facility: <u>Percent Non-Fibrous Material:</u> 97.2
Lab No.: 7497878 Client No.: 457-39 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Yellow Vinyl Sheet Flooring Client Description: Sheet Vinyl <u>Percent Non-Asbestos Fibrous Material:</u> 10 Cellulose 2 Fibrous Glass	Location: Unit H, Bath, Bottom Layer Facility: <u>Percent Non-Fibrous Material:</u> 88

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

Date Received: 9/20/2022
Date Analyzed: 09/26/2022
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/26/2022
Report No.: 669355 - PLM
Project: Building 457 JBER AK
Project No.: 22-136

Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7497878(L2)
Client No.: 457-39

Percent Asbestos:
None Detected

Analyst Observation: Yellow Mastic
Client Description: Sheet Vinyl
Percent Non-Asbestos Fibrous Material:
2 Cellulose

Location: Unit H, Bath, Bottom Layer
Facility:
Percent Non-Fibrous Material:
98

Lab No.: 7497879
Client No.: 457-40

Percent Asbestos:
None Detected

Analyst Observation: Off-White Vinyl Sheet Flooring
Client Description: Sheet Vinyl
Percent Non-Asbestos Fibrous Material:
10 Cellulose
2 Fibrous Glass

Location: Unit H, Kitchen, Bottom Layer
Facility:
Percent Non-Fibrous Material:
88

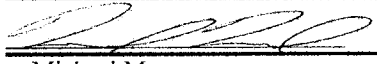
Lab No.: 7497879(L2)
Client No.: 457-40


Percent Asbestos:
None Detected

Analyst Observation: Yellow Mastic
Client Description: Sheet Vinyl
Percent Non-Asbestos Fibrous Material:
2 Cellulose

Location: Unit H, Kitchen, Bottom Layer
Facility:
Percent Non-Fibrous Material:
98

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

Date Received: 9/20/2022
Date Analyzed: 09/26/2022
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Client: AKE001

Report Date: 9/26/2022
Report No.: 669355 - PLM
Project: Building 457 JBER AK
Project No.: 22-136

Appendix to Analytical Report

Customer Contact: Travis Hubbard

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 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: Kelly Klippel

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) See additional information at the end of this appendix.

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/26/2022
Report No.: 669355 - PLM
Project: Building 457 JBER AK
Project No.: 22-136

Client: AKE001

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 gänge, 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/1198_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.



9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/26/2022
Report No.: 669355 - PLM
Project: Building 457 JBER AK
Project No.: 22-136

Client: AKE001

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).

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

Chain of Custody

–Bulk Asbestos–

Contact Information

Client Company: AK Environmental Consultants, Inc
Office Address: 5700 Old Seward Hwy, Suite 205
City, State, Zip: Anchorage, AK 99518
Fax Number:
Email Address: travis@akenviro.com

Project Number: 22-136
Project Name: Building 457 JBER, AK
Primary Contact: Travis Hubbard
Office Phone: 907-561-2532
Cell Phone: 907-330-9282

PLM Instructions:

- ☒ PLM: Bulk Asbestos Building Materials EPA 600 R-93/116, 1993
- ☐ PLM: Bulk Asbestos Building Materials EPA 600 M-4/82-020, 1982
- ☐ PLM: Bulk Asbestos Building Materials NIOSH 9002, 1985
- ☐ PLM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.1, 2002
- ☐ PLM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.6, 2010
- ☐ TEM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.4, 2009

- ☐ PLM: Point Counting
 - ☐ PC: via ELAP 198.1
 - ☐ PC: 400 Points
 - ☐ PC: 800 Points *
 - ☐ PC: 1600 Points *

- ☒ PLM: Instructions for Multi-Layered Samples
 - ☒ Analyze and Report All Separable Layers per EPA 600
 - ☐ Report Composite for Drywall Systems per NESHAP
 - ☐ Report All Layers and Composite Where Applicable
 - ☐ Only Analyze and Report Specifically Noted Layer

- ☐ PLM: Analyze Until Positive (Positive Stop)
 - ☐ AUP: by Homogenous Area as Noted
 - ☐ AUP: by Material Type as Noted
- ☐ PLM: NOB via 198.6
 - ☐ PLM: Friable via EPA 600 2.3
 - ☐ If <1% by PLM, to TEM via 198.4 *
 - ☐ If <1% by PLM, Hold for Instructions

- ☐ PLM: Non-Building Material *** (Dust, Wipe, Tape)
 - ☐ Soil or Vermiculite Analysis
 - ☐ CARB 435

Special Instructions:

* Additional charge and turnaround may be required

** Alternative Method (ex: EPA 600/R-04/004) may be recommended by Laboratory

Turnaround Time

Preliminary Results Requested Date: _____

☐ Verbal ☒ Email ☐ Fax

Specific date / time
☐ 10 Day ☒ 5 Day ☐ 3 Day ☐ 2 Day ☐ 1 Day* ☐ 12 Hour** ☐ 6 Hour** ☐ RUSH**

* End of next business day unless otherwise specified. ** Matrix Dependent. ***Please notify the lab before shipping***

Chain of Custody

Relinquished (Name/Organization): AK Environmental Consultants, Inc Date: 9/19/2022 Time: 1:00pm
Received (Name / iATL): _____ Date: _____ Time: _____
Sample Login (Name / iATL): _____ Date: _____ Time: _____
Analysis(Name(s) / iATL): Travis Hubbard Date: 9/20/22 Time: _____
QA/QC Review (Name / iATL): _____ Date: _____ Time: _____
Archived / Released: _____ QA/QC InterLAB Use: _____ Date: _____ Time: _____

RECEIVED



AK Environmental Consultants, Inc.
5700 Old Seward Highway, Suite 205
Anchorage, AK 99518

Project Title Building 457

Location Bldg. 457 Fort Richardson, AK 99505

Client 673 CES CENMP

Project # 21-136

Bulk Sample Log

Analytical Method Requested <u>EPA 821-R-93/116, 1993</u>	Turnaround Time <u>5 Day</u>	Sample Count	Collection Date <u>9/15/2022</u>
Collected By (Printed Name and Signature) <u>Travis Hubbard / [Signature]</u>	Client Project # <u>Bldg. 457</u>		
Relinquished By <u>[Signature]</u>	Date / Time <u>9/19/2022</u>	Samples Received By	Date / Time

Project Notes

- Fluorescent lights and smoke detectors present in Building.
- Unit E has 2 layers of sheet vinyl throughout except laundry.
- Unit H has 2 layers of sheet vinyl throughout.

Sample Number	Material Sampled	Sample Location and Notes
457-01	Vapor Barrier	Unit D, Entryway Canopy 7497840
457-02	Damp Proofing	Unit A, Foundation 7497841
457-03	Fiber Board	Under Siding, Unit B 7497842
457-04	Sheet Vinyl	Unit A, Bath, Top Layer 7497843
457-05	Sheet Vinyl	Unit A, Bath, Bottom Layer 7497844
457-06	Sheet Vinyl	Unit A, Kitchen 7497845
457-07	Joint Compound	Unit A, Dining Room 7497846
457-08	Wall Texture	Unit A, Kitchen 7497847
457-09	Ceiling Texture	Unit A, Living Room 7497848
457-10	Wall Texture	Unit B, Laundry Room 7497849
457-11	Sheet Vinyl	Unit B, Bath 7497850
457-12	Joint Compound	7497851
457-13	Cove Base Mastic	7497852
457-14	Sink Undercoat	Unit B, Kitchen 7497853
457-15	Sheet Vinyl	Unit B, Main Entry 7497854
457-16	Sheet Vinyl	Unit C, Kitchen, Top Layer 7497855
457-17	Sheet Vinyl	Unit C, Kitchen, Bottom Layer 7497856

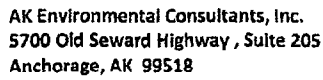


AK Environmental Consultants, Inc.
5700 Old Seward Highway, Suite 205
Anchorage, AK 99518

Project Title Building 457
Location Bldg 457 Fort Richardson, AK 99505
Client 673 CES CENMP Project # 21-136

Bulk Sample Log

Analytical Method Requested	Turnaround Time <u>5 Days</u>	Sample Count	Collection Date <u>9/15/2022</u>
Collected By (Printed Name and Signature) <u>Trevor Hubbs</u>	Client Project # <u>Bldg. 457</u>		
Relinquished By <u>T Hubbs</u>	Date / Time <u>9/19/2022</u>	Samples Received By	Date / Time
Project Notes			
Sample Number	Material Sampled	Sample Location and Notes	
457-18	Joint Compound	Unit C, Dining Room	7497857
457-19	Ceiling Texture	Unit C, Kitchen	7497858
457-20	Sheet Vinyl + Mastic	Unit C, Bath	7497859
457-21	Joint Compound	Unit C, Basement Stairwell	7497860
457-22	Stair Mastic	+	7497861
457-23	Sheet Vinyl	Unit D, Laundry	7497862
457-24	Joint Compound	+	7497863
457-25	Wall Texture	Unit D, Dining Room	7497864
457-26	Sheet Vinyl	+	7497865
457-27	Drywall	Mech Room	7497866
457-28	Gasket	Mech Room, Pump 1	7497867
457-29	Joint Compound	Mech Room	7497868
457-30	Sheet Vinyl	Unit E, Bath, Top Layer	7497869
457-31	Sheet Vinyl	Unit E, Bath, Bottom Layer	7497870
457-32	Sheet Vinyl	Unit E, Rear Entryway, Bottom Layer	7497871
457-33	Joint Compound	Unit E, Basement Stairwell	7497872
457-34	Wall Texture	Unit F, Kitchen	7497873



Project Title Building 457
Location Bldg. 457 Fort Richardson, AK 99505
Client 673 CES CENMP Project # 21-136

