



# Hazardous Building Materials Assessment

**USDA Forest Service  
Thomas Creek Work Center  
Lakeview, OR 97630**



**Prepared for:** USDA Forest Service  
Fremont-Winema NF HQ  
1301 South G Street  
Lakeview, OR 97630

**Prepared by:** DH Environmental, Inc.  
1011 SW Klickitat Way,  
Suite 107  
Seattle, WA 98134

U.S. Forest Service IDIQ Contract  
Region 6 & 10 Hazmat Services  
Contract Number: 12046W18C0007

## EXECUTIVE SUMMARY

The USDA Forest Service retained DH Environmental, Inc. (DH Environmental) to conduct a hazardous building materials assessment at the Thomas Creek Work Center located in Lakeview, OR. DH Environmental provided one AHERA accredited building inspector and one Senior Project Scientist to conduct the assessment on May 12<sup>th</sup>, 2021. The scope of the services included assessing three buildings for hazardous building materials in anticipation of the forthcoming demolition.

DH Environmental assessed the buildings for the following hazardous building materials:

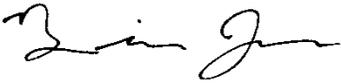
- Asbestos-containing materials (ACM);
- Lead-based paints (LBP);
- Other hazardous building materials (universal waste, refrigerant gases, propane cylinders and mercury thermostat switches).

Twenty bulk samples of suspect asbestos-containing materials were collected and analyzed using polarized light microscopy (PLM). Twelve of the materials sampled and analyzed were found to contain asbestos greater than the 1% reporting limit by PLM.

One-hundred and thirteen (113) samples were collected and analyzed using an X-ray fluorescence analyzer (XRF). Five of the samples were found to contain lead above the established threshold of 1 mg/cm<sup>2</sup>. These materials were found on the exterior of the barracks.

Other hazardous materials such as misc. petroleum-based containers, batteries, mercury switch, propane cylinder, generator, gas powered lawn mower, home heating oil tank (quantity unknown), 1,000-gallon diesel tank (residual), and a large home propane tank (quantity unknown) are inventoried in the report.

**PROJECT INFORMATION**

<b>Project Title</b>	USDA Forest Service – Thomas Creek Work Center Hazardous Building Materials Assessment
<b>Assessment Conducted by</b>	DH Environmental, Inc. 1011 SW Klickitat Way, Suite 107 Seattle, WA 98134
<b>Project Owner</b>	USDA Forest Service
<b>Contract Vehicle</b>	USDA Forest Service IDIQ Contract Contract # 12046W18C0007
<b>USDA Forest Service Contracting Officer</b>	Jared Machgan Contract Specialist
<b>Assessment Personnel</b>	Brian Johnson, OHST, CIT AHERA Accredited Building Inspector Certified Lead Risk Assessor (WA State)  Stacy Fox, CHMM Senior Project Scientist
<b>Survey Date(s)</b>	12 May 2021
<b>Report Delivery Date</b>	28 May 2021
<b>Report Prepared by</b>	  Brian Johnson, OHST, CIT AHERA Accredited Building Inspector Certified Lead Risk Assessor (WA State) EHS Program Manager
<b>Report Reviewed by</b>	David Hill, PE, CHMM, CPEA Principal DH Environmental, Inc.

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## 1.0 INTRODUCTION

The USDA Forest Service retained DH Environmental, Inc. (DH Environmental) to conduct a hazardous building materials assessment at the Thomas Creek Work Center located in Lakeview, OR. DH Environmental provided one AHERA accredited building inspector and one Senior Project Scientist to conduct the assessment on May 12<sup>th</sup>, 2021. The Work was awarded and conducted under USDA Forest Contract Number 12046W18C0007, Regional Hazmat Services IDIQ.

### 1.1 Scope of Services

The scope of the services included assessing three buildings for hazardous building materials in anticipation of the forthcoming demolition in accordance with United State Environmental Protection Agency 40 CFR Part 61, 261, 262, 29 CFR 1910.1001, and 1926.1101, Department of Environmental Quality OAR 340-248-0270 and the State of Oregon's Hazardous Waste Regulations OAR 340. The following hazardous materials were assessed:

- Asbestos-containing materials (ACM);
- Lead-based paints (LBP);
- Other hazardous building materials (universal waste, refrigerant gases, propane cylinders and mercury thermostat switches).

### 1.2 Assessment Objective

The objective of this hazardous building materials assessment is to assist the USDA Forest Service with communicating the presence of hazardous building materials and the presence, location, and quantity of ACM to employees, vendors, and contractors working in the project area. In addition, this assessment is meant to satisfy the requirements for an asbestos survey for the Department of Environmental Quality regulations prior to building demolition or renovation. Regulations require that a complete copy of this assessment be kept in a conspicuous location on-site at all times during activities that may impact known and suspect ACM.

## 2.0 SITE DESCRIPTION

The Thomas Creek Work Center was built circa 1957 and originally used as a fire station that housed its crew on site. They used propane to run their hot water heater, refrigerators and cook stoves. The power supply was an old WWII diesel motor with a converter. After 1992, the work center was used intermittently for field crews such as botany, wildlife or fire crews conducting a burn assignment. Crews would stay there for no more than a week at a time. Around 1988, the spring levels lowered allowing wildlife to burrow deeper into the water source eventually making it necessary to shut down the Work Center in the early 90s. Since then, the facilities on the site have deteriorated to such a point that they are no longer serviceable.

Building Number	Year Constructed	Square Feet	Description
1320	1957	1,840	Barracks
2200	1975	1,223	Warehouse
2506	1959	96	Gas House

## **3.0 ASBESTOS CONTAINING MATERIALS ASSESSMENT**

### **3.1 Applicable ACM Regulations**

The Oregon Occupational Safety and Health Administration (Oregon OSHA) and the Department of Environmental Quality (DEQ) regulate building materials that contain more than 1 percent asbestos as ACM for protection of human health and the environment.

Oregon OSHA regulates worker exposure to airborne asbestos fibers during general work activities and construction and demolition activities in parallel with Federal OSHA regulations (29 CFR 1926.1101). Worker exposure to airborne asbestos fibers must be below the Permissible Exposure Level (PEL) of an 8-hour time-weighted average (8-hr TWA) of 0.1 fiber per cubic centimeter (f/cc) of air. Oregon OSHA regulations establish engineering controls and work practices that are designed to mitigate workers exposure to asbestos in the workplace.

The DEQ regulates the release of airborne asbestos fibers in Oregon and surrounding areas. Specifically, DEQ under OAR 340-248-0260 regulates emission standards and procedural requirements of asbestos during building renovation and demolition projects. This regulation requires that an asbestos survey be conducted prior to demolition, that DEQ be notified prior to commencing with demolition activities, that ACM be removed prior to demolition, and that asbestos-containing waste materials be properly removed and disposed of in a manner that prevents the release of airborne asbestos fibers. In addition, the United States Environmental Protection Agency (USEPA) requires asbestos abatement workers and supervisors to be trained and certified in accordance with 40 CFR 763 Subpart E, Appendix C. DEQ has analogous training requirements for abatement workers in OAR 340-248-0130. The EPA and DEQ training and certification requirements apply to abatement work for buildings at the subject property.

### **3.2 Sampling Methodology**

The ACM sampling methodology conducted for this assessment was conducted in accordance with DEQ OAR 340-248-0270, as well as related AHERA Protocols.

All areas of the interior and exterior were investigated thoroughly looking for suspected ACM. Destructive sampling was needed in some areas to help identify building materials. Where appropriate, suspect ACM was grouped as homogenous if the materials were similar in appearance. The locations of the sample collections are shown in both Figures 2 & 5.

Samples were collected, containerized, and delivered to NVL Environmental Laboratories in Seattle, WA following standard chain of custody procedures. Suspect ACM samples were analyzed per EPA Method 600/R93/116 by Polarized Light Microscopy (PLM) analysis. NVL is a National Voluntary Laboratory Accreditation Program (NVLAP) – certified laboratory, certification number 102063-0 (see attachment 4).

### 3.3 Sampling Results

Twenty bulk samples of suspect asbestos-containing materials were collected and analyzed using Polarized Light Microscopy (PLM). Twelve of the materials sampled and analyzed were found to contain asbestos greater than the 1% reporting limit by PLM.

Sample ID	Material Description	Sample Location	Concentration	Material Quantity Estimate (if applicable)
USFS-TCWC-ACM-01	Layer 1: Brown crumbly fibrous material with black asphaltic mastic  Layer 2: Yellow fluffy fibrous material with debris	Building 1320	ACM (%): ND	NA
USFS-TCWC-ACM-02	Layer 1: Off-white vinyl tile with debris  Layer 2: Black asphaltic mastic with debris	Building 1320	ACM (%): Chrysotile 3% (Layer 2)	100 ft <sup>2</sup>
USFS-TCWC-ACM-03	Layer 1: Brown rubbery material with debris  Layer 2: Brown brittle mastic  Layer 3: Tan brittle mastic with paint	Building 1320	ACM (%): ND	NA
USFS-TCWC-ACM-04	Layer 1: Beige vinyl tile  Layer 2: Black asphaltic mastic	Building 1320	ACM (%): Chrysotile 2% (Layer 2)	25 ft <sup>2</sup>
USFS-TCWC-ACM-05	Layer 1: Dark green vinyl tile  Layer 2: Black asphaltic mastic with debris	Building 1320	ACM (%): Chrysotile 7% (Layer 1)  Chrysotile 3% (Layer 2)	222 ft <sup>2</sup>
USFS-TCWC-ACM-06	Layer 1: Tan soft mastic with debris  Layer 2: Dark green vinyl tile  Layer 3: Black asphaltic mastic	Building 1320	ACM (%): Chrysotile 6% (Layer 2)  Chrysotile 4% (Layer 3)	Same as sample USFS-TCWC-ACM-05
USFS-TCWC-ACM-07	Layer 1: Yellow soft mastic with debris  Layer 2: Dark red vinyl tile	Building 1320	ACM (%): Chrysotile 7% (Layer 2)  Chrysotile 3% (Layer 3)	39 ft <sup>2</sup>

	<p>Layer 3: Black asphaltic mastic</p> <p>Layer 4: Beige crumbly material</p>			
USFS-TCWC-ACM-08	<p>Layer 1: Yellow soft mastic with debris</p> <p>Layer 2: Dark red vinyl tile</p> <p>Layer 3: Black asphaltic mastic</p>	Building 1320	<p>ACM (%):  <b>Chrysotile 7% (Layer 2)</b></p> <p><b>Chrysotile 4% (Layer 3)</b></p>	Same as sample USFS-TCWC-ACM-07
USFS-TCWC-ACM-09	<p>Layer 1: Brown rubbery material</p> <p>Layer 2: Brown brittle mastic</p>	Building 1320	ACM (%): ND	NA
USFS-TCWC-ACM-10	<p>Layer 1: Yellow brittle mastic with debris</p> <p>Layer 2: Dark red vinyl tile</p> <p>Layer 3: Black asphaltic mastic</p>	Building 1320	<p>ACM (%):  <b>Chrysotile 7% (Layer 2)</b></p> <p><b>Chrysotile 4% (Layer 3)</b></p>	425 ft <sup>2</sup>
USFS-TCWC-ACM-11	<p>Layer 1: Tan soft mastic with debris</p> <p>Layer 2: Dark red vinyl tile</p> <p>Layer 3: Black asphaltic mastic</p>	Building 1320	<p>ACM (%):  <b>Chrysotile 7% (Layer 2)</b></p> <p><b>Chrysotile 4% (Layer 3)</b></p>	Same as sample USFS-TCWC-ACM-10
USFS-TCWC-ACM-12	<p>Layer 1: Off-white vinyl tile</p> <p>Layer 2: Black asphaltic mastic</p>	Building 1320	<p>ACM (%):  <b>Chrysotile 3% (Layer 2)</b></p>	72 ft <sup>2</sup>
USFS-TCWC-ACM-13	<p>Layer 1: Yellow soft mastic with debris</p> <p>Layer 2: Red vinyl tile</p> <p>Layer 3: Black asphaltic mastic</p>	Building 1320	<p>ACM (%):  <b>Chrysotile 7% (Layer 2)</b></p> <p><b>Chrysotile 4% (Layer 3)</b></p>	252 ft <sup>2</sup>
USFS-TCWC-ACM-14	<p>Layer 1: Multicolored woven fibrous material with beige and yellow mastic</p>	Building 1320	ACM (%): ND	NA