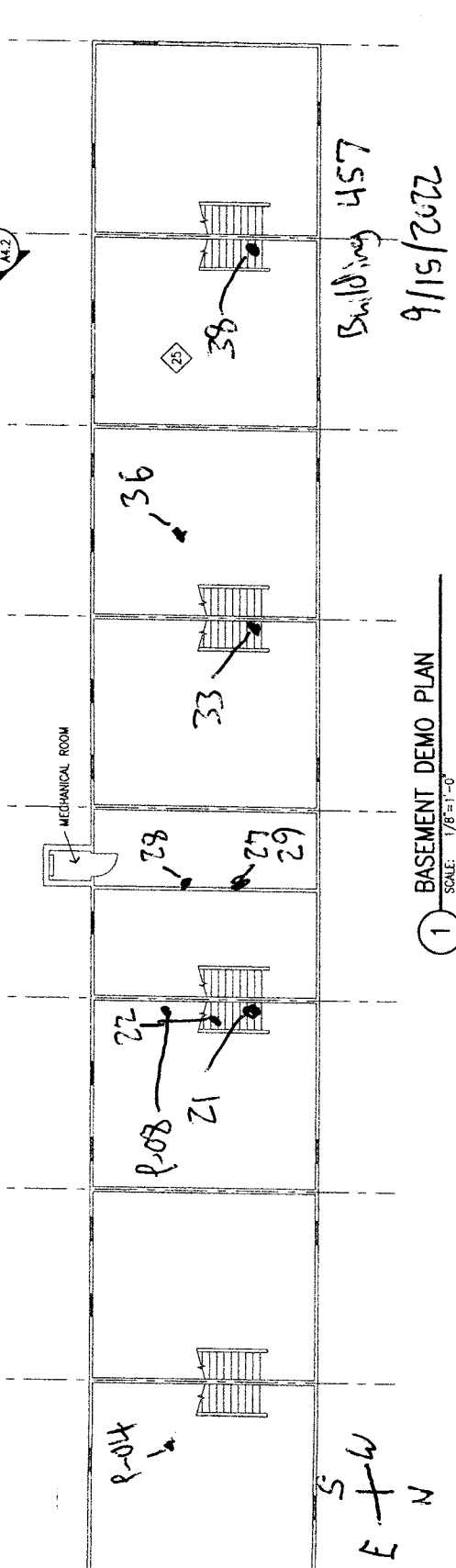
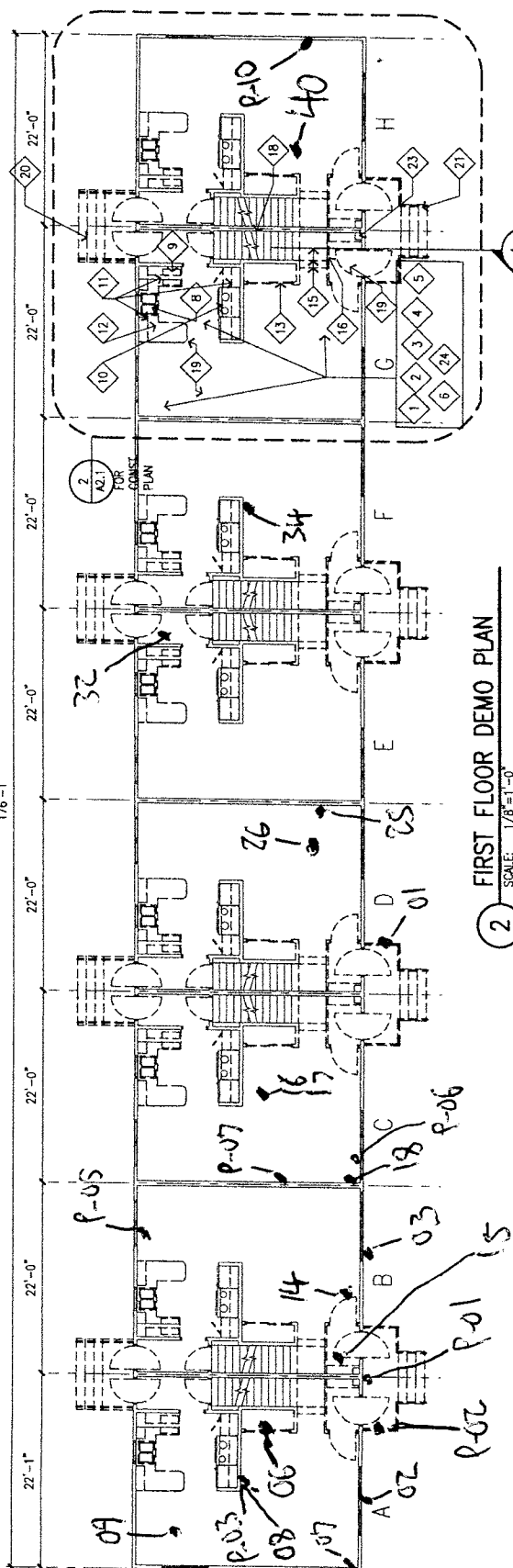
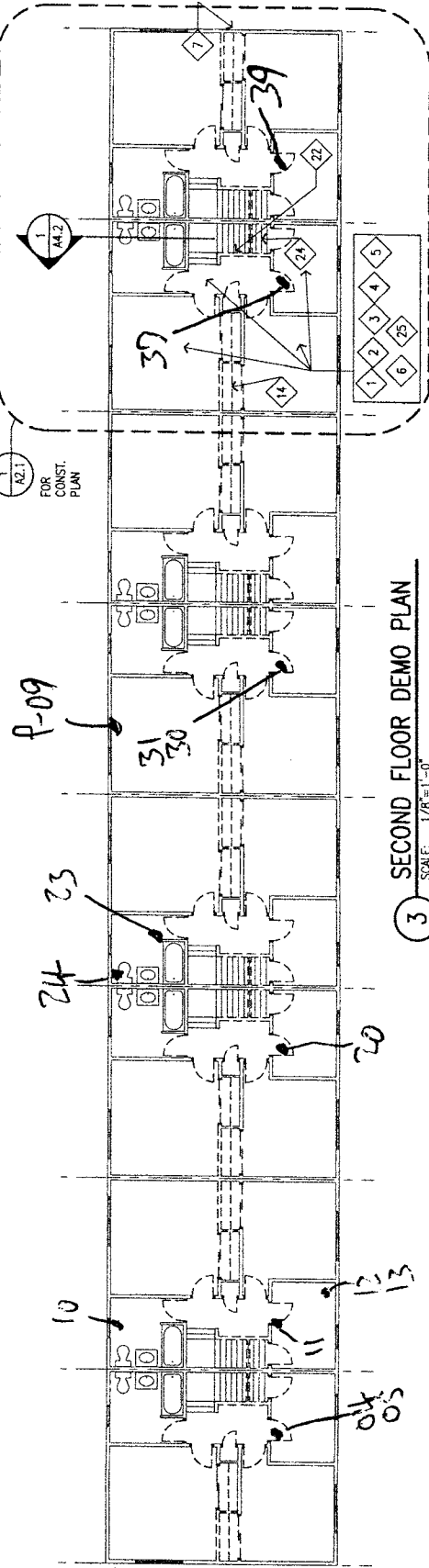
Bulk Sample Log

[illegible]

KEY NOTES

1. TYPICAL DEMO NOTE
APPLICABLE TO ALL UNITS UNLESS OTHERWISE NOTED
- A1. SPECIFIC UNIT DEMO NOTE
1. REMOVE ALL EXISTING DOORS AND ENLARGE OPEN HEADERS OF OFFICE AND BEDROOM DOORS TO PER NEW TRANSOM LITES SHOWN ON 2/A5.2
2. REMOVE AND DISPOSE OF ALL INTERIOR AND EXTERIOR DOOR FRAMES, TRIM AND COMPONENTS (ASSUME LEAD BASED PAINT).
3. REMOVE BASEBOARDS AND CROWN MOLDING ALL ROOMS EXCEPT BATHROOM (ASSUME LEAD BASED PAINT).
4. REMOVE AND DISPOSE OF GYPSUM BOARD WALLS AND CEILINGS IN ALL ROOMS EXCEPT THE BATHROOM. ALL GYPSUM BOARD HAS ASBESTOS-CONTAINING JOINT COMPOUND AND SHALL BE REMOVED AS CLASS II ASBESTOS WORK.
5. REMOVE EXISTING FLOORING, EXCEPT HARDWOOD IN GOOD CONDITION IN ALL ROOMS EXCEPT BATHROOM. SEE NOTE 19 FOR SPECIFICS ON DINING, KITCHEN ENTRY AREAS.
6. REMOVE EXISTING MINI BLINDS / WINDOW COVERINGS.
7. REMOVE ATTIC VENT LOUVER (TYPICAL EACH END OF BOTH BUILDINGS).
8. REMOVE EXISTING GARBAGE DISPOSAL.
9. REMOVE EXISTING DISHWASHER (LOCATION VARIES).
10. REMOVE EXISTING RANGE HOOD.
11. REMOVE EXISTING KITCHEN CABINETS.
12. REMOVE EXISTING KITCHEN COUNTER TOPS AND SINKS.
13. DEMO EXISTING COAT CLOSET.
14. DEMO CLOSET IN OFFICE.
15. DEMO STAIR LANDING AND BOTTOM 2 TREADS.
16. DEMO INTERIOR WALLS OF ENTRY VESTIBULE.
18. REMOVE EXISTING STAIR HAND RAIL.
19. REMOVE AND DISPOSE OF ASBESTOS-CONTAINING VIBRATORY FLOORINGS AND FLOORING MASTICS FROM KITCHEN, ROOM, AND ENTRY AREAS. FLOORS MAY CONTAIN LAYERS OF SHEET VINYL, TILE AND MASTICS. BIDS BE BASED ON SQUARE FOOTAGE OF FLOOR AREA REGARDLESS OF LAYERS.
SEE SHEET A1.2 FOR UNIT-BY-UNIT DESCRIPTION OF DEMO WORK.
20. DEMO EXISTING CONCRETE STEPS AND STOOP INCLUDING STEEL RAILING.
21. DEMO EXISTING CONCRETE STEPS AND STOOP INCLUDING STEEL RAILING - EXISTING CEDAR FENCE WILL REQUIRE REMOVAL AND RESTORATION TO PROVIDE ACCESS TO ADJACENT LOT.
22. REMOVE EXISTING HALF WALL AND TRIM (ASSUME LEAD BASED PAINT IN TRIM).
23. REMOVE EXISTING PIPE CHASE.
24. DEMO EXISTING CLOSET IN LAUNDRY ROOM.
25. BUILDINGS WILL BE TURNED OVER TO CONTRACTOR IN GOOD CONDITION. ALL SELF HELP WORK IN THE BASEMENT SHALL BE REMOVED BY FT. RICHARDSON DEP PRIOR TO CONSTRUCTION START.

100%
SUBMITTAL
CONSTRUCTION



Building 457
9/15/2022

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N

Appendix B

Lead Paint Analytical Report / Sample Collection Forms

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521


Report Date: 9/27/2022
Report No.: 669346 - Lead Paint
Project: Building 457 JBER AK
Project No.: 22-136

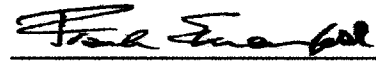
Client: AKE001

LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 7497697 Client No.: 457P-01	Description: Location: Exterior Siding - Unit A Entry, Wood	Result (% by Weight): 0.39 Result (ppm): 3900 Comments:
Lab No.: 7497698 Client No.: 457P-02	Description: Location: Deck Railing - Unit A, Wood	Result (% by Weight): <0.0064 Result (ppm): <64 Comments:
Lab No.: 7497699 Client No.: 457P-03	Description: Location: Unit A - Kitchen Wall GWB	Result (% by Weight): <0.0071 Result (ppm): <71 Comments:
Lab No.: 7497700 Client No.: 457P-04	Description: Location: Unit A - Basement Floor Concrete	Result (% by Weight): 0.093 Result (ppm): 930 Comments:
Lab No.: 7497701 Client No.: 457P-05	Description: Location: Unit B - Window Sill - Living Room	Result (% by Weight): <0.0070 Result (ppm): <70 Comments: ***
Lab No.: 7497702 Client No.: 457P-06	Description: Location: Unit C - Wall - Dining Room	Result (% by Weight): <0.0060 Result (ppm): <60 Comments: ***
Lab No.: 7497703 Client No.: 457P-07	Description: Location: Unit C - Base Trim - Dining Room	Result (% by Weight): <0.0081 Result (ppm): <81 Comments:
Lab No.: 7497704 Client No.: 457P-08	Description: Location: Unit C - Basement Wall CMU	Result (% by Weight): 0.11 Result (ppm): 1100 Comments:

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

Date Received: 9/20/2022
Date Analyzed: 09/27/2022
Signature: 
Analyst: Chad Shaffer

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/27/2022
Report No.: 669346 - Lead Paint
Project: Building 457 JBER AK
Project No.: 22-136

Client: AKE001

LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 7497705
Client No.: 457P-09

Description:
Location: Unit E - Window Sill - South Bedroom

Result (% by Weight): <0.0056
Result (ppm): <56
Comments: ***

Lab No.: 7497706
Client No.: 457P-10

Description:
Location: Unit H - Window Sill - Dining Room

Result (% by Weight): <0.0062
Result (ppm): <62
Comments: ***

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

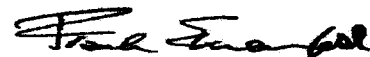
Date Received: 9/20/2022

Date Analyzed: 09/27/2022

Signature:

Analyst: Chad Shaffer

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/27/2022
Report No.: 669346 - Lead Paint
Project: Building 457 JBER AK
Project No.: 22-136

Client: AKE001

Appendix to Analytical Report:

Customer Contact: Travis Hubbard

Method: ASTM D3335-85a, US EPA SW846 3050B:7000B

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: Kelly Klippel

Sample Login Notes: See Batch Sheet Attached

Sample Matrix: Paint

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 ASTM D3335-85a by AAS

Certification:

- National Lead Laboratory Program (NLLAP): AIHA-LAP, LLC No. 100188

- NYSDOH-ELAP No. 11021

This report meets the standards set forth in the EPA's National Lead Laboratory Accreditation Program (NLLAP) through the Laboratory Quality System Requirements (LQSR) Revision 3.0 November 5, 2007. All Environmental Lead Proficiency Analytical Testing (ELPAT) is through the AIHA-PAT established program.

Regulatory limit is 0.5% lead by weight (EPA/HUD guidelines). Recommend multiple sampling for all samples less than regulatory limit for confirmation.

All results are based on the samples as received at the lab. iATL assumes that appropriate sampling methods have been used and that the data upon which these results are based have been accurately supplied by the client.

Method Detection Limit (MDL) per EPA Method 40CFR Part 136 Appendix B.

Reporting Limit (RL) based upon Lowest Standard Determined (LSD) in accordance with AIHA-ELLAP policies.

LSD=0.2 ppm MDL=0.006% by weight. RL= 0.010% by weight (based upon 100 mg sampled).

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 complete list with highlighted disclaimers pertinent to this project. For a full explanation of these and other disclaimers, please inquire at customerservice@iatl.com.

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/27/2022
Report No.: 669346 - Lead Paint
Project: Building 457 JBER AK
Project No.: 22-136

Client: AKE001

- * Insufficient sample provided to perform QC reanalysis (<200 mg)
- ** Not enough sample provided to analyze (<50 mg)
- *** Matrix / substrate interference possible.

< less than sign, signifies none-detected below the empirical value based upon sub-sampled mass. This is often below the Reporting Limit (see above).

Chain of Custody

– Environmental Lead –

Contact Information

Client Company: AK Environmental Consultants, Inc.

Office Address: 5700 Old Seward Hwy, Suite 205

City, State, Zip: Anchorage, AK 99518

Fax Number:

Email Address: travis@akenviro.com

Project Number: 22-136

Project Name: Building 457 JBER, AK

Primary Contact: Travis Hubbard

Office Phone: 907-561-2532

Cell Phone: 907-330-9282

iATL is accredited by the National Lead Laboratory Accreditation Program (NLLAP) to perform analytical testing of environmental samples for lead (Pb). The accreditation is through AIHA-LAP, LLC and several other nationally recognized state programs.

Matrix/Method:

- ☒ Paint by AAS: ASTM D3335-85a, 2009
☐ Wipe/Dust by AAS: SW 846: 3050B: 700B, 2010
☐ Air by AAS: NIOSH 7082, 1994
☐ Soil by AAS: EPA SW 846 (Soil)
☐ Water by AAS-GF: ASTM D3559-03D, US EPA 200.9
☐ Other Metals (Cd, Zn, Cr) by AAS
☐ Toxicity Characteristic Leaching Procedure (TCLP) by AAS: US EPA 1311
☐ Other _____

Special Instructions:

Turnaround Time

Preliminary Results Requested Date: _____

Specific date / time

☐ 10 Day ☒ 5 Day ☐ 3 Day ☐ 2 Day ☐ 1 Day* ☐ 12 Hour** ☐ 6 Hour** ☐ RUSH**

* End of next business day unless otherwise specified. ** Matrix Dependent. ***Please notify the lab before shipping***

Chain of Custody

Relinquished (Name/Organization): Travis Hubbard

Received (Name / iATL): _____

Sample Login (Name / iATL): _____

Analysis(Name(s) / iATL): CF/22/100

QA/QC Review (Name / iATL): 9/22/22

Archived / Released: _____ QA/QC InterLAB Use: _____

Date: 9/19/2022

Date: _____

Date: _____

Date: _____

Date: _____

Date: _____

Time: 1:00pm

Time: _____

Time: _____

Time: _____

Time: _____

Time: _____

RECEIVED

h

SEP 20 2022



AK Environmental Consultants, Inc.
5700 Old Seward Highway, Suite 205
Anchorage, AK 99518

Project Title Building 457
Location Bldg. 457 Fort Richardson, AK 99505
Client 673 CES GENMP Project # 81-136

Bulk Sample Log

Analytical Method Requested <u>ASTM D3335-85a, 2009</u>	Turnaround Time <u>3 Day</u>	Sample Count	Collection Date <u>9/15/2022</u>
Collected By (Printed Name and Signature) <u>Travis Hubbard</u>	<u>[Signature]</u>	Client Project # <u>Bldg. 457</u>	
Relinquished By <u>[Signature]</u>	Date / Time <u>9/14/2022</u>	Samples Received By	Date / Time

Project Notes

Sample Number	Material Sampled	Sample Location and Notes
457P-01	Paint 7497697	Exterior Siding, Unit A Entry, Wood
457P-02	Paint 7497698	Deck Deck Railing, Unit A, Wood
457P-03	Paint 7497699	Unit A, Kitchen, Wall GWS
457P-04	Paint 7497700	Unit A, Basement Floor Concrete
457P-05	Paint 7497701	Unit B, Windowsill, Living Room
457P-06	Paint 7497702	Unit C, Wall, Dining Room
457P-07	Paint 7497703	Unit C, Base Trim, Dining Room
457P-08	Paint 7497704	Unit C, Basement Wall CMU
457P-09	Paint 7497705	Unit E, Windowsill, South Bedroom
457P-10	Paint 7497706	Unit H, Windowsill, Dining Room

LIMITED ASBESTOS & LEAD INSPECTION REPORT

Building 458
Fort Richardson, AK 99505

Prepared for
673 CES CENMP
730 Quartermaster Road
JBER, AK 99505

Prepared by



AK Environmental Consultants, Inc.
5700 Old Seward Highway, Suite 205
Anchorage, AK 99518

September 28, 2022

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- Appendix A: Bulk Asbestos Analytical Report / Sample Collection Forms**
- Appendix B: Lead Paint Analytical Report / Sample Collection Forms**
- Appendix C: Inspectors Certifications**
- Appendix D: Laboratory Certification**



OVERVIEW

AK Environmental Consultants, Inc. (AKEC) conducted a limited asbestos & lead inspection of Building 458 located at Fort Richardson, AK 99505 on September 16, 2022. The inspection was not AHERA or NESHAP compliant at the client's request. The sampling was conducted by AHERA-accredited asbestos building inspector, Travis Hubbard. Accessible interior and exterior components were surveyed, and homogeneous areas of suspect asbestos-containing materials (ACM) were visually identified and documented. Although reasonable effort was made to survey all accessible suspect materials, additional suspect but unsampled materials may be present in walls, voids, or other inaccessible areas of the building.

All suspect ACM samples were delivered to an accredited laboratory for analysis by polarized light microscopy (PLM).

ASBESTOS INSPECTION PROCEDURES

The inspection was conducted by Travis Hubbard, AHERA-accredited asbestos building inspector, on September 16, 2022. A copy of the inspector license is attached as Appendix C. The inspection began with a walk through of the eight-plex. Building materials identified as glass, wood, or metal are not considered suspect ACM.

Based on results of the visual observation, bulk samples of suspect ACM were collected in accordance with the client's budgetary constraints. No sampling or assessment of the roof was performed at the client's request. Samples were placed in sealable containers and labeled with unique sample numbers using an indelible marker. Suspect materials identified and sampled include, exterior fiber board, foundation damp proofing, canopy vapor barrier, sheet vinyl, cove base mastic, sink undercoat, joint compound, wall texture, ceiling texture, stair tread mastic, drywall, and gasket.

ASBESTOS ANALYSIS RESULTS

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 R-93/116, 1993). 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 and found to have less than 10% asbestos were "point-counted" by the laboratory for more accuracy. The table below contains a list of the building material that was found to contain asbestos.

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. Appendix A contains the results of all bulk samples and collection sheets.



SAMPLE NUMBER	MATERIAL	SAMPLE LOCATION	ASBESTOS CONTENT
458-21	Joint Compound	Unit C, Basement Stairwell	1.3%
458-33 L1	Joint Compound	Unit E, Basement Stairwell	1.6%
458-33 L2	Joint Compound	Unit E, Basement Stairwell	1.9%

The following material was found to contain asbestos in this survey.

- Joint Compound

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

Joint Compound:

Joint compound on gypsum board walls and ceilings throughout the basement stairwells of the eight-plex are presumed asbestos containing material. AKEC recommends that all joint compound in the basement stairwells be treated as asbestos containing material. Joint compound is considered a Class II asbestos containing material by OSHA. Any disturbance of asbestos-containing materials should only be performed by state certified asbestos abatement personnel.

LEAD INSPECTION PROCEDURES

On September 16, 2022, a limited lead paint inspection was conducted by AKEC employee, Travis Hubbard, at Building 458 located at Fort Richardson, AK 99505. Appendix B contains the results of the paint samples. EPA lead risk assessor certification for the inspector is in Appendix C.

AKEC collected ten samples of paints suspected to be lead containing. Paints containing 5,000 ppm or greater of lead are classified as Lead Based Paint (LBP). LBP is regulated by EPA and OSHA. Paints containing less than 5,000 ppm are classified as Lead Containing Paint (LCP). LCP is regulated by OSHA. Paints sampled that were not reported to have detectable concentrations of lead above the Limit of Detection (LOD) are not classified as lead paint. Samples were analyzed by EPA Method SW846-7000B.

LEAD ANALYSIS RESULTS

The paint chip samples were collected and submitted to International Asbestos Testing Laboratories (IATL), Mt. Laurel, New Jersey for analysis by flame atomic absorption spectroscopy per EPA Method SW846-3050B: 7000B. IATL is an American Industrial Hygiene Association (AIHA) ELPAT and NLLAP accredited laboratory.