USFS-TCWC-ACM-15	Layer 1: White woven fibrous material with debris	Building 1320	ACM (%): ND	NA
USFS-TCWC-ACM-16	Layer 1: Brown woven fibrous material with yellow mastic Layer 2: Black asphaltic mastic with debris	Building 1320	ACM (%): Chrysotile 3% (Layer 2)	80 ft <sup>2</sup>
USFS-TCWC-ACM-17	Layer 1: Brown woven fibrous material with yellow mastic Layer 2: Black asphaltic mastic with debris	Building 1320	ACM (%): Chrysotile 3% (Layer 2)	Same as sample USFS-TCWC-ACM-16
USFS-TCWC-ACM-18	Layer 1: Black asphaltic fibrous material	Building 1320	ACM (%): ND	NA
USFS-TCWC-ACM-19	Layer 1: Black asphaltic fibrous material	Building 1320	ACM (%): ND	NA
USFS-TCWC-ACM-20	Layer 1: Black asphaltic fibrous material	Building 2200	ACM (%): ND	NA

Table 1: ACM Sample Results  
 ND: Not Detected at Reporting Limit  
 NA: Not Applicable  
 ACM: Asbestos Containing Material

## 4.0 LEAD BASED PAINT (LBP) ASSESSMENT

### 4.1 Applicable LBP Regulations

Oregon OSHA regulates exposure of workers in general industry (29 CFR 1910.1025) and construction workers (29 CFR 1926.62) to lead in the workplace. The regulations provide engineering controls and work practices to minimize worker exposures. These regulations are applicable to renovation/demolition activities that have the potential to expose workers to airborne concentrations of lead at or above the 8-hr time weighted average (TWA) action level of 30 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) of air. Workers must not be exposed to lead at concentrations greater than the permissible exposure limit (PEL) of 50  $\mu\text{g}/\text{m}^3$  for an 8-hr TWA. Employers are responsible for determining whether their employees will be exposed to lead. A negative exposure assessment is required, consisting of modeling or air monitoring to verify that workers are not being exposed above the action level. If an exposure assessment cannot be conducted for demolition activities, workers coming into contact with deteriorated paint and paint dust should wear a half-face respirator with a particulate cartridge, coveralls or similar full-body work clothing, gloves, safety glasses, and shoes or disposable shoe coverlets. If the negative exposure assessment reveals that workers are exposed to lead dust above the PEL, the requirements of 29 CFR 1926.62(d) in construction or 29 CFR 1910.1025(d) in general industry must be implemented, including training, air monitoring, and medical surveillance.

The USEPA regulates LBP activities in residential target housing (40 CFR 745, Subpart L). These regulations include both training and certification requirements for persons involved in LBP activities in target housing, as well as work practice standards for conducting LBP inspections, risk assessments, and abatement activities. The regulations under 40 CFR 745, Subpart L do not apply to LBP activities to be conducted on the subject property.

The USEPA and the State of Oregon requires generators of solid waste to determine whether their waste is a hazardous waste for proper accumulation, transportation, and disposal. For demolition debris-related waste that potentially contains lead or other heavy metals, a representative sample(s) of the debris must be analyzed by the Toxicity Characteristic Leachate Procedure (TCLP) in accordance with 40 CFR Part 261. Solid wastes containing leachable lead detected at a concentration of 5 mg/L or greater must be accumulated, stored, transported, and disposed of as hazardous waste. Scrap metal that will be recycled is exempt from regulation as a Hazardous Waste in accordance with 40 CFR 261.4(a)(13).

### 4.2 LBP Sampling Methodology

The testing of suspected lead painted surfaces was conducted by portable XRF lead-based paint analyzer. XRF instruments expose a building component to electromagnetic radiation in the form of X-rays or gamma radiation. In response to radiation, each element, including lead, emits energy at a fixed and characteristic level. Emission of characteristic x-rays is called "X-Ray Fluorescence," or XRF. The energy released is measured by the instrument's fluorescence detector and displayed, all of the inconclusive ranges and/or thresholds are based on 1.0 mg/cm<sup>2</sup>. The lead-based paint inspection is in accordance with the methodologies set forth by the U.S. Department of Housing and Urban Development (HUD), and manufacturer's guidelines.

Locations of the areas tested are shown in Figure 1, 2, 3, and 4.

### 4.3 LBP Sampling Results

One-hundred thirteen (113) samples were collected and analyzed using an XRF. Five of the samples were found to contain lead above the established threshold of 1 mg/cm<sup>2</sup>, these materials were found on the exterior of the crane. The table below represents the tests that were confirmed positive for lead concentrations exceeding the threshold of 1 mg/cm<sup>2</sup>.

A complete list of test locations and findings can be found in Attachment 3.

Sample ID	Space Name	Component	Substrate	Color	Concentration	Notes
Reading # 12-16 Building 2022	Exterior	Wall	Wood	Brown	Lead Concentration: 1.01 mg/cm <sup>2</sup>	
Reading # 12-37 Building 1320	Exterior	Wall	Wood	Brown	Lead Concentration: 1.02 mg/cm <sup>2</sup>	
Reading # 12-41 Building 1320	Exterior	Wall	Wood	Brown	Lead Concentration: 1.1 mg/cm <sup>2</sup>	
Reading # 12-49 Building 1320	Exterior	Wall	Wood	Brown	Lead Concentration: 0.97 mg/cm <sup>2</sup>	
Reading # 12-65 Building 1320	Exterior	Roof Trim	Wood	White	Lead Concentration: 1.04 mg/cm <sup>2</sup>	

**Table 2: LBP Sample Results**  
 mg/cm<sup>2</sup>: milligrams per Square Centimeter  
 LBP: Lead Based Paint

## 5.0 OTHER HAZARDOUS BUILDING MATERIALS ASSESSMENT

A visual inspection was conducted to inventory other hazardous building materials. Other hazardous building materials assessed included misc. petroleum-based containers, batteries, mercury switch, propane cylinder, generator, gas powered lawn mower, home heating oil tank (quantity unknown), 1,000-gallon diesel tank (residual), and large home propane tank (quantity unknown).

### 5.1 Universal Waste

Universal waste is a category of hazardous waste that allows all businesses to handle several common types of hazardous waste under simplified rules. Managing these materials as universal waste means that they are not counted toward your generator status or reported on your Hazardous Waste Report. In Oregon, the following categories of waste can be managed as universal waste:

- Batteries;
- Lights, lamps, light bulbs, and light tubes;
- Mercury-containing thermometers;
- Mercury-containing thermostats;
- Mercury-containing switches and relays;
- Pesticides.

If any of these materials are identified for disposal for the demolition or renovation project, the materials should be removed, packaged, and recycled as universal waste.

### 5.2 Refrigerant Gases

Section 608 of the Federal Clean Air Act prohibits individuals from intentionally venting refrigerants into the atmosphere while disposing of refrigeration/AC equipment. “De minimis” quantities of refrigerant released in the course of making good faith attempts to recapture and recycle or safely dispose of refrigerant are not subject to this prohibition (40 CFR 82.154[a][2]). To implement the venting prohibition, Section 608 specifies evacuation level requirements (40 CFR 82.156) and refrigerant recovery equipment requirements (40 CFR 82.158) for both small appliances and other refrigeration/AC equipment. When demolishing or renovating a structure, the following equipment should be assessed to determine the need for evacuation, recovery, or disposal by a licensed technician:

#### Small Appliances

A small appliance is defined as any appliance that is fully manufactured, charged, and hermetically sealed in a factory with five pounds or less of a CFC or HCFC refrigerant, including the following:

- Refrigerators and freezers (designed for home, commercial, or consumer use);
- Medical or industrial research refrigeration equipment;
- Room air conditioners (including window air conditioners and packaged terminal air heat pumps);
- Under-the-counter ice makers;
- Vending machines; and
- Drinking water coolers.

**All Other Equipment**

All other equipment refers to all appliances except for small appliances, motor vehicle air conditioners (MVACs), and MVAC-like appliances. Specifically, this equipment includes:

- Chillers;
- Industrial refrigeration equipment (not including research equipment);
- Refrigerant fire suppression systems;
- Commercial refrigeration equipment; and
- Cold storage equipment.

**5.3 Fire Extinguishers**

Dry chemical and liquid fire extinguishers may designate as hazardous waste if they are disposed of as solid waste. Fire extinguishers should be removed from service prior to demolishing or renovating the area where the fire extinguishers are mounted or stored. If the fire extinguishers cannot be recycled or reused, they must be designated and disposed of accordingly.

**5.4 Radioactive Exit Signs and Smoke Alarms**

Many exit signs and smoke alarms contain low-level radioactive sources that should be managed in accordance with Nuclear Regulatory Commission Regulations. Accredited mail-in programs are available to recycle these materials. Radioactive exit signs and smoke alarms should be identified for removal and recycling or disposal prior to renovation or demolition of the building or affected area.

**5.5 Summary of Other Hazardous Building Materials**

This hazardous building materials assessment identified fluorescent light tubes, high intensity discharge lamps, refrigerant gases, mercury thermostats, propane tanks, and fire extinguishers that should be removed and reused, recycled, or disposed of prior to the renovation project. No radioactive exit signs or smoke alarms were identified.

Building 2506 - Other Hazardous Building Materials	Total
5 Gallon Oil Bucket	Full – 5 Gallons
1 Gallon Gas Can	¼ Full
2-5 Gallon Lubricant	Full – 10 Gallons
2-1 Quart Motor Oil Containers	Residual
1 Used Oil Filter	Empty
500 Gallon Elevated Gasoline Tank	Empty
Building 2200 - Other Hazardous Building Materials	Total
Misc. Batteries	6-12
1 Large Propane Cylinder	Unknown
1 Generator	Unknown
Gas Powered Mower	Unknown

Building 1320 - Other Hazardous Building Materials	Total
Home Heating Oil Tank	Unknown
Home Propane Tank	Unknown
1 Hot Water Tank	N/A
1 Refrigerator	N/A
Oil Furnace	Unknown
1 Mercury-Containing Thermostat	12 Grams

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

### 6.1 Asbestos Containing Materials

ACM was detected in the areas where the work was understood to be conducted. Therefore, we recommend that this work should be considered an “Asbestos Abatement Project” as defined in the DEQ Regulation OAR 340-248-0010.

### 6.2 Lead-Based Paint

Lead was detected in some of the building materials sampled. Therefore, we recommend implementation of engineering and work practice controls to reduce and maintain employee exposure to lead to or below the permissible exposure limit<sup>1</sup> to the extent that such controls are feasible in accordance with 29 CFR 1926.62(d) construction standards.

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<sup>1</sup> 29 CFR 1926.62 (1): You must ensure that no employee is exposed to lead at concentrations greater than 50 micrograms per cubic meter of air (50 µg/m<sup>3</sup>) averaged over an 8-hour period.