Lead in Paint Samples



Sample ID #	Sampling Location	Results, parts per million (ppm) Total Lead	Lead Based Paint (LBP) Lead Containing Paint (LCP) < Limit of Detection (<LOD)
458P-01	Exterior Siding, Unit A	110,000	Lead Based Paint
458P-02	Porch Railing, Unit A	130	Lead Containing Paint
458P-03	Wall, Unit A, Dining Room	<73	< Limit of Detection
458P-04	Stairs, Unit B, Basement	1,200	Lead Containing Paint
458P-05	Base Trim, Unit C, Dining Room	<59	< Limit of Detection
458P-06	Wall, Unit C, Basement Stairwell	450	Lead Containing Paint
458P-07	Wall, Unit C, Basement	130	Lead Containing Paint
458P-08	Windowsill, Unit C, Living Room	<51	< Limit of Detection
458P-09	Floor, Unit D, Basement	3,600	Lead Containing Paint
458P-10	Windowsill, Unit G, Dining Room	70	Lead Containing Paint

Detectable levels of lead were found in seven of the samples collected. Toxic Characteristic Leaching Procedure (TCLP) is required to assess the project waste stream for disposal. Lead safe work practices should be utilized.

HAZARDOUS MATERIALS

During the September 16, 2022 inspection the following potentially, hazardous materials were observed at Building 458 Fort Richardson, AK 99505.

Lead-Containing Materials

Lead based and lead containing paint was found to be present at the building. Lead solder at copper piping and poured lead sealants at bell and spigot joints of waste and vent piping may be present.

PCB-Containing Materials

Light Ballasts

EPA regulation (40 CFR Part 761) covers the proper handling and disposal of Poly Chlorinated Biphenyls (PCB)-containing materials. PCB-containing light ballasts were found in the building, any removed PCB-containing equipment is 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.

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. All lights shall be inspected during removal. 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.

Mercury-Containing 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. 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.

Glycol

Propylene glycol is presumed to be present in the buildings heating system. Prior to demolition or dismantling of the buildings heating system it should be drained and tested for the presence of glycol.

Soil Contamination

The scope of work for AK Environmental Consultants, Inc. did not include investigation of soils for petroleum or other contaminations.

REGULATORY OVERVIEW

Asbestos

The asbestos NESHAP (40 CFR Part 61, Subpart M) regulates asbestos fiber emissions and asbestos waste disposal practices. It also requires the identification and classification of existing asbestos-containing material (ACM) according to friability prior to demolition or renovation activity. Friable ACM is a material containing more than 1 percent (%) asbestos that, when dry, may be crumbled, pulverized or reduced to powder by hand pressure. All friable ACM is considered regulated asbestos-containing material (RACM).

The NESHAP regulation classifies ACM as either RACM, Category I non-friable ACM or Category II nonfriable ACM. RACM includes friable ACM, along with Category I non-friable ACM that has become friable or will be or has been subjected to sanding, grinding, cutting or abrading, and Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder during renovation or demolition activity. Category I non-friable ACMs are exclusively asbestos-containing packings, gaskets, resilient floor coverings, floor coverings and associated mastic, and asphalt roofing products that contain more than 1% asbestos. Category II non-friable ACM are all other non-friable materials other than Category I non-friable ACM that contain more than 1% asbestos. RACM must be removed prior to renovation or demolition activities.



The NESHAP requirements are administered by the EPA, and states that the owner, operator or the contractor must provide the EPA with written notification at least 10 working days prior to beginning any friable abatement project. Removal of RACM must be conducted by a State licensed asbestos abatement contractor.

The OSHA Asbestos standard for construction (29 CFR 1926.1101) and the State of Alaska Department of Labor (8 AAC 61) regulates workplace exposure to asbestos. The OSHA standard requires that employee exposure to airborne asbestos fibers be maintained below 0.1 asbestos fibers per cubic centimeter of air (0.1 f/cc) as an eight-hour time weighted average. The OSHA standard classifies construction and maintenance activities which could disturb ACM and specifies work practices and precautions which employers must follow when engaging in each class of regulated work.

Lead

Lead is regulated by Federal OSHA (29 CFR 1926.62) and the State of Alaska (8 AAC Chapter 61). The EPA regulates lead use, removal, and disposal, and OSHA regulates lead exposure to workers. The EPA defines LBP as paint, varnish, stain, or other applied coating that contains lead equal to or greater than 1.0 mg/cm², 5,000 mg/kg, or 0.5% by dry weight as determined by laboratory analysis. For the purpose of the OSHA lead standard, lead includes metallic lead, all inorganic lead compounds, and organic lead soaps. A synopsis of the OSHA regulations (29 CFR 1926.62) and the applicability are as follows:

The OSHA *Interim Lead Standard for Construction* (29 CFR 1926.62) applies to all construction work where an employee may be occupationally exposed to lead. All work related to construction, alteration, or repair (including painting and decorating) is included. The lead-in- construction standard applies to any detectable concentration of lead in paint, as even small concentrations of lead can result in unacceptable employee exposures depending upon on the method of removal and other workplace conditions. Under this standard, construction includes, but is not limited to, the following:

- Demolition or salvage of structures where lead or materials containing lead are present
- Removal or encapsulation of materials containing lead
- New construction, alteration, repair, or renovation of structures, substrates, or portions containing lead, or materials containing lead
- Installation of products containing lead
- Lead contamination/emergency clean-up
- Transportation, disposal, storage, or containment of lead or materials containing lead on the site or location at which construction activities are performed
- Maintenance operations associated with construction activities described above

29 CFR 1926.62 established an "Action Level" for lead concentrations in air of 30 micrograms per cubic meter of air (µg/m³) and a permissible exposure level (PEL) for lead concentrations in air of 50 µg/m³ as an eight-hour time weighted average. At this time, OSHA has not established limits for lead content in bulk paint (non-airborne). Their interpretation on this issue is that any amount of lead may cause airborne concentrations above the established limits. Detectable levels of lead were found in three of the samples collected. Toxic Characteristic Leaching Procedure (TCLP) is required to assess the project waste stream for disposal.



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 standards and practices and are subject to the following inherent limitations:

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, AK Environmental Consultants, Inc. reserves the right to amend or revise its conclusions, opinions, and/or recommendations.

This limited survey did not include investigation of the entire site and is not valid outside the survey area. Sampling or assessment of roofing materials was excluded at the client's request. The intent of this survey was to identify common asbestos and lead containing materials that may be disturbed during demolition. This survey is not intended to be utilized as the sole design document for abatement. 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 asbestos and lead hazards only. The demolition contractor is responsible for assessment of potential chemical hazards.

Variations may occur between materials and items that appear to be the same but are of different construction or materials. Non-destructive testing was performed. Other asbestos-containing or potentially hazardous materials may be present in the project area that were concealed by debris, structural members, walls, ceilings or floor coverings, or in materials where testing was not conducted. Any other suspect materials discovered but not tested in this limited inspection should be assumed to contain asbestos and treated as such until further sampling shows materials do not contain asbestos.

The removal and disposal of asbestos containing material is highly regulated, it is anticipated that removal and disposal of asbestos will be conducted by a contractor who is qualified for such removal. It is anticipated that the contractor will be able to conduct their work using engineering controls and work practices to control worker exposure.

 9/28/2022

Travis Hubbard

EPA AHERA Inspector Certificate # T-30171-831

EPA Lead Risk Assessor Certification # LBP-R-175670-2

Appendix A

Bulk Asbestos Analytical Report / Sample Collection Forms

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/26/2022
Report No.: 669354 - PLM
Project: Building 458 JBER AK
Project No.: 22-136

Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7497800	Analyst Observation: Black Tar Paper	Location: Unit D, Canopy At Entryway
Client No.: 458-01	Client Description: Vapor Barrier	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	50 Cellulose	50

Lab No.: 7497801	Analyst Observation: Brown Fiberboard	Location: Under Siding, Unit B
Client No.: 458-02	Client Description: Fiberboard	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	98 Cellulose	2


Lab No.: 7497802	Analyst Observation: Black Tar	Location: Unit A Foundation
Client No.: 458-03	Client Description: Damp Proofing	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7497803	Analyst Observation: White Texture	Location: Unit A, Dining Room
Client No.: 458-04	Client Description: Joint Compound	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7497803(L2)	Analyst Observation: Off-White Joint Compound	Location: Unit A, Dining Room
Client No.: 458-04	Client Description: Joint Compound	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7497804	Analyst Observation: White/Off-White Texture/Joint	Location: Unit A, Dining Room
Client No.: 458-05	Client Description: Wall Texture	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

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

Date Received: 9/20/2022
Date Analyzed: 09/26/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

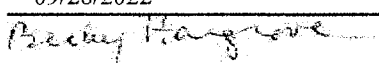
Report Date: 9/26/2022
Report No.: 669354 - PLM
Project: Building 458 JBER AK
Project No.: 22-136

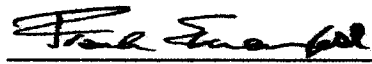
Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7497805 Client No.: 458-06	Analyst Observation: White Texture Client Description: Ceiling Texture	Location: Unit A, Kitchen Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7497806 Client No.: 458-07	Analyst Observation: Off-White/Beige Vinyl Sheet Flooring Client Description: Sheet Vinyl	Location: Unit A, Kitchen, Top Layer Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> 20 Cellulose	<u>Percent Non-Fibrous Material:</u> 80
Lab No.: 7497806(L2) Client No.: 458-07	Analyst Observation: Lt Tan Mastic Client Description: Sheet Vinyl	Location: Unit A, Kitchen, Top Layer Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7497807 Client No.: 458-08	Analyst Observation: Tan Vinyl Sheet Flooring Client Description: Sheet Vinyl	Location: Unit A, Kitchen, Bottom Layer Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> 20 Cellulose 2 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 78
Lab No.: 7497807(L2) Client No.: 458-08	Analyst Observation: Tan Mastic Client Description: Sheet Vinyl	Location: Unit A, Kitchen, Bottom Layer Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7497808 Client No.: 458-09	Analyst Observation: Off-White Sink Undercoating Client Description: Sink Undercoat	Location: Unit A, Kitchen Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> 20 Cellulose	<u>Percent Non-Fibrous Material:</u> 80

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

Date Received: 9/20/2022
Date Analyzed: 09/26/2022
Signature: 
Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
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Anchorage AK 99521

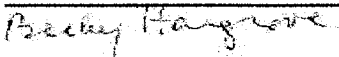
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Project No.: 22-136