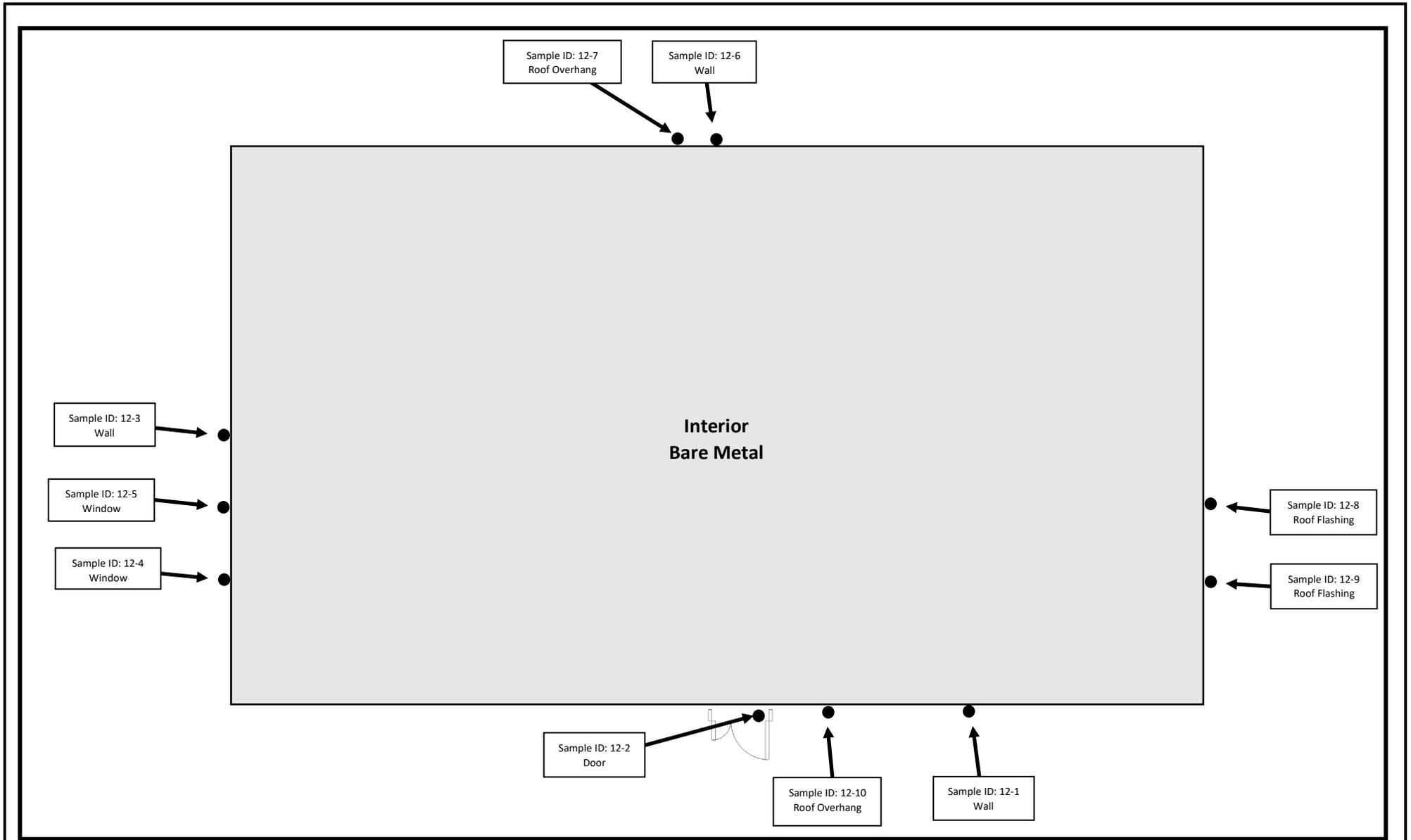
## 7.0 LIMITATIONS

This report presents the results of the hazardous building materials assessment conducted at the USDA Forest Service Thomas Creek Work Center in Lakeview, OR. The assessment was conducted with the objective of identifying hazardous building materials in anticipation of demolition in accordance with certain regulations requiring such identification. For example, 40 CFR 763, along with DEQ OAR 340-248-0270, requires an “Asbestos Survey” before the renovation or demolition of a building. In addition, the State of Oregon Hazardous Waste Regulations (OAR 340) requires identification and designation of solid waste prior to disposal. This includes suspect lead-based paint and building materials.

Our assessment has considered risks pertaining to asbestos, lead in paint, universal waste, and other hazardous building materials discussed in Section 5 of this document. Our assessment is limited to only those locations and materials assessed. This assessment was not designed to identify all potential concerns or to eliminate all risks associated with renovation, demolition, construction, waste disposal, or transferring of property title. Evaluation of other risks not specifically described in the Scope of Work have not been included. For example, the following risks were not assessed: structural integrity, engineering loads, electrical, mechanical, radon gas, slope stability, building settlement, and evaluation of toxic and hazardous substances in, or in contact with, soil and groundwater. No warranty, expressed or implied, is made. DH Environmental has performed the services set forth in the Scope of Work in accordance with generally accepted practices in the same or similar localities, related to the nature of the work accomplished, at the time the services were performed.

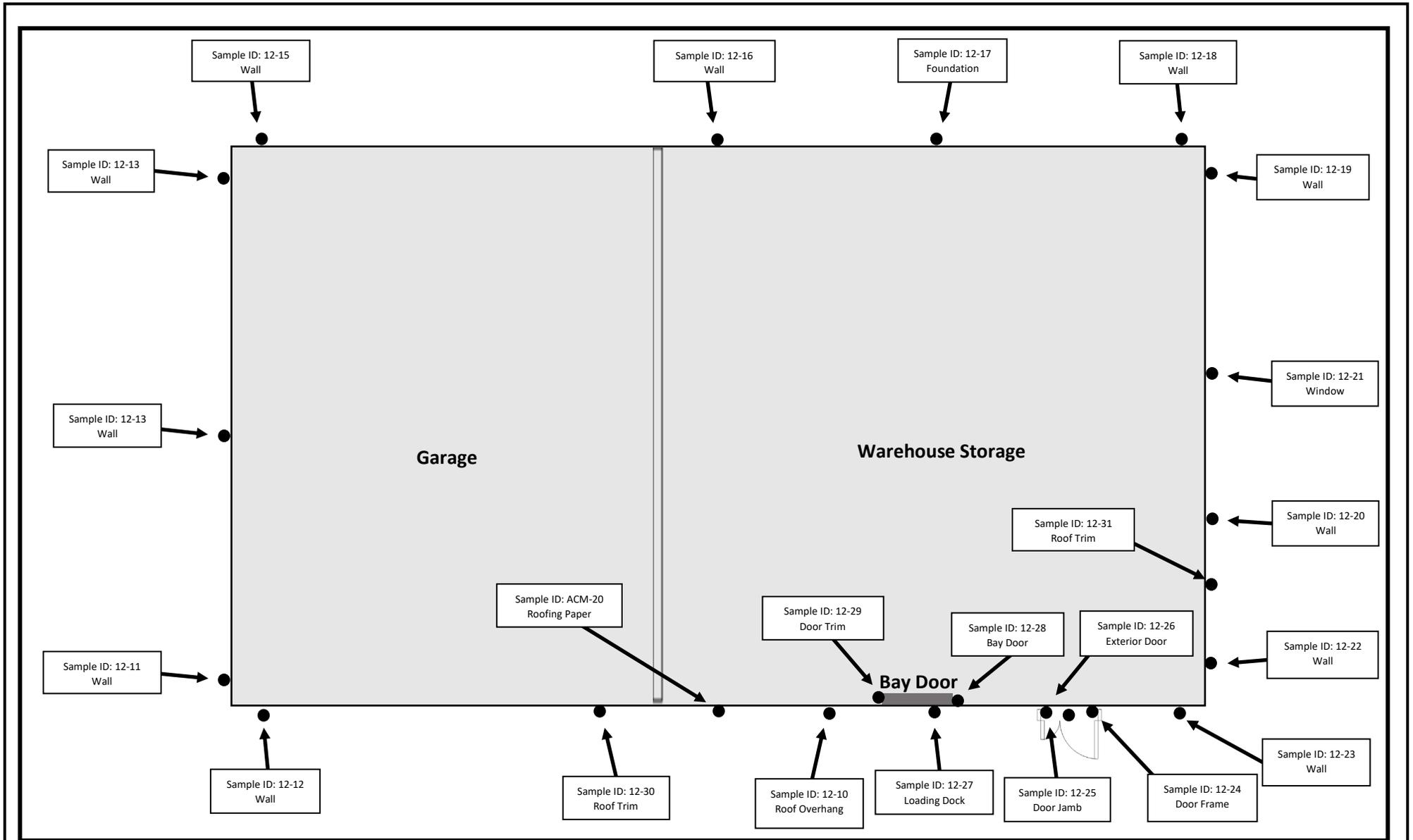
The hazardous building materials assessment presented in this report represents the conditions and materials observed on the dates we conducted the sampling and visually inspected the building. This assessment report is intended for the exclusive use of the USDA Forest Service for specific application to the referenced property. This assessment does not replace or should be used in lieu of professionally developed construction or demolition plans, specifications, or bidding documents. This report is not a legal opinion.

**Figure 1      Gas House – Lead Paint Assessment**



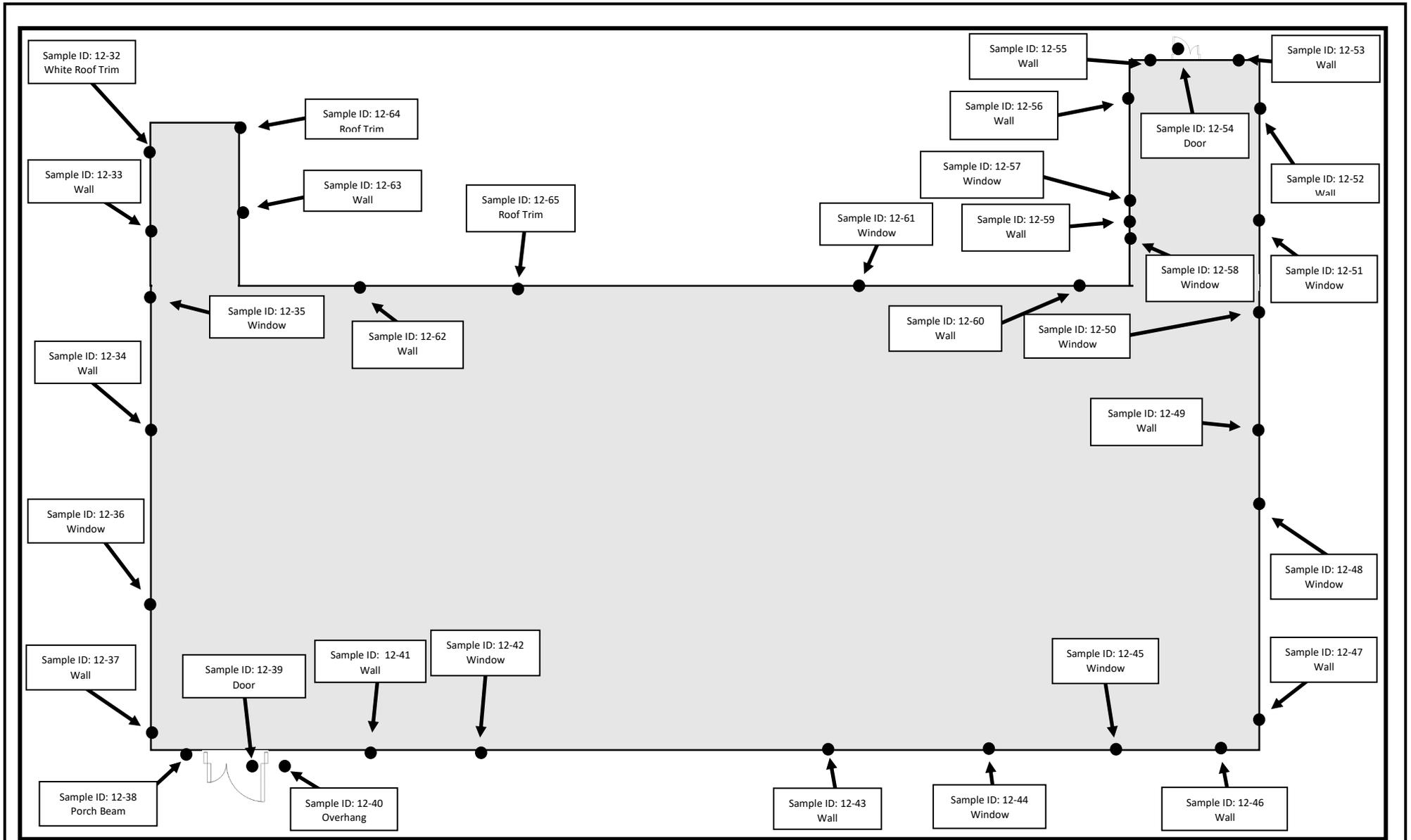
Date: 05-12-2021		<b>Lead-Based Paint Assessment</b> Thomas Creek Work Center	Sample Location Gas House	Figure 1
By: Brian Johnson Accredited WA State Lead Risk Assessor	Site Address: 42 °23'41.05" N, 120°36'18.98" W			