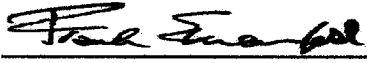
Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7497809 Client No.: 458-10 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Off-White Vinyl Sheet Flooring Client Description: Sheet Vinyl <u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	Location: Unit A, Bath Facility: <u>Percent Non-Fibrous Material:</u> 95
Lab No.: 7497810 Client No.: 458-11 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Off-White Joint Compound Client Description: Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Unit B, Laundry Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7497811 Client No.: 458-12 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Texture Client Description: Wall Texture <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Unit B, Laundry Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7497811(L2) Client No.: 458-12 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Off-White Joint Compound Client Description: Wall Texture <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Unit B, Laundry Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7497812 Client No.: 458-13 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Beige Vinyl Sheet Flooring Client Description: Sheet Vinyl <u>Percent Non-Asbestos Fibrous Material:</u> 20 Cellulose 1 Fibrous Glass	Location: Unit B, Laundry Facility: <u>Percent Non-Fibrous Material:</u> 79
Lab No.: 7497812(L2) Client No.: 458-13 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Tan Mastic Client Description: Sheet Vinyl <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Unit B, Laundry Facility: <u>Percent Non-Fibrous Material:</u> 100

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Analyst: Rebecca Hargrove

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/26/2022
Report No.: 669354 - PLM
Project: Building 458 JBER AK
Project No.: 22-136

Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7497813
Client No.: 458-14
Percent Asbestos:
None Detected

Analyst Observation: Beige/White Vinyl Sheet Flooring
Client Description: Sheet Vinyl
Percent Non-Asbestos Fibrous Material:
20 Cellulose
2 Fibrous Glass

Location: Unit B, Rear Entryway
Facility:
Percent Non-Fibrous Material:
78

Lab No.: 7497813(L2)
Client No.: 458-14
Percent Asbestos:
None Detected

Analyst Observation: Tan Mastic
Client Description: Sheet Vinyl
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Unit B, Rear Entryway
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7497814
Client No.: 458-15
Percent Asbestos:
None Detected

Analyst Observation: Tan Mastic
Client Description: Stair Tread Mastic
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Unit B, Basement
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7497815
Client No.: 458-16
Percent Asbestos:
None Detected

Analyst Observation: Lt Tan Mastic
Client Description: Cove Base Mastic
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Unit C, Bath
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7497816
Client No.: 458-17
Percent Asbestos:
None Detected

Analyst Observation: Off-White Vinyl Sheet Flooring
Client Description: Sheet Vinyl
Percent Non-Asbestos Fibrous Material:
20 Cellulose
1 Fibrous Glass

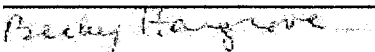
Location: Unit C, Bath, Top Layer
Facility:
Percent Non-Fibrous Material:
79


Lab No.: 7497817
Client No.: 458-18
Percent Asbestos:
None Detected

Analyst Observation: Tan Vinyl Sheet Flooring
Client Description: Sheet Vinyl
Percent Non-Asbestos Fibrous Material:
20 Cellulose

Location: Unit C, Bath, Bottom Layer
Facility:
Percent Non-Fibrous Material:
80

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Approved By: 
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Laboratory Director

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Report Date: 9/26/2022
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Project: Building 458 JBER AK
Project No.: 22-136

Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7497817(L2)
Client No.: 458-18

Analyst Observation: Off-White Mastic
Client Description: Sheet Vinyl

Location: Unit C, Bath, Bottom Layer
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7497817(L3)
Client No.: 458-18

Analyst Observation: Tan Mastic
Client Description: Sheet Vinyl

Location: Unit C, Bath, Bottom Layer
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7497818
Client No.: 458-19

Analyst Observation: White Texture
Client Description: Ceiling Texture

Location: Unit C, Dining Room
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7497819
Client No.: 458-20

Analyst Observation: Tan Vinyl Sheet Flooring
Client Description: Sheet Vinyl

Location: Unit C, Kitchen
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
20 Cellulose
1 Fibrous Glass

Percent Non-Fibrous Material:
79

Lab No.: 7497819(L2)
Client No.: 458-20

Analyst Observation: Tan Mastic
Client Description: Sheet Vinyl

Location: Unit C, Kitchen
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100


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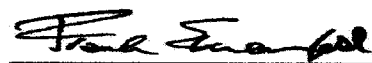
Date Analyzed: 09/26/2022

Signature:

Analyst:


Rebecca Hargrove

Approved By:


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Laboratory Director

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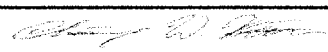
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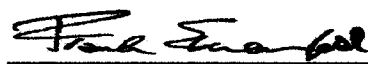
Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7497820 Client No.: 458-21 <u>Percent Asbestos:</u> PC 1.3 Chrysotile	Analyst Observation: Cream Joint Compound Client Description: Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Unit C, Basement Stairwell Facility: <u>Percent Non-Fibrous Material:</u> 98.7
Lab No.: 7497821 Client No.: 458-22 <u>Percent Asbestos:</u> None Detected	Analyst Observation: Off-White/Green Vinyl Sheet Flooring Client Description: Sheet Vinyl <u>Percent Non-Asbestos Fibrous Material:</u> 9 Cellulose 1 Fibrous Glass	Location: Unit D, Bath Facility: <u>Percent Non-Fibrous Material:</u> 90
Lab No.: 7497821(L2) Client No.: 458-22 <u>Percent Asbestos:</u> None Detected	Analyst Observation: Tan Mastic Client Description: Sheet Vinyl <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Unit D, Bath Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7497822 Client No.: 458-23 <u>Percent Asbestos:</u> None Detected	Analyst Observation: Lt Tan Vinyl Sheet Flooring Client Description: Sheet Vinyl <u>Percent Non-Asbestos Fibrous Material:</u> 9 Cellulose 1 Fibrous Glass	Location: Unit D, Laundry Facility: <u>Percent Non-Fibrous Material:</u> 90
Lab No.: 7497822(L2) Client No.: 458-23 <u>Percent Asbestos:</u> None Detected	Analyst Observation: Tan Mastic Client Description: Sheet Vinyl <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Unit D, Laundry Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7497823 Client No.: 458-24 <u>Percent Asbestos:</u> None Detected	Analyst Observation: Lt Tan Vinyl Sheet Flooring Client Description: Sheet Vinyl <u>Percent Non-Asbestos Fibrous Material:</u> 9 Cellulose 1 Fibrous Glass	Location: Unit D, Kitchen Facility: <u>Percent Non-Fibrous Material:</u> 90

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Date Received: 9/20/2022
Date Analyzed: 09/26/2022
Signature: 
Analyst: Christopher Riffe

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/26/2022
Report No.: 669354 - PLM
Project: Building 458 JBER AK
Project No.: 22-136

Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7497823(L2)
Client No.: 458-24

Analyst Observation: Tan Mastic
Client Description: Sheet Vinyl
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Unit D, Kitchen
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7497824
Client No.: 458-25
Percent Asbestos:
None Detected

Analyst Observation: Off-White Texture
Client Description: Ceiling Texture
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Unit D, Living Room
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7497825
Client No.: 458-26
Percent Asbestos:
None Detected

Analyst Observation: Off-White Texture
Client Description: Wall Texture
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Unit D, Living Room
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7497826
Client No.: 458-27
Percent Asbestos:
None Detected

Analyst Observation: Off-White Joint Compound
Client Description: Joint Compound
Percent Non-Asbestos Fibrous Material:
None Detected

Location: Unit D, Living Room
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7497827
Client No.: 458-28
Percent Asbestos:
None Detected

Analyst Observation: Grey Gasket
Client Description: Gasket
Percent Non-Asbestos Fibrous Material:
15 Cellulose

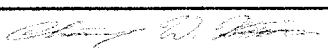
Location: Mech Room, Pump #2
Facility:
Percent Non-Fibrous Material:
85

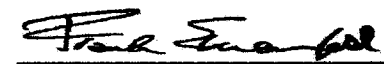
Lab No.: 7497828
Client No.: 458-29
Percent Asbestos:
None Detected

Analyst Observation: Lt Tan/Grey Drywall
Client Description: Drywall
Percent Non-Asbestos Fibrous Material:
10 Cellulose
3 Fibrous Glass

Location: Mech Room
Facility:
Percent Non-Fibrous Material:
87

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

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Analyst: Christopher Riffe

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

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Client: AK Environmental Consultants, Inc.
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Anchorage AK 99521

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Project No.: 22-136

Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7497829
Client No.: 458-30

Analyst Observation: Off-White Joint Compound
Client Description: Joint Compound

Location: Mech Room
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7497830
Client No.: 458-31

Analyst Observation: Off-White/Lt Tan Vinyl Sheet Flooring
Client Description: Sheet Vinyl

Location: Unit E, Bath
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
9 Cellulose
1 Fibrous Glass

Percent Non-Fibrous Material:
90

Lab No.: 7497831
Client No.: 458-32

Analyst Observation: Lt Tan Vinyl Sheet Flooring
Client Description: Sheet Vinyl

Location: Unit E, Kitchen
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
9 Cellulose
1 Fibrous Glass

Percent Non-Fibrous Material:
90

Lab No.: 7497832
Client No.: 458-33

Analyst Observation: Cream Joint Compound
Client Description: Joint Compound

Location: Unit E, Basement Stairwell
Facility:

Percent Asbestos:
PC 1.6 Chrysotile

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
98.4

Lab No.: 7497832(L2)
Client No.: 458-33

Analyst Observation: Lt Grey Joint Compound
Client Description: Joint Compound

Location: Unit E, Basement Stairwell
Facility:

Percent Asbestos:
PC 1.9 Chrysotile

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
98.1

Lab No.: 7497833
Client No.: 458-34

Analyst Observation: Beige Vinyl Sheet Flooring
Client Description: Sheet Vinyl

Location: Unit F, Entryway
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
10 Cellulose
Trace Fibrous Glass

Percent Non-Fibrous Material:
90

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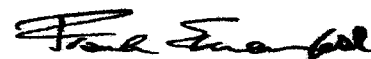
Date Received: 9/20/2022

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Project No.: 22-136

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PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7497833(L2)
Client No.: 458-34

Analyst Observation: Off-White Mastic
Client Description: Sheet Vinyl

Location: Unit F, Entryway
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7497834
Client No.: 458-35

Analyst Observation: Multi-Colored Vinyl Sheet Flooring
Client Description: Sheet Vinyl

Location: Unit G, Bath
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
2 Fibrous Glass

Percent Non-Fibrous Material:
98

Lab No.: 7497834(L2)
Client No.: 458-35

Analyst Observation: Beige Mastic
Client Description: Sheet Vinyl

Location: Unit G, Bath
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7497835
Client No.: 458-36

Analyst Observation: Beige Mastic
Client Description: Sheet Vinyl

Location: Unit G, Rear Entryway, Bottom
Layer

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7497835(L2)
Client No.: 458-36

Analyst Observation: Lt Tan Vinyl Sheet Flooring
Client Description: Sheet Vinyl

Location: Unit G, Rear Entryway, Bottom
Layer

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
9 Cellulose
1 Fibrous Glass

Facility:
Percent Non-Fibrous Material:
90

Lab No.: 7497835(L3)
Client No.: 458-36

Analyst Observation: Tan Mastic
Client Description: Sheet Vinyl

Location: Unit G, Rear Entryway, Bottom
Layer

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Facility:
Percent Non-Fibrous Material:
100

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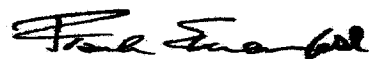
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Project: Building 458 JBER AK
Project No.: 22-136

Client: AKE001

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7497836
Client No.: 458-37

Analyst Observation: Lt Tan Vinyl Sheet Flooring
Client Description: Sheet Vinyl

Location: Unit G, Rear Entryway, Top Layer
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
9 Cellulose
1 Fibrous Glass

Percent Non-Fibrous Material:
90

Lab No.: 7497837
Client No.: 458-38

Analyst Observation: Off-White Joint Compound
Client Description: Joint Compound

Location: Unit G, Dining Room Ceiling
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7497838
Client No.: 458-39

Analyst Observation: Off-White/Green Vinyl Sheet Flooring
Client Description: Sheet Vinyl

Location: Unit H, Bath
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
9 Cellulose
1 Fibrous Glass

Percent Non-Fibrous Material:
90

Lab No.: 7497839
Client No.: 458-40

Analyst Observation: Cream Vinyl Sheet Flooring
Client Description: Sheet Vinyl

Location: Unit H, Kitchen
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
9 Cellulose
1 Fibrous Glass

Percent Non-Fibrous Material:
90

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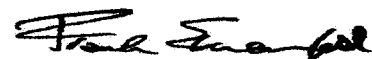
Date Received: 9/20/2022

Date Analyzed: 09/26/2022

Signature:

Analyst: Christopher Riffe

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

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Anchorage AK 99521

Report Date: 9/26/2022
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Project: Building 458 JBER AK
Project No.: 22-136

Client: AKE001

Appendix to Analytical Report

Customer Contact: Travis Hubbard

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 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: Kelly Klippel

Sample Login Notes: See Batch Sheet Attached

Sample Matrix: Bulk Building Materials

Exceptions Noted: See Following Pages

General Terms, Warrants, Limits, Qualifiers:

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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) See additional information at the end of this appendix.