**Figure 2      Warehouse – Lead Paint Assessment**



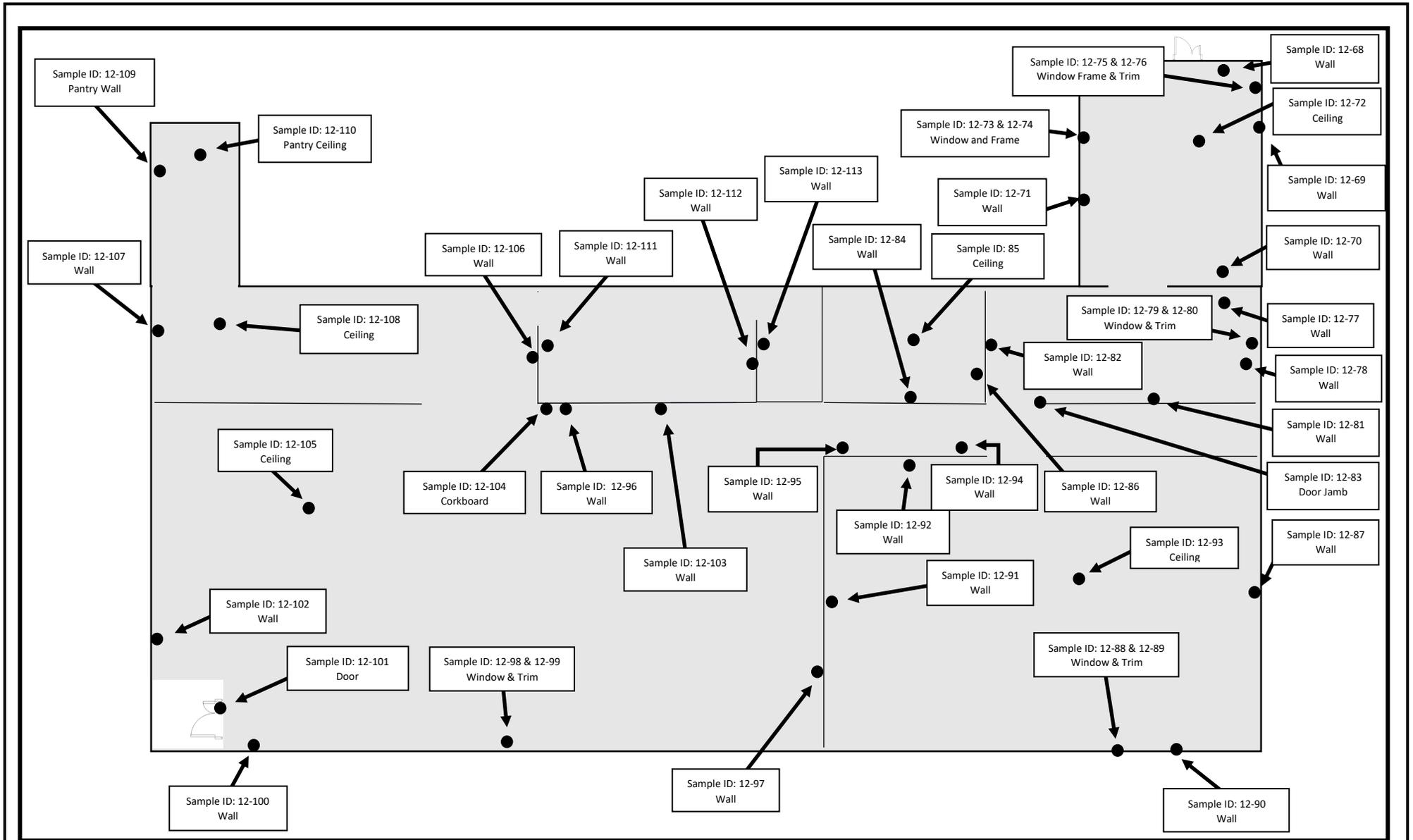
Date: 05-12-2021		<b>Asbestos &amp; Lead-Based Paint Assessment</b> Thomas Creek Work Center	Sample Locations Warehouse Exterior	Figure 2
By: Brian Johnson Accredited WA State Lead Risk Assessor	Site Address: 42 °23'41.05" N, 120°36'18.98" W			

**Figure 3 Barracks Exterior - Lead Paint Assessment**



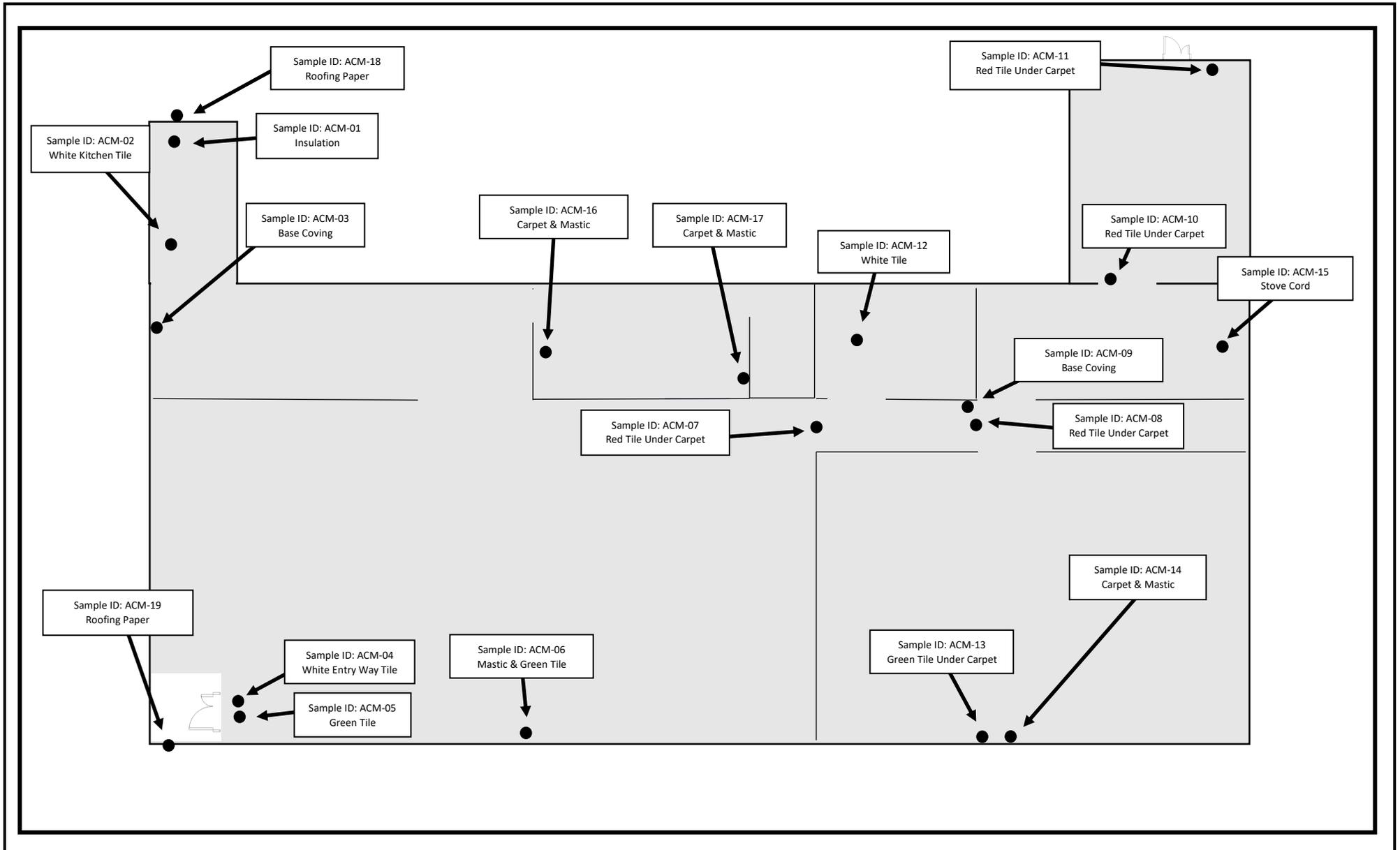
Date: 05-12-2021		<b>Lead-Based Paint Assessment</b> Thomas Creek Work Center	Sample Locations: Barracks Exterior	Figure 3
By: Brian Johnson Accredited WA State Lead Risk Assessor	Site Address: 42 °23'41.05" N, 120°36'18.98" W			

**Figure 4 Barracks Interior – Lead Paint Assessment**



Date: 05-12-2021		<b>Lead-Based Paint Assessment</b> Thomas Creek Work Center	Sample Locations: Barracks Interior	Figure 4
By: Brian Johnson Accredited WA State Lead Risk Assessor	Site Address: 42 °23'41.05" N, 120°36'18.98" W			

**Figure 5 Barracks Interior & Exterior – Asbestos Assessment**



Date: 05-12-2021		<b>Asbestos Assessment</b> Thomas Creek Work Center	Sample Locations Barracks Interior/Exterior	Figure 5
By: Brian Johnson Accredited WA State Lead Risk Assessor	Site Address: 42 °23'41.05" N, 120°36'18.98" W			

Attachment 1 Site Photos



Sample ID: USFS-TCWC-ACM-01



Sample ID: USFS-TCWC-ACM-02



Sample ID: USFS-TCWC-ACM-03



Sample ID: USFS-TCWC-ACM-04



Sample ID: USFS-TCWC-ACM-05



Sample ID: USFS-TCWC-ACM-06



Sample ID: USFS-TCWC-ACM-07



Sample ID: USFS-TCWC-ACM-08



Sample ID: USFS-TCWC-ACM-09



Sample ID: USFS-TCWC-ACM-10



Sample ID: USFS-TCWC-ACM-11



Sample ID: USFS-TCWC-ACM-12



Sample ID: USFS-TCWC-ACM-13



Sample ID: USFS-TCWC-ACM-14



Sample ID: USFS-TCWC-ACM-15



Sample ID: USFS-TCWC-ACM-16



Sample ID: USFS-TCWC-ACM-17



Sample ID: USFS-TCWC-ACM-18



Sample ID: USFS-TCWC-ACM-19



Sample ID: USFS-TCWC-ACM-20



Gas House: Misc. Petroleum Products



Gas House: Misc. Petroleum Products



Gas House: Misc. Petroleum Products



Gas House: Misc. Petroleum Products



Gas House: Misc. Petroleum Products



Gas House: Misc. Petroleum Products



Elevated Empty Gasoline Tank



Warehouse: Propane Cylinder



Warehouse: Generator



Warehouse: Lawn Mower



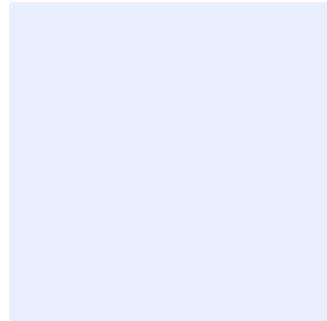
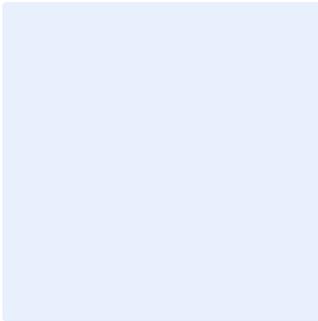
Outside: Diesel Tank



Outside: Propane Tank



Barracks: Oil Furnace



**Attachment 2 Laboratory Analytical Reports**

May 24, 2021



Brian Johnson  
DH Environmental  
1011 SW Klickitat Way Suite 107  
Seattle, WA 98134

**RE: Bulk Asbestos Fiber Analysis; NVL Batch # 2108813.00**

Client Project: Thomas Creek Work Center  
Location: Lakeview, OR

Dear Mr. Johnson,

Enclosed please find test results for the 20 sample(s) submitted to our laboratory for analysis on 5/14/2021.

Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with **U. S. EPA 40 CFR Appendix E to Subpart E of Part 763**, Interim Method for the Determination of Asbestos in Bulk Insulation Samples and **EPA 600/R-93/116**, Method for the Determination of Asbestos in Bulk Building Materials.

For samples containing more than one separable layer of materials, the report will include findings for each layer (labeled Layer 1 and Layer 2, etc. for each individual layer). The asbestos concentration in the sample is determined by calibrated visual estimation.

For those samples with asbestos concentrations between 1 and 10 percent based on visual estimation, the EPA recommends a procedure known as point counting (NESHAPS, 40 CFR Part 61). Point counting is a statistically more accurate means of quantification for samples with low concentrations of asbestos.

The detection limit for the calibrated visual estimation is <1%, 400 point counts is 0.25% and 1000 point counts is 0.1%

Samples are archived for two weeks following analysis. Samples that are not retrieved by the client are discarded after two weeks.

Thank you for using our laboratory services. Please do not hesitate to call if there is anything further we can assist you with.

Sincerely,

A handwritten signature in black ink, appearing to read "Nick Ly".

Nick Ly, Technical Director



Lab Code: 102063-0

Enc.: Sample Results

**Phone: 206 547.0100 | Fax: 206 634.1936 | Toll Free: 1.888.NVL.LABS (685.5227)**  
**4708 Aurora Avenue North | Seattle, WA 98103-6516**



# Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: DH Environmental  
 Address: 1011 SW Klickitat Way Suite 107  
 Seattle, WA 98134

**Batch #: 2108813.00**  
 Client Project #: Thomas Creek Work Center  
 Date Received: 5/14/2021  
 Samples Received: 20  
 Samples Analyzed: 20  
 Method: EPA/600/R-93/116

**Attention: Mr. Brian Johnson**  
 Project Location: Lakeview, OR

**Lab ID: 21060178**      **Client Sample #: USFS-TCWC-ACM-01**

Location: Lakeview, OR

<b>Layer 1 of 2</b>	<b>Description:</b> Brown crumbly fibrous material with black asphaltic mastic		
	Non-Fibrous Materials:	Other Fibrous Materials: %	<b>Asbestos Type: %</b>
	Binder/Filler, Asphalt/Binder, Fine particles	Cellulose 73%	<b>None Detected ND</b>
<b>Layer 2 of 2</b>	<b>Description:</b> Yellow fluffy fibrous material with debris		
	Non-Fibrous Materials:	Other Fibrous Materials: %	<b>Asbestos Type: %</b>
	Binder/Filler, Glass debris, Fine particles	Glass fibers 94%	<b>None Detected ND</b>
	Debris		

**Lab ID: 21060179**      **Client Sample #: USFS-TCWC-ACM-02**

Location: Lakeview, OR

<b>Layer 1 of 2</b>	<b>Description:</b> Off-white vinyl tile with debris		
	Non-Fibrous Materials:	Other Fibrous Materials: %	<b>Asbestos Type: %</b>
	Vinyl/Binder, Fine grains, Fine particles	None Detected ND	<b>None Detected ND</b>
	Debris		
<b>Layer 2 of 2</b>	<b>Description:</b> Black asphaltic mastic with debris		
	Non-Fibrous Materials:	Other Fibrous Materials: %	<b>Asbestos Type: %</b>
	Asphalt/Binder, Fine particles, Debris	Cellulose <1%	<b>Chrysotile 3%</b>

**Lab ID: 21060180**      **Client Sample #: USFS-TCWC-ACM-03**

Location: Lakeview, OR

<b>Layer 1 of 3</b>	<b>Description:</b> Brown rubbery material with debris		
	Non-Fibrous Materials:	Other Fibrous Materials: %	<b>Asbestos Type: %</b>
	Vinyl/Binder, Fine particles, Debris	None Detected ND	<b>None Detected ND</b>

**Sampled by:** Client

**Analyzed by:** Hilary Crumley

**Reviewed by:** Nick Ly

**Date:** 05/21/2021

**Date:** 05/24/2021

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government



# Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: DH Environmental  
 Address: 1011 SW Klickitat Way Suite 107  
 Seattle, WA 98134

**Batch #: 2108813.00**  
 Client Project #: Thomas Creek Work Center  
 Date Received: 5/14/2021  
 Samples Received: 20  
 Samples Analyzed: 20  
 Method: EPA/600/R-93/116

**Attention: Mr. Brian Johnson**  
 Project Location: Lakeview, OR

<b>Layer 2 of 3</b>	<b>Description:</b> Brown brittle mastic	Non-Fibrous Materials: Mastic/Binder, Fine particles	Other Fibrous Materials:% None Detected ND	<b>Asbestos Type: %</b> <b>None Detected ND</b>
<b>Layer 3 of 3</b>	<b>Description:</b> Tan brittle mastic with paint	Non-Fibrous Materials: Mastic/Binder, Fine particles, Paint	Other Fibrous Materials:% None Detected ND	<b>Asbestos Type: %</b> <b>None Detected ND</b>

**Lab ID: 21060181**      **Client Sample #: USFS-TCWC-ACM-04**  
 Location: Lakeview, OR

<b>Layer 1 of 2</b>	<b>Description:</b> Beige vinyl tile	Non-Fibrous Materials: Vinyl/Binder, Fine grains, Fine particles	Other Fibrous Materials:% None Detected ND	<b>Asbestos Type: %</b> <b>None Detected ND</b>
<b>Layer 2 of 2</b>	<b>Description:</b> Black asphaltic mastic	Non-Fibrous Materials: Asphalt/Binder, Fine particles	Other Fibrous Materials:% None Detected ND	<b>Asbestos Type: %</b> <b>Chrysotile 2%</b>

**Lab ID: 21060182**      **Client Sample #: USFS-TCWC-ACM-05**  
 Location: Lakeview, OR

<b>Layer 1 of 2</b>	<b>Description:</b> Dark green vinyl tile	Non-Fibrous Materials: Vinyl/Binder, Fine grains, Fine particles Glass debris	Other Fibrous Materials:% None Detected ND	<b>Asbestos Type: %</b> <b>Chrysotile 7%</b>
<b>Layer 2 of 2</b>	<b>Description:</b> Black asphaltic mastic with debris	Non-Fibrous Materials: Asphalt/Binder, Fine particles, Debris	Other Fibrous Materials:% Cellulose <1%	<b>Asbestos Type: %</b> <b>Chrysotile 3%</b>

**Lab ID: 21060183**      **Client Sample #: USFS-TCWC-ACM-06**  
 Location: Lakeview, OR

<b>Sampled by:</b> Client	 _____ Nick Ly, Technical Director
<b>Analyzed by:</b> Hilary Crumley	
<b>Reviewed by:</b> Nick Ly	
<b>Date:</b> 05/21/2021	
<b>Date:</b> 05/24/2021	

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government



# Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: DH Environmental  
Address: 1011 SW Klickitat Way Suite 107  
Seattle, WA 98134

**Batch #: 2108813.00**

Client Project #: Thomas Creek Work Center

Date Received: 5/14/2021

Samples Received: 20

Samples Analyzed: 20

Method: EPA/600/R-93/116

**Attention: Mr. Brian Johnson**

Project Location: Lakeview, OR

<b>Layer 1 of 3</b>	<b>Description:</b> Tan soft mastic with debris Non-Fibrous Materials: Mastic/Binder, Fine particles, Debris	Other Fibrous Materials:% Synthetic fibers 3%	<b>Asbestos Type: %</b> <b>None Detected ND</b>
<b>Layer 2 of 3</b>	<b>Description:</b> Dark green vinyl tile Non-Fibrous Materials: Vinyl/Binder, Fine grains, Fine particles Glass debris	Other Fibrous Materials:% None Detected ND	<b>Asbestos Type: %</b> <b>Chrysotile 6%</b>
<b>Layer 3 of 3</b>	<b>Description:</b> Black asphaltic mastic Non-Fibrous Materials: Asphalt/Binder, Fine particles	Other Fibrous Materials:% None Detected ND	<b>Asbestos Type: %</b> <b>Chrysotile 4%</b>

**Lab ID: 21060184**      **Client Sample #: USFS-TCWC-ACM-07**

Location: Lakeview, OR

<b>Layer 1 of 4</b>	<b>Description:</b> Yellow soft mastic with debris Non-Fibrous Materials: Mastic/Binder, Fine particles, Debris	Other Fibrous Materials:% Synthetic fibers 1%	<b>Asbestos Type: %</b> <b>None Detected ND</b>
<b>Layer 2 of 4</b>	<b>Description:</b> Dark red vinyl tile Non-Fibrous Materials: Vinyl/Binder, Fine grains, Fine particles Glass debris	Other Fibrous Materials:% None Detected ND	<b>Asbestos Type: %</b> <b>Chrysotile 7%</b>
<b>Layer 3 of 4</b>	<b>Description:</b> Black asphaltic mastic Non-Fibrous Materials: Asphalt/Binder, Fine particles	Other Fibrous Materials:% None Detected ND	<b>Asbestos Type: %</b> <b>Chrysotile 3%</b>
<b>Layer 4 of 4</b>	<b>Description:</b> Beige crumbly material Non-Fibrous Materials: Binder/Filler, Fine grains, Fine particles	Other Fibrous Materials:% Cellulose <1%	<b>Asbestos Type: %</b> <b>None Detected ND</b>

**Sampled by:** Client

**Analyzed by:** Hilary Crumley

**Reviewed by:** Nick Ly

**Date:** 05/21/2021

**Date:** 05/24/2021

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government



# Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: DH Environmental  
 Address: 1011 SW Klickitat Way Suite 107  
 Seattle, WA 98134

**Batch #: 2108813.00**  
 Client Project #: Thomas Creek Work Center  
 Date Received: 5/14/2021  
 Samples Received: 20  
 Samples Analyzed: 20  
 Method: EPA/600/R-93/116

**Attention: Mr. Brian Johnson**  
 Project Location: Lakeview, OR

**Lab ID: 21060185**      **Client Sample #: USFS-TCWC-ACM-08**

Location: Lakeview, OR

<b>Layer 1 of 3</b>	<b>Description:</b> Yellow soft mastic with debris			
	Non-Fibrous Materials:	Other Fibrous Materials:%		<b>Asbestos Type: %</b>
	Mastic/Binder, Fine particles, Debris	Synthetic fibers 1%		<b>None Detected ND</b>
<b>Layer 2 of 3</b>	<b>Description:</b> Dark red vinyl tile			
	Non-Fibrous Materials:	Other Fibrous Materials:%		<b>Asbestos Type: %</b>
	Vinyl/Binder, Fine grains, Fine particles	None Detected ND		<b>Chrysotile 7%</b>
	Glass debris			
<b>Layer 3 of 3</b>	<b>Description:</b> Black asphaltic mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		<b>Asbestos Type: %</b>
	Asphalt/Binder, Fine particles	Cellulose <1%		<b>Chrysotile 4%</b>

**Lab ID: 21060186**      **Client Sample #: USFS-TCWC-ACM-09**

Location: Lakeview, OR

<b>Layer 1 of 2</b>	<b>Description:</b> Brown rubbery material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		<b>Asbestos Type: %</b>
	Vinyl/Binder, Fine particles	None Detected ND		<b>None Detected ND</b>
<b>Layer 2 of 2</b>	<b>Description:</b> Brown brittle mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		<b>Asbestos Type: %</b>
	Mastic/Binder, Fine particles	Cellulose <1%		<b>None Detected ND</b>

**Lab ID: 21060187**      **Client Sample #: USFS-TCWC-ACM-10**

Location: Lakeview, OR

<b>Layer 1 of 3</b>	<b>Description:</b> Yellow brittle mastic with debris			
	Non-Fibrous Materials:	Other Fibrous Materials:%		<b>Asbestos Type: %</b>
	Mastic/Binder, Fine particles, Debris	Synthetic fibers 1%		<b>None Detected ND</b>

<b>Sampled by:</b> Client		
<b>Analyzed by:</b> Hilary Crumley	<b>Date:</b> 05/21/2021	
<b>Reviewed by:</b> Nick Ly	<b>Date:</b> 05/24/2021	Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government



# Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: DH Environmental  
 Address: 1011 SW Klickitat Way Suite 107  
 Seattle, WA 98134

**Batch #: 2108813.00**  
 Client Project #: Thomas Creek Work Center  
 Date Received: 5/14/2021  
 Samples Received: 20  
 Samples Analyzed: 20  
 Method: EPA/600/R-93/116

**Attention: Mr. Brian Johnson**  
 Project Location: Lakeview, OR

		Cellulose <1%	
<b>Layer 2 of 3</b>	<b>Description:</b> Dark red vinyl tile		
	Non-Fibrous Materials:	Other Fibrous Materials:%	<b>Asbestos Type: %</b>
	Vinyl/Binder, Fine grains, Fine particles	None Detected ND	<b>Chrysotile 7%</b>
<b>Layer 3 of 3</b>	<b>Description:</b> Black asphaltic mastic		
	Non-Fibrous Materials:	Other Fibrous Materials:%	<b>Asbestos Type: %</b>
	Asphalt/Binder, Fine particles	None Detected ND	<b>Chrysotile 4%</b>

**Lab ID: 21060188**      **Client Sample #: USFS-TCWC-ACM-11**  
 Location: Lakeview, OR

<b>Layer 1 of 3</b>	<b>Description:</b> Tan soft mastic with debris		
	Non-Fibrous Materials:	Other Fibrous Materials:%	<b>Asbestos Type: %</b>
	Mastic/Binder, Fine particles, Debris	Synthetic fibers 2%	<b>None Detected ND</b>
		Cellulose <1%	
<b>Layer 2 of 3</b>	<b>Description:</b> Dark red vinyl tile		
	Non-Fibrous Materials:	Other Fibrous Materials:%	<b>Asbestos Type: %</b>
	Vinyl/Binder, Fine grains, Fine particles	None Detected ND	<b>Chrysotile 7%</b>
<b>Layer 3 of 3</b>	<b>Description:</b> Black asphaltic mastic		
	Non-Fibrous Materials:	Other Fibrous Materials:%	<b>Asbestos Type: %</b>
	Asphalt/Binder, Fine particles	None Detected ND	<b>Chrysotile 4%</b>

**Lab ID: 21060189**      **Client Sample #: USFS-TCWC-ACM-12**  
 Location: Lakeview, OR

<b>Layer 1 of 2</b>	<b>Description:</b> Off-white vinyl tile		
	Non-Fibrous Materials:	Other Fibrous Materials:%	<b>Asbestos Type: %</b>
	Vinyl/Binder, Fine grains, Fine particles	None Detected ND	<b>None Detected ND</b>

<b>Sampled by:</b> Client		
<b>Analyzed by:</b> Hilary Crumley	<b>Date:</b> 05/21/2021	
<b>Reviewed by:</b> Nick Ly	<b>Date:</b> 05/24/2021	Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government



# Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: DH Environmental  
Address: 1011 SW Klickitat Way Suite 107  
Seattle, WA 98134

**Batch #: 2108813.00**

Client Project #: Thomas Creek Work Center

Date Received: 5/14/2021

Samples Received: 20

Samples Analyzed: 20

Method: EPA/600/R-93/116

**Attention: Mr. Brian Johnson**

Project Location: Lakeview, OR

<b>Layer 2 of 2</b>	<b>Description:</b> Black asphaltic mastic			
	Non-Fibrous Materials:	Other Fibrous Materials: %		<b>Asbestos Type: %</b>
	Asphalt/Binder, Fine particles	None Detected	ND	<b>Chrysotile 3%</b>

**Lab ID: 21060190**      **Client Sample #: USFS-TCWC-ACM-13**

Location: Lakeview, OR

<b>Layer 1 of 3</b>	<b>Description:</b> Yellow soft mastic with debris			
	Non-Fibrous Materials:	Other Fibrous Materials: %		<b>Asbestos Type: %</b>
	Mastic/Binder, Fine particles, Debris	Synthetic fibers	1%	<b>None Detected ND</b>

<b>Layer 2 of 3</b>	<b>Description:</b> Red vinyl tile			
	Non-Fibrous Materials:	Other Fibrous Materials: %		<b>Asbestos Type: %</b>
	Vinyl/Binder, Fine grains, Fine particles	None Detected	ND	<b>Chrysotile 7%</b>

<b>Layer 3 of 3</b>	<b>Description:</b> Black asphaltic mastic			
	Non-Fibrous Materials:	Other Fibrous Materials: %		<b>Asbestos Type: %</b>
	Asphalt/Binder, Fine particles	Cellulose	<1%	<b>Chrysotile 4%</b>

**Lab ID: 21060191**      **Client Sample #: USFS-TCWC-ACM-14**

Location: Lakeview, OR

<b>Layer 1 of 1</b>	<b>Description:</b> Multicolored woven fibrous material with beige and yellow mastic			
	Non-Fibrous Materials:	Other Fibrous Materials: %		<b>Asbestos Type: %</b>
	Binder/Filler, Mastic/Binder, Fine particles	Synthetic fibers	73%	<b>None Detected ND</b>

**Lab ID: 21060192**      **Client Sample #: USFS-TCWC-ACM-15**

Location: Lakeview, OR

<b>Layer 1 of 1</b>	<b>Description:</b> White woven fibrous material with debris			
	Non-Fibrous Materials:	Other Fibrous Materials: %		<b>Asbestos Type: %</b>
	Binder/Filler, Fine particles, Debris	Glass fibers	96%	<b>None Detected ND</b>

**Sampled by:** Client

**Analyzed by:** Hilary Crumley

**Reviewed by:** Nick Ly

**Date:** 05/21/2021

**Date:** 05/24/2021

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government



# Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: DH Environmental  
 Address: 1011 SW Klickitat Way Suite 107  
 Seattle, WA 98134

**Batch #: 2108813.00**  
 Client Project #: Thomas Creek Work Center  
 Date Received: 5/14/2021  
 Samples Received: 20  
 Samples Analyzed: 20  
 Method: EPA/600/R-93/116

**Attention: Mr. Brian Johnson**  
 Project Location: Lakeview, OR

**Lab ID: 21060193**      **Client Sample #: USFS-TCWC-ACM-16**

Location: Lakeview, OR

<b>Layer 1 of 2</b>	<b>Description:</b> Brown woven fibrous material with yellow mastic			
	Non-Fibrous Materials:	Other Fibrous Materials: %		<b>Asbestos Type: %</b>
	Binder/Filler, Mastic/Binder, Fine particles	Synthetic fibers 70%		<b>None Detected ND</b>
<b>Layer 2 of 2</b>	<b>Description:</b> Black asphaltic mastic with debris			
	Non-Fibrous Materials:	Other Fibrous Materials: %		<b>Asbestos Type: %</b>
	Asphalt/Binder, Fine particles, Debris	Cellulose 3%		<b>Chrysotile 3%</b>

**Lab ID: 21060194**      **Client Sample #: USFS-TCWC-ACM-17**

Location: Lakeview, OR

<b>Layer 1 of 2</b>	<b>Description:</b> Brown woven fibrous material with yellow mastic			
	Non-Fibrous Materials:	Other Fibrous Materials: %		<b>Asbestos Type: %</b>
	Binder/Filler, Mastic/Binder, Fine particles	Synthetic fibers 72%		<b>None Detected ND</b>
<b>Layer 2 of 2</b>	<b>Description:</b> Black asphaltic mastic with debris			
	Non-Fibrous Materials:	Other Fibrous Materials: %		<b>Asbestos Type: %</b>
	Asphalt/Binder, Fine particles, Debris	Cellulose 2%		<b>Chrysotile 3%</b>

**Lab ID: 21060195**      **Client Sample #: USFS-TCWC-ACM-18**

Location: Lakeview, OR

<b>Layer 1 of 1</b>	<b>Description:</b> Black asphaltic fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials: %		<b>Asbestos Type: %</b>
	Asphalt/Binder, Fine particles	Cellulose 52%		<b>None Detected ND</b>

**Lab ID: 21060196**      **Client Sample #: USFS-TCWC-ACM-19**

Location: Lakeview, OR

<b>Sampled by:</b> Client		
<b>Analyzed by:</b> Hilary Crumley	<b>Date:</b> 05/21/2021	
<b>Reviewed by:</b> Nick Ly	<b>Date:</b> 05/24/2021	Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government



# Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: DH Environmental  
Address: 1011 SW Klickitat Way Suite 107  
Seattle, WA 98134

**Attention: Mr. Brian Johnson**  
Project Location: Lakeview, OR

**Batch #: 2108813.00**  
Client Project #: Thomas Creek Work Center  
Date Received: 5/14/2021  
Samples Received: 20  
Samples Analyzed: 20  
Method: EPA/600/R-93/116

---

**Layer 1 of 1**      **Description:** Black asphaltic fibrous material with debris  
Non-Fibrous Materials:      Other Fibrous Materials:%  
Asphalt/Binder, Fine particles, Debris      Cellulose 51%      **Asbestos Type: %**  
Insect parts      **None Detected ND**

---

**Lab ID: 21060197**      **Client Sample #: USFS-TCWC-ACM-20**  
Location: Lakeview, OR

**Layer 1 of 1**      **Description:** Black asphaltic fibrous material with debris  
Non-Fibrous Materials:      Other Fibrous Materials:%  
Asphalt/Binder, Fine particles, Debris      Cellulose 52%      **Asbestos Type: %**  
Wood flakes      **None Detected ND**

**Sampled by:** Client  
**Analyzed by:** Hilary Crumley      **Date:** 05/21/2021  
**Reviewed by:** Nick Ly      **Date:** 05/24/2021        
Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

# ASBESTOS LABORATORY SERVICES



<b>Company</b> DH Environmental	<b>NVL Batch Number</b> 2108813.00
<b>Address</b> 1011 SW Klickitat Way Suite 107 Seattle, WA 98134	<b>TAT</b> 5 Days <b>AH</b> No
<b>Project Manager</b> Mr. Brian Johnson	<b>Rush TAT</b>
<b>Phone</b> (206) 934-4043	<b>Due Date</b> 5/21/2021 <b>Time</b> 12:30 PM
	<b>Email</b> brian.johnson@dhenviro.com
	<b>Fax</b> (206) 930-4043

<b>Project Name/Number:</b> Thomas Creek Work Center	<b>Project Location:</b> Lakeview, OR
--	---------------------------------------