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/26/2022
Report No.: 669354 - PLM
Project: Building 458 JBER AK
Project No.: 22-136

Client: AKE001

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 gangue, 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/1198_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: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/26/2022
Report No.: 669354 - PLM
Project: Building 458 JBER AK
Project No.: 22-136

Client: AKE001

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).

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

Chain of Custody

—Bulk Asbestos—

Contact Information

Client Company: AK Environmental Consultants, Inc
Office Address: 5700 Old Seward Hwy, Suite 205
City, State, Zip: Anchorage, AK 99518
Fax Number:
Email Address: travis@akenviro.com

Project Number: 22-136
Project Name: Building 458 JBER, AK
Primary Contact: Travis Hubbard
Office Phone: 907-561-2532
Cell Phone: 907-330-9282

PLM Instructions:

- ☒ PLM: Bulk Asbestos Building Materials EPA 600 R-93/116, 1993
- ☐ PLM: Bulk Asbestos Building Materials EPA 600 M-4/82-020, 1982
- ☐ PLM: Bulk Asbestos Building Materials NIOSH 9002, 1985
- ☐ PLM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.1, 2002
- ☐ PLM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.6, 2010
- ☐ TEM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.4, 2009
- ☐ PLM: Point Counting
 - ☐ PC: via ELAP 198.1
 - ☐ PC: 400 Points
 - ☐ PC: 800 Points *
 - ☐ PC: 1600 Points *
- ☒ PLM: Instructions for Multi-Layered Samples
 - ☒ Analyze and Report All Separable Layers per EPA 600
 - ☐ Report Composite for Drywall Systems per NESHAP
 - ☐ Report All Layers and Composite Where Applicable
 - ☐ Only Analyze and Report Specifically Noted Layer
- ☐ PLM: Analyze Until Positive (Positive Stop)
 - ☐ AUP: by Homogenous Area as Noted
 - ☐ AUP: by Material Type as Noted
- ☐ PLM: NOB via 198.6
 - ☐ PLM: Friable via EPA 600 2.3
 - ☐ If <1% by PLM, to TEM via 198.4 *
 - ☐ If <1% by PLM, Hold for Instructions
- ☐ PLM: Non-Building Material *** (Dust, Wipe, Tape)
 - ☐ Soil or Vermiculite Analysis
 - ☐ CARB 435

Special Instructions:

* Additional charge and turnaround may be required ** Alternative Method (ex: EPA 600/R-04/004) may be recommended by Laboratory

Turnaround Time

Preliminary Results Requested Date: _____ ☐ Verbal ☒ Email ☐ Fax

Specific date / time
☐ 10 Day ☒ 5 Day ☐ 3 Day ☐ 2 Day ☐ 1 Day* ☐ 12 Hour** ☐ 6 Hour** ☐ RUSH**

* End of next business day unless otherwise specified. ** Matrix Dependent. ***Please notify the lab before shipping***

Chain of Custody

Relinquished (Name/Organization): AK Environmental Consultants, Inc Date: 9/19/2022 Time: 1:00pm
Received (Name / iATL): Travis Hubbard Date: 9/20/2022 Time: 1:00pm
Sample Login (Name / iATL): AK-22-136 Date: 9/20/2022 Time: 1:00pm
Analysis (Name(s) / iATL): Travis Hubbard Date: 9/20/2022 Time: 1:00pm
QA/QC Review (Name / iATL): Travis Hubbard Date: 9/20/2022 Time: 1:00pm
Archived / Released: _____ QA/QC InterLAB Use: _____ Date: _____ Time: _____



AK Environmental Consultants, Inc.
5700 Old Seward Highway, Suite 205
Anchorage, AK 99518

Project Title Building 458
Location Bldg. 458 Fort Richardson, AK 99505
Client 673 CES CENMP Project # 21-136

Bulk Sample Log

Analytical Method Requested <u>EPA 821-R-73/116, 1973</u>	Turnaround Time <u>5 Day</u>	Sample Count <u>40</u>	Collection Date <u>9/16/2022</u>
Collected By (Printed Name and Signature) <u>Travis Hubbard / [Signature]</u>	Client Project # <u>Bldg. 458</u>		
Relinquished By <u>[Signature]</u>	Date / Time <u>9/19/2022</u>	Samples Received By	Date / Time
Project Notes <ul style="list-style-type: none"> Fluorescent lighting and smoke detectors present in Building Limited sampling in Unit F due to extensive mold contamination. 			
Sample Number	Material Sampled	Sample Location and Notes	
458-01	Vapor Barrier	Unit D, Canopy at Entryway	7497800
458-02	Fiber Board	Under Siding, Unit B	7497801
458-03	Damp Proofing	Foundation, Unit B	7497802
458-04	Joint Compound	Unit A, Dining Room	7497803
458-05	Wall Texture		7497804
458-06	Ceiling Texture	Unit A, Kitchen	7497805
458-07	Sheet Vinyl	Unit A, Kitchen, Top Layer	7497806
458-08	Sheet Vinyl *	Unit A, Kitchen, Bottom Layer	7497807
458-09	Sink Undercoat	Unit A, Kitchen	7497808
458-10	Sheet Vinyl	Unit A, Bath	7497809
458-11	Joint Compound	Unit B, Laundry	7497810
458-12	Wall Texture		7497811
458-13	Sheet Vinyl		7497812
458-14	Sheet Vinyl	Unit B, Rear Entryway	7497813
458-15	Stair Tread Mastic	Unit B, Basement	7497814
458-16	Cove Base Mastic	Unit C, Bath	7497815
458-17	Sheet Vinyl	Unit C, Bath, Top Layer	7497816



AK Environmental Consultants, Inc.
5700 Old Seward Highway, Suite 205
Anchorage, AK 99518

Project Title Building 458
Location Bldg 458 Fort Richardson, AK 99505
Client 673 CES CENMP Project # 21-136

Bulk Sample Log

Analytical Method Requested	Turnaround Time <u>5 Day</u>	Sample Count <u>40</u>	Collection Date <u>9/16/2022</u>
Collected By (Printed Name and Signature) <u>Trevi B. Hubbard / [Signature]</u>	Client Project # <u>Bldg 458</u>		
Relinquished By <u>[Signature]</u>	Date / Time	Samples Received By	Date / Time
Project Notes			
Sample Number	Material Sampled	Sample Location and Notes	
458-18	Sheet Vinyl	Unit C, Bath, Bottom Layer 7497817	
458-19	Ceiling Texture	Unit C, Dining Room 7497818	
458-20	Sheet Vinyl	Unit C, Kitchen 7497819	
458-21	Joint Compound	Unit C, Basement Stairwell 7497820	
458-22	Sheet Vinyl	Unit D, Bath 7497821	
458-23	Sheet Vinyl	Unit D, Laundry 7497822	
458-24	Sheet Vinyl	Unit D, Kitchen 7497823	
458-25	Ceiling Texture	Unit D, Living Room 7497824	
458-26	Wall Texture	7497825	
458-27	Joint Compound	7497826	
458-28	Gasket	Mech Room, Pump #2 7497827	
458-29	Drywall	Mech Room 7497828	
458-30	Joint Compound	Mech Room 7497829	
458-31	Sheet Vinyl	Unit E, Bath 7497830	
458-32	Sheet Vinyl	Unit E, Kitchen 7497831	
458-33	Joint Compound	Unit E E, Basement Stairwell 7497832	
458-34	Sheet Vinyl	Unit F, Entryway 7497833	

start
CR
9/20/22



Project Title Building 458

Location Bldg 458 Fort Richardson, AK 99505

Client: 673 LES CENMP

Project # 2-136

Bulk Sample Log

Analytical Method Requested	Turnaround Time 5 Day	Sample Count 40	Collection Date 9/16/2022
Collected By (Printed Name and Signature) Trevor Hubbard / 	Client Project # Bldg. 458		
Relinquished By 	Date / Time	Samples Received By	Date / Time

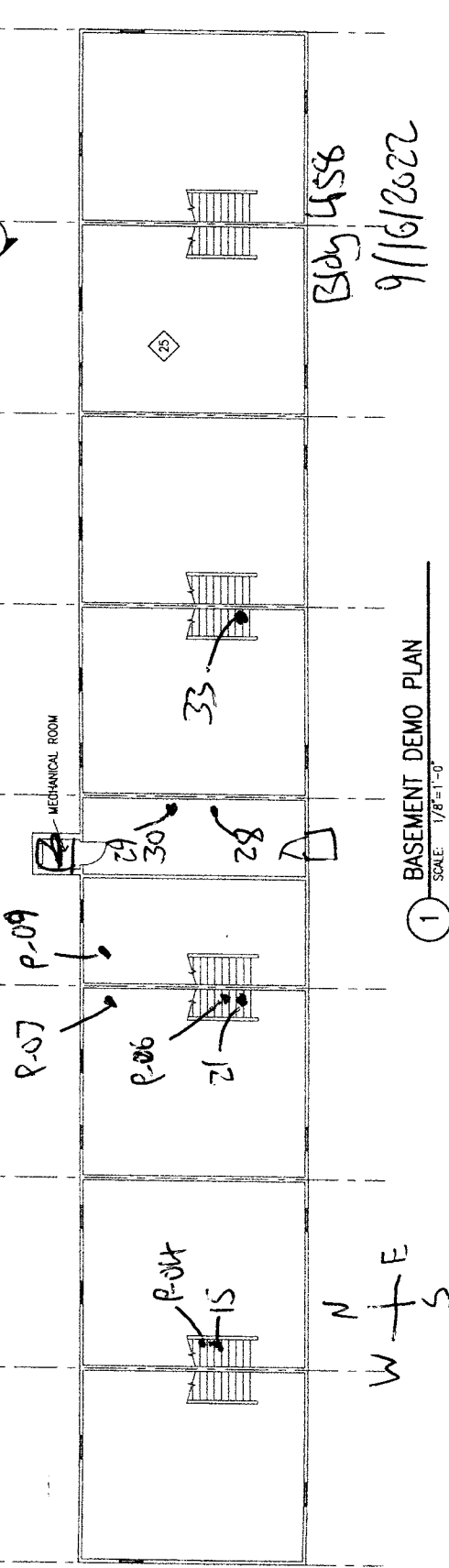
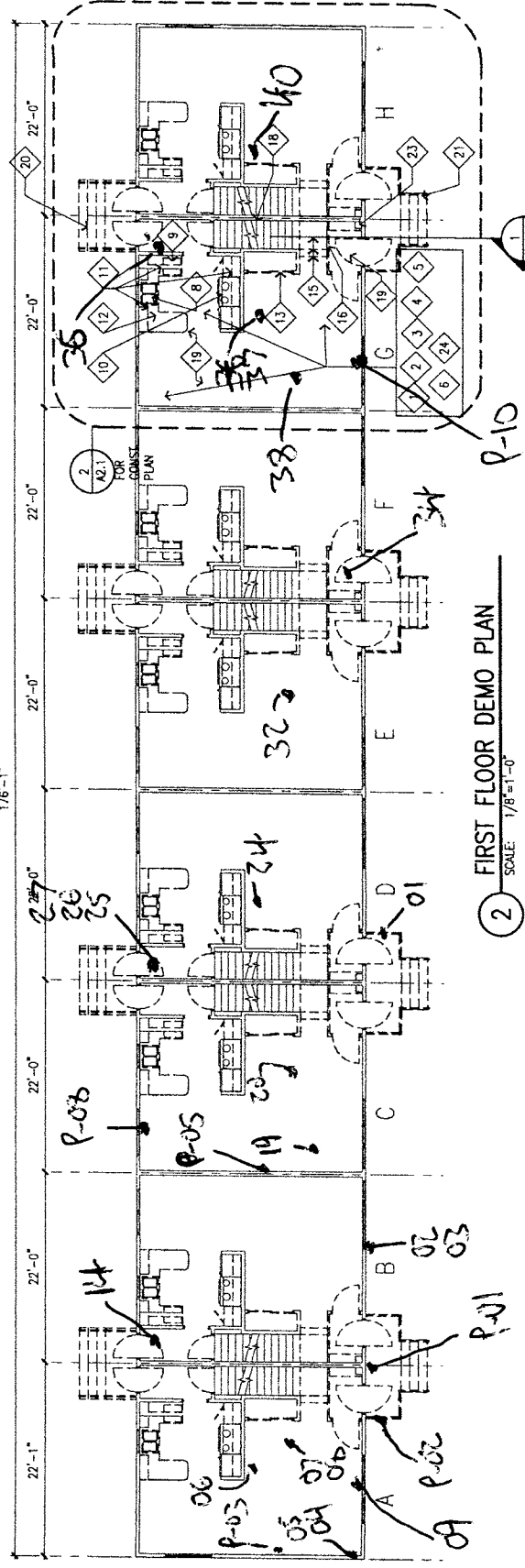
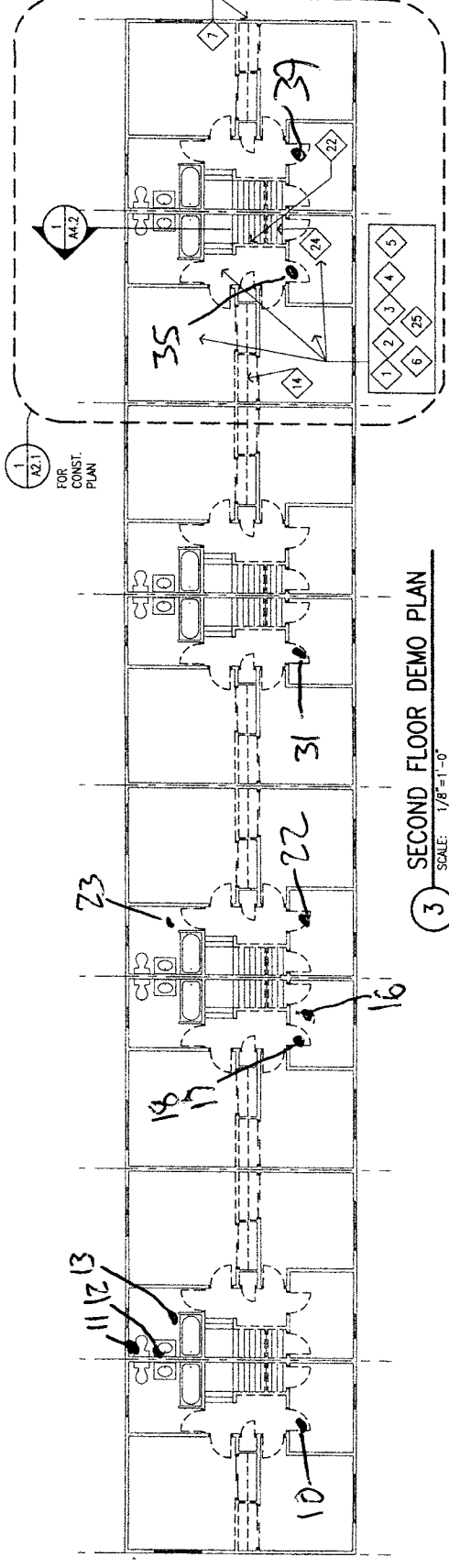
Project Notes

[illegible]

KEY NOTES

- 1. TYPICAL DEMO NOTE APPLICABLE TO ALL UNITS UNLESS OTHERWISE NOTED
- 2. SPECIFIC UNIT DEMO NOTE
- 3. REMOVE ALL EXISTING DOORS AND ENLARGE OPENINGS TO 10' CLEAR FOR NEW TRANSOM LITES SHOWN ON 2/A5.2
- 4. REMOVE AND DISPOSE OF ALL INTERIOR AND EXTERIOR DOOR FRAMES, TRIM AND COMPONENTS (ASSUME BASED PAINT).
- 5. REMOVE BASEBOARDS AND CROWN MOULDING ALL FLOORS EXCEPT BATHROOM (ASSUME LEAD BASED PAINT)
- 6. REMOVE AND DISPOSE OF GYPSUM BOARD WALLS AND CEILINGS IN ALL ROOMS EXCEPT THE BATHROOM. ALL GYPSUM BOARD HAS ASBESTOS-CONTAINING JOINT COMPOUND AND SHALL BE REMOVED AS CLASS II ASBESTOS WORK.
- 7. REMOVE EXISTING FLOORING, EXCEPT HARDWOOD IN GOOD CONDITION, IN ALL ROOMS EXCEPT BATHROOM. SEE NOTE 19 FOR SPECIFICS ON DINING, KITCHEN ENTRY AREAS
- 8. REMOVE EXISTING MINI BLINDS/ WINDOW COVERINGS
- 9. REMOVE EXISTING ATTIC VENT LOUVER (TYPICAL EACH END OF BOTH BUILDINGS)
- 10. REMOVE EXISTING GARBAGE DISPOSAL
- 11. REMOVE EXISTING DISHWASHER (LOCATION VARIES)
- 12. REMOVE EXISTING RANGE HOOD
- 13. REMOVE EXISTING KITCHEN CABINETS
- 14. REMOVE EXISTING KITCHEN COUNTER TOPS AND SINKS
- 15. DEMO EXISTING COAT CLOSET
- 16. DEMO CLOSET IN OFFICE
- 17. DEMO STAIR LANDING AND BOTTOM 2 TREADS
- 18. DEMO INTERIOR WALLS OF ENTRY VESTIBULE
- 19. REMOVE EXISTING STAR HAND RAIL
- 20. REMOVE AND DISPOSE OF ASBESTOS-CONTAINING FLOORING AND FLOORING MASTICS FROM KITCHEN, BATHROOM, AND ENTRY AREAS. FLOORS MAY CONTAIN LAYERS OF SHEET VINYL TILE AND MASTICS. THIS WORK SHALL BE BASED ON SQUARE FOOTAGE OF FLOOR AREA. SEE SHEET A1.2 FOR UNIT-BY-UNIT DESCRIPTION
- 21. DEMO EXISTING CONCRETE STEPS AND STOOP INCLUDING STEEL RAILING
- 22. DEMO EXISTING CONCRETE STEPS AND STOOP INCLUDING STEEL RAILING - EXISTING CEDAR FENCE WILL REMAIN. REMOVAL AND RESTORATION TO PROVIDE ACCESS TO ADJACENT LOT
- 23. REMOVE EXISTING HALF WALL AND TRIM (ASSUME LEAD BASED PAINT IN TRIM)
- 24. REMOVE EXISTING PIPE CHASE
- 25. DEMO EXISTING CLOSET IN LAUNDRY ROOM
- 26. BUILDINGS WILL BE TURNED OVER TO CONTRACTOR IN GOOD CONDITION. ALL SELF HELP WORK IN THE BASEMENT SHALL BE REMOVED BY FT. RICHARDSON DPW PRIOR TO CONSTRUCTION START

100% SUBMITTAL



Blg 458
9/16/2022

Appendix B

Lead Paint Analytical Report / Sample Collection Forms

CERTIFICATE OF ANALYSIS


Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521
Client: AKE001


Report Date: 9/27/2022
Report No.: 669345 - Lead Paint
Project: Building 458 JBER AK
Project No.: 22-136

LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 7497687 Client No.: 458P-01	Description: Location: Exterior Siding - Unit A, Wood	Result (% by Weight): 11 Result (ppm): 110000 Comments: ***
Lab No.: 7497688 Client No.: 458P-02	Description: Location: Porch Railing - Unit A, Wood	Result (% by Weight): 0.013 Result (ppm): 130 Comments:
Lab No.: 7497689 Client No.: 458P-03	Description: Location: Wall - Unit A Dining Room, EWB	Result (% by Weight): <0.0073 Result (ppm): <73 Comments: ***
Lab No.: 7497690 Client No.: 458P-04	Description: Location: Stairs - Unit B, Basement	Result (% by Weight): 0.12 Result (ppm): 1200 Comments:
Lab No.: 7497691 Client No.: 458P-05	Description: Location: Base Trim - Unit C, Dining Room	Result (% by Weight): <0.0059 Result (ppm): <59 Comments:
Lab No.: 7497692 Client No.: 458P-06	Description: Location: Wall - Unit C, Basement Stairwell GWB	Result (% by Weight): 0.045 Result (ppm): 450 Comments:
Lab No.: 7497693 Client No.: 458P-07	Description: Location: Wall - Unit C, Basement CMU	Result (% by Weight): 0.013 Result (ppm): 130 Comments:
Lab No.: 7497694 Client No.: 458P-08	Description: Location: Window Sill - Unit C, Living Room	Result (% by Weight): <0.0051 Result (ppm): <51 Comments:

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

Date Received: 9/20/2022
Date Analyzed: 09/27/2022
Signature: 
Analyst: Chad Shaffer

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director



9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/27/2022
Report No.: 669345 - Lead Paint
Project: Building 458 JBER AK
Project No.: 22-136

Client: AKE001

LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 7497695
Client No.: 458P-09

Description:
Location: Floor - Unit D, Basement

Result (% by Weight): 0.36
Result (ppm): 3600
Comments:

Lab No.: 7497696
Client No.: 458P-10

Description:
Location: Window Sill - Unit G, Dining Room

Result (% by Weight): 0.0070
Result (ppm): 70
Comments:

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

Date Received: 9/20/2022

Date Analyzed: 09/27/2022

Signature:

Analyst: Chad Shaffer

Approved By:

Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/27/2022
Report No.: 669345 - Lead Paint
Project: Building 458 JBER AK
Project No.: 22-136

Client: AKE001

Appendix to Analytical Report:

Customer Contact: Travis Hubbard

Method: ASTM D3335-85a, US EPA SW846 3050B:7000B

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: Kelly Klippel

Sample Login Notes: See Batch Sheet Attached

Sample Matrix: Paint

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 ASTM D3335-85a by AAS

Certification:

- National Lead Laboratory Program (NLLAP): AIHA-LAP, LLC No. 100188

- NYSDOH-ELAP No. 11021

This report meets the standards set forth in the EPA's National Lead Laboratory Accreditation Program (NLLAP) through the Laboratory Quality System Requirements (LQSR) Revision 3.0 November 5, 2007. All Environmental Lead Proficiency Analytical Testing (ELPAT) is through the AIHA-PAT established program.

Regulatory limit is 0.5% lead by weight (EPA/HUD guidelines). Recommend multiple sampling for all samples less than regulatory limit for confirmation.

All results are based on the samples as received at the lab. iATL assumes that appropriate sampling methods have been used and that the data upon which these results are based have been accurately supplied by the client.

Method Detection Limit (MDL) per EPA Method 40CFR Part 136 Appendix B.

Reporting Limit (RL) based upon Lowest Standard Determined (LSD) in accordance with AIHA-ELLAP policies.

LSD=0.2 ppm MDL=0.006% by weight. RL= 0.010% by weight (based upon 100 mg sampled).

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 complete list with highlighted disclaimers pertinent to this project. For a full explanation of these and other disclaimers, please inquire at customerservice@iatl.com.



9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: AK Environmental Consultants, Inc.
PO Box 211994
Anchorage AK 99521

Report Date: 9/27/2022
Report No.: 669345 - Lead Paint
Project: Building 458 JBER AK
Project No.: 22-136

Client: AKE001

- * Insufficient sample provided to perform QC reanalysis (<200 mg)
- ** Not enough sample provided to analyze (<50 mg)
- *** Matrix / substrate interference possible.

< less than sign, signifies none-detected below the empirical value based upon sub-sampled mass. This is often below the Reporting Limit (see above).

Chain of Custody

– Environmental Lead –

Contact Information

Client Company: AK Environmental Consultants, Inc.

Office Address: 5700 Old Seward Hwy, Suite 205

City, State, Zip: Anchorage, AK 99518

Fax Number:

Email Address: travis@akenviro.com

Project Number: 22-136

Project Name: Building 458 JBER, AK

Primary Contact: Travis Hubbard

Office Phone: 907-561-2532

Cell Phone: 907-330-9282

iATL is accredited by the National Lead Laboratory Accreditation Program (NLLAP) to perform analytical testing of environmental samples for lead (Pb). The accreditation is through AIHA-LAP, LLC and several other nationally recognized state programs.

Matrix/Method:

- ☒ Paint by AAS: ASTM D3335-85a, 2009
☐ Wipe/Dust by AAS: SW 846: 3050B: 700B, 2010
☐ Air by AAS: NIOSH 7082, 1994
☐ Soil by AAS: EPA SW 846 (Soil)
☐ Water by AAS-GF: ASTM D3559-03D, US EPA 200.9
☐ Other Metals (Cd, Zn, Cr) by AAS
☐ Toxicity Characteristic Leaching Procedure (TCLP) by AAS: US EPA 1311
☐ Other _____

Special Instructions:

Turnaround Time

Preliminary Results Requested Date: _____

☐ Verbal ☒ Email ☐ Fax

Specific date / time

☐ 10 Day ☒ 5 Day ☐ 3 Day ☐ 2 Day ☐ 1 Day* ☐ 12 Hour** ☐ 6 Hour** ☐ RUSH**

* End of next business day unless otherwise specified. ** Matrix Dependent. ***Please notify the lab before shipping***

Chain of Custody

Relinquished (Name/Organization): Z. Hubbard

Received (Name / iATL): _____

Sample Login (Name / iATL): _____

Analysis(Name(s) / iATL): W1212

QA/QC Review (Name / iATL): 6/27/22

Archived / Released: _____ QA/QC InterLAB Use: _____

Date: 9/19/2022 Time: 1:00pm

Date: _____ Time: _____

Date: _____ Time: _____

Date: _____ Time: _____

Date: _____ Time: _____

Date: _____ Time: _____



AK Environmental Consultants, Inc.
5700 Old Seward Highway, Suite 205
Anchorage, AK 99518

Project Title Building 458
Location Bldg 458 Fort Richardson AK 99505
Client 673 CES CSNMP Project # 21-136

Bulk Sample Log

Analytical Method Requested <u>ASTM D3335-85a, 2009</u>	Turnaround Time <u>5 Day</u>	Sample Count <u>10</u>	Collection Date <u>9/16/2022</u>
Collected By (Printed Name and Signature) <u>Tyler H. Hildreth / [Signature]</u>	Client Project # <u>Bldg 458</u>		
Relinquished By <u>[Signature]</u>	Date / Time <u>9/19/2022</u>	Samples Received By	Date / Time

Project Notes

Sample Number	Material Sampled	Sample Location and Notes
458P-01	Paint 7497687	Exterior Siding, Unit A, Wood
458P-02	Paint 7497688	Porch Railing, Unit A, Wood
458P-03	Paint 7497689	Wall, Unit A Dining Room GWS
458P-04	Paint 7497690	Stairs, Unit B, Basement Wood
458P-05	Paint 7497691	Base Trim, Unit C, Dining Room
458P-06	Paint 7497692	Wall, Unit C, Basement Stairwell GWS
458P-07	Paint 7497693	Wall, Unit C, Basement CMU
458P-08	Paint 7497694	Windowsill, Unit C, Living Room
458P-09	Paint 7497695	Floor, Unit D, Basement
458P-10	Paint 7497696	Windowsill, Unit G, Dining Room

Appendix C

Inspectors Certifications



ENVIRONMENTAL
MANAGEMENT
INCORPORATED

Certificate of Training

I - 30171 - 831

Certificate Number

This is to certify that

Travis W. Hubbard

has satisfactorily completed 4 hours

of

EPA/AHERA Inspector Refresher

In Accordance With 40 CFR Part 763 Subpart E

Class Start Date: 11/1/2021

Class End Date: 11/1/2021

11/1/2021

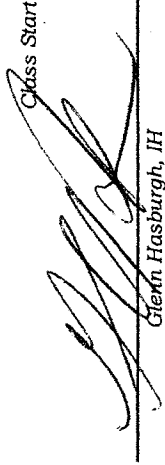
Exam Date

11/1/2022

Cert. Exp. Date

Stuart M. Jacques

Director


Glen Hasburgh, IH

Environmental Management Inc. 206 E. Fireweed Lane Suite 201, Anchorage Alaska 99503 907-272-8852

United States Environmental Protection Agency

This is to certify that

Travis W Hubbard



has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226 as:

Risk Assessor

In the Jurisdiction of:

All EPA Administered Lead-based Paint Activities Program States, Tribes and Territories

This certification is valid from the date of issuance and expires June 09, 2023

LBP-R-1175670-2

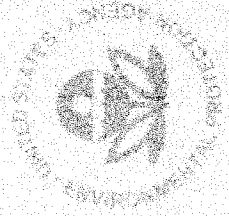
Certification #

April 10, 2020

Issued On

A handwritten signature in dark ink, appearing to read 'Adrienne Priselac'. The signature is fluid and cursive.

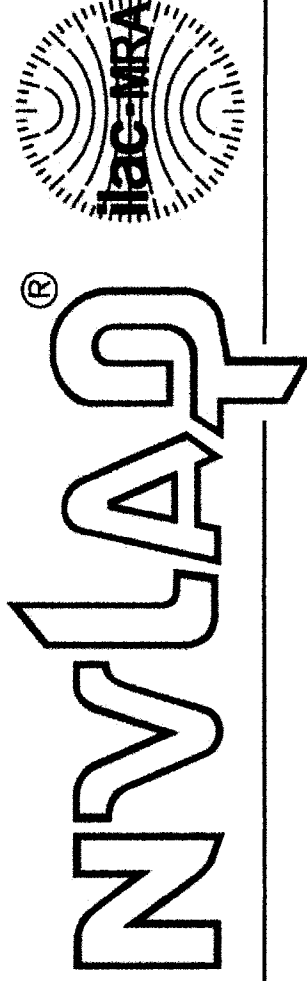
Adrienne Priselac, Manager, Toxics Office
Land Division



Appendix D

Laboratory Certifications

United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 101165-0

International Asbestos Testing Laboratories

Mt. Laurel, NJ

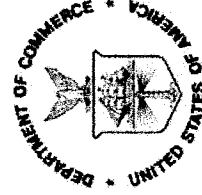
is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.
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).

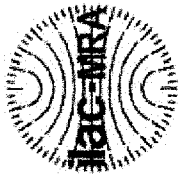
2022-07-01 through 2023-06-30

Effective Dates



A handwritten signature in cursive script, reading 'Peter S. Luman'.

For the National Voluntary Laboratory Accreditation Program



AIHA

Laboratory Accreditation
Programs, LLC

AIHA Laboratory Accreditation Programs, LLC

acknowledges that

International Asbestos Testing Laboratories (IATL)

9000 Commerce Parkway, Suite B, Mt. Laurel, NJ 08054

Laboratory ID: LAP-100188

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 17025:2017 international standard, General Requirements for the Competence of Testing and Calibration Laboratories in the following:

LABORATORY ACCREDITATION PROGRAMS

<input checked="" type="checkbox"/>	INDUSTRIAL HYGIENE	Accreditation Expires: November 01, 2023
<input checked="" type="checkbox"/>	ENVIRONMENTAL LEAD	Accreditation Expires: November 01, 2023
<input checked="" type="checkbox"/>	ENVIRONMENTAL MICROBIOLOGY	Accreditation Expires: November 01, 2023
<input type="checkbox"/>	FOOD	Accreditation Expires:
<input type="checkbox"/>	UNIQUE SCOPES	Accreditation Expires:
<input type="checkbox"/>	BERYLLIUM FIELD/MOBILE	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 17025:2017 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.

Cheryl O. Morton

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

Revision 19.1: 07/28/2021

Date Issued: 12/01/2021