**Subcategory** PLM Bulk

**Item Code** ASB-02      EPA 600/R-93-116 Asbestos by PLM <bulk>

**Total Number of Samples** 20      **Rush Samples**

Lab ID	Sample ID	Description	A/R
1	21060178	USFS-TCWC-ACM-01	A
2	21060179	USFS-TCWC-ACM-02	A
3	21060180	USFS-TCWC-ACM-03	A
4	21060181	USFS-TCWC-ACM-04	A
5	21060182	USFS-TCWC-ACM-05	A
6	21060183	USFS-TCWC-ACM-06	A
7	21060184	USFS-TCWC-ACM-07	A
8	21060185	USFS-TCWC-ACM-08	A
9	21060186	USFS-TCWC-ACM-09	A
10	21060187	USFS-TCWC-ACM-10	A
11	21060188	USFS-TCWC-ACM-11	A
12	21060189	USFS-TCWC-ACM-12	A
13	21060190	USFS-TCWC-ACM-13	A
14	21060191	USFS-TCWC-ACM-14	A
15	21060192	USFS-TCWC-ACM-15	A
16	21060193	USFS-TCWC-ACM-16	A
17	21060194	USFS-TCWC-ACM-17	A
18	21060195	USFS-TCWC-ACM-18	A

	Print Name	Signature	Company	Date	Time
<b>Sampled by</b>	Client				
<b>Relinquished by</b>	Drop Box				

Office Use Only	Print Name	Signature	Company	Date	Time
<b>Received by</b>	Hilary Crumley		NVL	5/14/21	1230
<b>Analyzed by</b>	Hilary Crumley		NVL	5/21/21	
<b>Results Called by</b>					
<input type="checkbox"/> <b>Faxed</b> <input type="checkbox"/> <b>Emailed</b>					

**Special Instructions:**

---



---

Date: 5/14/2021  
 Time: 3:05 PM  
 Entered By: Kelly AuVu

# ASBESTOS LABORATORY SERVICES



<b>Company</b> DH Environmental <b>Address</b> 1011 SW Klickitat Way Suite 107 Seattle, WA 98134 <b>Project Manager</b> Mr. Brian Johnson <b>Phone</b> (206) 934-4043	<b>NVL Batch Number</b> <b>2108813.00</b> <b>TAT</b> 5 Days <b>AH</b> No <b>Rush TAT</b> <b>Due Date</b> 5/21/2021 <b>Time</b> 12:30 PM <b>Email</b> brian.johnson@dhenviro.com <b>Fax</b> (206) 930-4043
---	--

**Project Name/Number:** Thomas Creek Work Center      **Project Location:** Lakeview, OR

**Subcategory** PLM Bulk  
**Item Code** ASB-02      EPA 600/R-93-116 Asbestos by PLM <bulk>

**Total Number of Samples** 20      **Rush Samples** \_\_\_\_\_

Lab ID	Sample ID	Description	A/R
19	21060196	USFS-TCWC-ACM-19	A
20	21060197	USFS-TCWC-ACM-20	A

	Print Name	Signature	Company	Date	Time
<b>Sampled by</b>	Client				
<b>Relinquished by</b>	Drop Box				

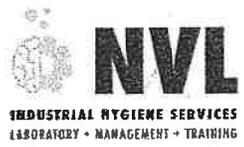
Office Use Only	Print Name	Signature	Company	Date	Time
<b>Received by</b>	Hilary Crumley		NVL	5/14/21	1230
<b>Analyzed by</b>	Hilary Crumley		NVL	5/21/21	
<b>Results Called by</b>					
<input type="checkbox"/> <b>Faxed</b> <input type="checkbox"/> <b>Emailed</b>					

**Special Instructions:** \_\_\_\_\_

Date: 5/14/2021  
 Time: 3:05 PM  
 Entered By: Kelly AuVu

rac

2108813



# ASBESTOS CHAIN OF CUSTODY

### Turn Around Time

- 1 Hour       24 Hours       4 Days
- 2 Hours       2 Days       5 Days
- 4 Hours       3 Days       10 Days

Please call for TAT less than 24 Hours

Company DH Environmental Project Manager Brian Johnson  
 Address 1011 SW Klickitat Way Cell (206) 930-4043  
Seattle, WA 98134 Email \_\_\_\_\_  
 Phone 206-930-4043 Fax ( ) \_\_\_\_\_

Project Name/Number Thomas Creek Work Center Project Location LaKeview, OR

- PCM Air (NIOSH 7400)       TEM (NIOSH 7402)       TEM (AHERA)       TEM (EPA Level II Modified)
- PLM (EPA 600/R-93-116)       EPA 400 Points (600/R-93-116)       EPA 1000 Points (600/R-93-116)
- PLM Gravimetry (600/R-93-116)       Asbestos in Vermiculite (EPA 600/R-04/004)       Asbestos in Sediment (EPA 1900 Points)
- Asbestos Friable/Non-Friable (EPA 600/R-93/116)       Other \_\_\_\_\_

Reporting Instructions Please send results to Brian Johnson  
 Call ( ) \_\_\_\_\_       Fax ( ) \_\_\_\_\_       Email brian.johnson@dhenviro.com

Total Number of Samples 20 15

Sample ID	Description	A/R
1	USFS-TCWC-ACM-01	Insulation
2	USFS-TCWC-ACM-02	Tile & mastic
3	USFS-TCWC-ACM-03	Base coat & mastic
4	USFS-TCWC-ACM-04	Tile & mastic
5	USFS-TCWC-ACM-05	Tile
6	USFS-TCWC-ACM-06	Tile & mastic
7	USFS-TCWC-ACM-07	Tile & mastic
8	USFS-TCWC-ACM-08	Tile & mastic
9	USFS-TCWC-ACM-09	Base coat & mastic
10	USFS-TCWC-ACM-10	Tile & mastic
11	USFS-TCWC-ACM-11	Tile & mastic
12	USFS-TCWC-ACM-12	Tile & mastic
13	USFS-TCWC-ACM-13	Tile & mastic
14	USFS-TCWC-ACM-14	Carpet & mastic
15	USFS-TCWC-ACM-15	Fireplace door

	Print Name	Signature	Company	Date	Time
Sampled by	Brian Johnson		DH Env.	5-12-21	0900
Relinquish by	Brian Johnson		DH Env.	5-14-21	1200

### Office Use Only

	Print Name	Signature	Company	Date	Time
Received by				5/14/21	1230 DB
Analyzed by					
Called by					
Faxed/Email by					



# ASBESTOS CHAIN OF CUSTODY

Turn Around Time

- 1 Hour       24 Hours       4 Days
- 2 Hours       2 Days       5 Days
- 4 Hours       3 Days       10 Days

Please call for TAT less than 24 Hours

Company \_\_\_\_\_ Project Manager \_\_\_\_\_  
 Address \_\_\_\_\_ Cell (    ) - \_\_\_\_\_  
 \_\_\_\_\_ Email \_\_\_\_\_  
 Phone \_\_\_\_\_ Fax (    ) - \_\_\_\_\_

Project Name/Number	Project Location
---------------------	------------------

- PCM Air (NIOSH 7400)       TEM (NIOSH 7402)       TEM (AHERA)       TEM (EPA Level II Modified)
- PLM (EPA 600/R-93-116)       EPA 400 Points (600/R-93-116)       EPA 1000Points (600/R-93-116)
- PLM Gravimetry (600/R-93-116)       Asbestos in Vermiculite (EPA 600/R-04/004)       Asbestos in Sediment (EPA 1900 Points)
- Asbestos Friable/Non-Friable (EPA 600/R-93/116)       Other \_\_\_\_\_

Reporting Instructions \_\_\_\_\_  
 Call (    ) - \_\_\_\_\_       Fax (    ) - \_\_\_\_\_       Email \_\_\_\_\_

Total Number of Samples 5

Sample ID	Description	A/R
1	USFS-TCWL-ACM-16 Carpet & mastic	
2	USFS-TCWL-ACM-17 Carpet & mastic	
3	USFS-TCWL-ACM-18 Roofing paper	
4	USFS-TCWL-ACM-19 Roofing paper	
5	USFS-TCWL-ACM-20 Roofing paper	
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

Print Name	Signature	Company	Date	Time
Sampled by Brian Johnson		DH Env.	5-12-21	0900
Relinquish by Brian Johnson		DH Env.	5-14-21	1200

**Office Use Only**

Print Name	Signature	Company	Date	Time
Received by Hilary		NVL	5/14/21	12:30 PM
Analyzed by				
Called by				
Faxed/Email by				

**Attachment 3 XRF Data**

## XRF Data

Instrument Serial Number	Reading #	Date	Time	Method Name	Pb Action Level Cutoff	Units	Pb Concentration	Pb Action Level
821477	1	5/12/2021	8:00:25	LeadPaint	1	mg/cm2	0.00836	Negative
821477	2	5/12/2021	8:01:26	LeadPaint	1	mg/cm2	0.01794	Negative
821477	3	5/12/2021	8:02:27	LeadPaint	1	mg/cm2	0.00834	Negative
821477	4	5/12/2021	8:02:57	LeadPaint	1	mg/cm2	0.00633	Negative
821477	5	5/12/2021	8:03:43	LeadPaint	1	mg/cm2	0.00142	Negative
821477	6	5/12/2021	8:04:24	LeadPaint	1	mg/cm2	0.01203	Negative
821477	7	5/12/2021	8:04:49	LeadPaint	1	mg/cm2	0.01912	Negative
821477	8	5/12/2021	8:05:46	LeadPaint	1	mg/cm2	0.01862	Negative
821477	9	5/12/2021	8:06:11	LeadPaint	1	mg/cm2	0.01566	Negative
821477	10	5/12/2021	8:07:29	LeadPaint	1	mg/cm2	0.02624	Negative
821477	11	5/12/2021	8:09:38	LeadPaint	1	mg/cm2	0.53548	Negative
821477	12	5/12/2021	8:10:17	LeadPaint	1	mg/cm2	0.74596	Negative
821477	13	5/12/2021	8:10:46	LeadPaint	1	mg/cm2	0.75386	Negative
821477	14	5/12/2021	8:11:15	LeadPaint	1	mg/cm2	0.52446	Negative
821477	15	5/12/2021	8:11:53	LeadPaint	1	mg/cm2	0.68969	Negative
821477	16	5/12/2021	8:12:20	LeadPaint	1	mg/cm2	1.01304	Positive
821477	17	5/12/2021	8:13:11	LeadPaint	1	mg/cm2	<LOD	Negative
821477	18	5/12/2021	8:13:46	LeadPaint	1	mg/cm2	0.90068	Negative
821477	19	5/12/2021	8:14:21	LeadPaint	1	mg/cm2	<LOD	Negative
821477	20	5/12/2021	8:14:43	LeadPaint	1	mg/cm2	<LOD	Negative
821477	21	5/12/2021	8:15:13	LeadPaint	1	mg/cm2	0.4619	Negative
821477	22	5/12/2021	8:15:43	LeadPaint	1	mg/cm2	<LOD	Negative
821477	23	5/12/2021	8:17:08	LeadPaint	1	mg/cm2	0.62249	Negative
821477	24	5/12/2021	8:17:48	LeadPaint	1	mg/cm2	0.43245	Negative
821477	25	5/12/2021	8:18:20	LeadPaint	1	mg/cm2	0.32015	Negative
821477	26	5/12/2021	8:18:55	LeadPaint	1	mg/cm2	0.25334	Negative
821477	27	5/12/2021	8:22:38	LeadPaint	1	mg/cm2	0.25496	Negative
821477	28	5/12/2021	8:23:16	LeadPaint	1	mg/cm2	0.38494	Negative

## XRF Data

Instrument Serial Number	Reading #	Date	Time	Method Name	Pb Action Level Cutoff	Units	Pb Concentration	Pb Action Level
821477	29	5/12/2021	8:23:48	LeadPaint	1	mg/cm2	0.33484	Negative
821477	30	5/12/2021	8:24:21	LeadPaint	1	mg/cm2	0.39512	Negative
821477	31	5/12/2021	8:26:03	LeadPaint	1	mg/cm2	0.03412	Negative
821477	32	5/12/2021	8:27:38	LeadPaint	1	mg/cm2	0.54349	Negative
821477	33	5/12/2021	8:28:23	LeadPaint	1	mg/cm2	0.00443	Negative
821477	34	5/12/2021	8:29:00	LeadPaint	1	mg/cm2	0.9036	Negative
821477	35	5/12/2021	8:29:30	LeadPaint	1	mg/cm2	0.31975	Negative
821477	36	5/12/2021	8:30:01	LeadPaint	1	mg/cm2	0.36178	Negative
821477	37	5/12/2021	8:30:35	LeadPaint	1	mg/cm2	1.01577	Positive
821477	38	5/12/2021	8:31:06	LeadPaint	1	mg/cm2	0.43641	Negative
821477	39	5/12/2021	8:31:40	LeadPaint	1	mg/cm2	0.40399	Negative
821477	40	5/12/2021	8:32:15	LeadPaint	1	mg/cm2	0.43924	Negative
821477	41	5/12/2021	8:32:44	LeadPaint	1	mg/cm2	1.10867	Positive
821477	42	5/12/2021	8:33:15	LeadPaint	1	mg/cm2	0.32094	Negative
821477	43	5/12/2021	8:33:42	LeadPaint	1	mg/cm2	0.65203	Negative
821477	44	5/12/2021	8:34:10	LeadPaint	1	mg/cm2	0.35131	Negative
821477	45	5/12/2021	8:34:41	LeadPaint	1	mg/cm2	0.53029	Negative
821477	46	5/12/2021	8:35:14	LeadPaint	1	mg/cm2	0.94679	Negative
821477	47	5/12/2021	8:36:12	LeadPaint	1	mg/cm2	0.89835	Negative
821477	48	5/12/2021	8:36:45	LeadPaint	1	mg/cm2	0.52238	Negative
821477	49	5/12/2021	8:37:24	LeadPaint	1	mg/cm2	0.97449	Positive
821477	50	5/12/2021	8:37:57	LeadPaint	1	mg/cm2	0.45515	Negative
821477	51	5/12/2021	8:38:50	LeadPaint	1	mg/cm2	0.41118	Negative
821477	52	5/12/2021	8:39:28	LeadPaint	1	mg/cm2	0.65541	Negative
821477	53	5/12/2021	8:40:21	LeadPaint	1	mg/cm2	0.55016	Negative
821477	54	5/12/2021	8:40:57	LeadPaint	1	mg/cm2	0.24991	Negative
821477	55	5/12/2021	8:41:37	LeadPaint	1	mg/cm2	0.75048	Negative
821477	56	5/12/2021	8:42:01	LeadPaint	1	mg/cm2	0.94395	Negative

## XRF Data

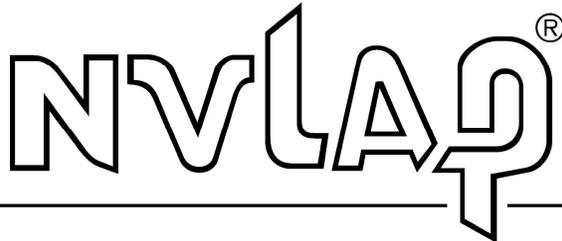
Instrument Serial Number	Reading #	Date	Time	Method Name	Pb Action Level Cutoff	Units	Pb Concentration	Pb Action Level
821477	59	5/12/2021	8:43:22	LeadPaint	1	mg/cm2	0.86293	Negative
821477	60	5/12/2021	8:43:47	LeadPaint	1	mg/cm2	0.73194	Negative
821477	61	5/12/2021	8:44:17	LeadPaint	1	mg/cm2	0.50781	Negative
821477	62	5/12/2021	8:44:51	LeadPaint	1	mg/cm2	0.85725	Negative
821477	63	5/12/2021	8:45:20	LeadPaint	1	mg/cm2	0.85354	Negative
821477	64	5/12/2021	8:45:50	LeadPaint	1	mg/cm2	0.6913	Negative
821477	65	5/12/2021	8:46:17	LeadPaint	1	mg/cm2	1.03575	Positive
821477	66	5/12/2021	8:47:04	LeadPaint	1	mg/cm2	0.06811	Negative
821477	67	5/12/2021	8:52:35	LeadPaint	1	mg/cm2	0.22409	Negative
821477	68	5/12/2021	8:56:55	LeadPaint	1	mg/cm2	<LOD	Negative
821477	69	5/12/2021	8:57:21	LeadPaint	1	mg/cm2	<LOD	Negative
821477	70	5/12/2021	8:57:40	LeadPaint	1	mg/cm2	<LOD	Negative
821477	71	5/12/2021	8:58:00	LeadPaint	1	mg/cm2	<LOD	Negative
821477	72	5/12/2021	8:58:17	LeadPaint	1	mg/cm2	0.02116	Negative
821477	73	5/12/2021	8:58:49	LeadPaint	1	mg/cm2	<LOD	Negative
821477	74	5/12/2021	8:59:10	LeadPaint	1	mg/cm2	<LOD	Negative
821477	75	5/12/2021	8:59:39	LeadPaint	1	mg/cm2	<LOD	Negative
821477	76	5/12/2021	8:59:56	LeadPaint	1	mg/cm2	<LOD	Negative
821477	77	5/12/2021	9:00:33	LeadPaint	1	mg/cm2	<LOD	Negative
821477	78	5/12/2021	9:00:50	LeadPaint	1	mg/cm2	<LOD	Negative
821477	79	5/12/2021	9:01:11	LeadPaint	1	mg/cm2	<LOD	Negative
821477	80	5/12/2021	9:01:32	LeadPaint	1	mg/cm2	<LOD	Negative
821477	81	5/12/2021	9:01:51	LeadPaint	1	mg/cm2	<LOD	Negative
821477	82	5/12/2021	9:02:12	LeadPaint	1	mg/cm2	<LOD	Negative
821477	83	5/12/2021	9:02:40	LeadPaint	1	mg/cm2	<LOD	Negative
821477	84	5/12/2021	9:03:44	LeadPaint	1	mg/cm2	0.0995	Negative
821477	85	5/12/2021	9:04:10	LeadPaint	1	mg/cm2	0.0805	Negative
821477	86	5/12/2021	9:04:33	LeadPaint	1	mg/cm2	0.51416	Negative

## XRF Data

Instrument Serial Number	Reading #	Date	Time	Method Name	Pb Action Level Cutoff	Units	Pb Concentration	Pb Action Level
821477	87	5/12/2021	9:05:13	LeadPaint	1	mg/cm2	<LOD	Negative
821477	88	5/12/2021	9:05:40	LeadPaint	1	mg/cm2	<LOD	Negative
821477	89	5/12/2021	9:06:02	LeadPaint	1	mg/cm2	<LOD	Negative
821477	90	5/12/2021	9:06:21	LeadPaint	1	mg/cm2	<LOD	Negative
821477	91	5/12/2021	9:06:40	LeadPaint	1	mg/cm2	<LOD	Negative
821477	92	5/12/2021	9:06:57	LeadPaint	1	mg/cm2	<LOD	Negative
821477	93	5/12/2021	9:07:13	LeadPaint	1	mg/cm2	0.00743	Negative
821477	94	5/12/2021	9:07:40	LeadPaint	1	mg/cm2	0.01645	Negative
821477	95	5/12/2021	9:08:00	LeadPaint	1	mg/cm2	<LOD	Negative
821477	96	5/12/2021	9:08:26	LeadPaint	1	mg/cm2	<LOD	Negative
821477	97	5/12/2021	9:08:55	LeadPaint	1	mg/cm2	0.03373	Negative
821477	98	5/12/2021	9:09:20	LeadPaint	1	mg/cm2	0.0489	Negative
821477	99	5/12/2021	9:09:50	LeadPaint	1	mg/cm2	0.0202	Negative
821477	100	5/12/2021	9:10:15	LeadPaint	1	mg/cm2	0.03347	Negative
821477	101	5/12/2021	9:10:38	LeadPaint	1	mg/cm2	0.01068	Negative
821477	102	5/12/2021	9:11:12	LeadPaint	1	mg/cm2	0.01204	Negative
821477	103	5/12/2021	9:11:57	LeadPaint	1	mg/cm2	0.01216	Negative
821477	104	5/12/2021	9:12:33	LeadPaint	1	mg/cm2	<LOD	Negative
821477	105	5/12/2021	9:13:00	LeadPaint	1	mg/cm2	0.01397	Negative
821477	106	5/12/2021	9:13:45	LeadPaint	1	mg/cm2	0.09387	Negative
821477	107	5/12/2021	9:14:12	LeadPaint	1	mg/cm2	0.08564	Negative
821477	108	5/12/2021	9:14:48	LeadPaint	1	mg/cm2	0.16671	Negative
821477	109	5/12/2021	9:15:22	LeadPaint	1	mg/cm2	0.01544	Negative
821477	110	5/12/2021	9:15:46	LeadPaint	1	mg/cm2	0.01656	Negative
821477	111	5/12/2021	9:16:28	LeadPaint	1	mg/cm2	<LOD	Negative
821477	112	5/12/2021	9:17:02	LeadPaint	1	mg/cm2	<LOD	Negative
821477	113	5/12/2021	9:17:49	LeadPaint	1	mg/cm2	0.02554	Negative

**Attachment 4 Laboratory Certifications**

United States Department of Commerce  
National Institute of Standards and Technology



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## Certificate of Accreditation to ISO/IEC 17025:2017

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NVLAP LAB CODE: 102063-0

**NVL Laboratories, Inc.**  
Seattle, WA

*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 Communique dated January 2009).*

---

2020-07-23 through 2021-09-30

*Effective Dates*



---

*Dana S. Haman*  
For the National Voluntary Laboratory Accreditation Program

---

**SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017**

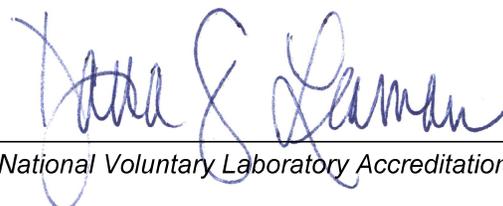
**NVL Laboratories, Inc.**  
4708 Aurora Avenue N.  
Seattle, WA 98103  
Mr. Nghiep Vi Ly  
Phone: 206-547-0100 Fax: 206-634-1936  
Email: [nick.l@nvllabs.com](mailto:nick.l@nvllabs.com)  
<http://www.nvllabs.com>

**ASBESTOS FIBER ANALYSIS**

**NVLAP LAB CODE 102063-0**

**Bulk Asbestos Analysis**

<u><i>Code</i></u>	<u><i>Description</i></u>
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials



---

*For the National Voluntary Laboratory Accreditation Program*

**Attachment 5 Inspector Certifications**

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# THE ASBESTOS INSTITUTE

*Certifies that*

## **Brian Johnson**

has attended and received instruction in the EPA approved course

### **AHERA Building Inspector Refresher**

on

### **July 07, 2020**

and successfully completed and passed the competency exam.

Certificate:  
ON-4644-2900-070720

Date of Examination:  
7-Jul-2020

Date of Expiration:  
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William T. Cavness  
Director



Approved Instructor

**THE ASBESTOS INSTITUTE**

20033 N. 19<sup>th</sup> Ave, Building 6, Phoenix, AZ 85027

602-864-6564 – [www.theasbestosinstitute.com](http://www.theasbestosinstitute.com)

*This training meets all requirements for asbestos certification under Toxic Substance Control Act Title II.*