REGULATED BUILDING MATERIAL INSPECTION

PORT OF FRIDAY HARBOR
JENSEN BOATYARD
SELECT BUILDINGS
1293 TURN POINT ROAD
FRIDAY HARBOR, WASHINGTON

Prepared by EMB Consulting, LLC
May 15, 2023

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Project Title: **REGULATED BUILDING MATERIAL INSPECTION**

PORT OF FRIDAY HARBOR
JENSEN BOATYARD
SELECT STRUCTURES
1293 TURN POINT ROAD
FRIDAY HARBOR, WASHINGTON

Prepared for: **LEON ENVIRONMENTAL, LLC**

EMB Consulting Project #: **1730**

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Certified Industrial Hygienist
EMB Consulting, LLC

Issue date: **MAY 15, 2023**

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EMLab P&K
May 9, 2023

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ALS Environmental
May 9, 2023

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1.0 INTRODUCTION

This regulated building material (RBM) inspection report presents the results for asbestos-containing materials (ACMs), lead in demolition debris (TCLP-Lead), polychlorinated biphenyls (PCBs), and an inventory of other regulated building materials for select structures at the former Jensen Boatyard (Site) at 1293 Turn Point Road in Friday Harbor, Washington.

The structures on the Site that are covered by this inspection are limited to the following: Boat Building (BB), Office (Off), and Bays (Bay 1, Bay 2, and Bay 3). This work was conducted to provide a good faith survey in anticipation of demolition or renovation of the structures on Site to support future plans of the Port of Friday Harbor.

The report is organized to provide a Site description, regulations, inspection methods, results, and conclusions. Attachments provide results tables and laboratory reports.

2.0 SITE DESCRIPTION

This RBM inspection is limited to the five structures described below and located at the east end of Friday Harbor Bay (Bay) between Turn Point Road and the Bay. A Google Earth aerial image has been modified to demonstrate the layout of the five structures on the property.

Information about the structures was provided by San Juan County Assessor records and Todd Nicholson of the Port of Friday Harbor. Because the structures are of varying ages, use, and construction, each structure will be addressed independently, with a summary of construction details and a photograph.

2.1 Boat Building

The former Boat Building (BB) is a two-level wooden frame building built on piles on a slight slope near the Bay coastline. The south portion of the building is embedded in the slope, but the north portion sits on piles to accommodate tidal influx. The entire building frame and siding are wood. There are wooden frame windows on the east and west walls. The building roof has multiple layers of granulated tar paper roofing.

The building interior is unfinished, with exposed wood floors, walls, and roof tresses. Some equipment remains inside the structure, to include an old oven in the west first level space. Fluorescent lighting units were visible through open walls.

The east portion of the building collapsed in 2022, so at the time of this inspection there was a sprawling debris pile of wood, roofing, and windows extending onto the ground to the east. The building could not be entered during this inspection, as it is no longer structurally sound.

The age of the building is unknown as of this writing, but is estimated to be 50 years old or older.

North side of Boat Building

West side of Boat Building

2.2 Office Building

The Office Building is a single level building consisting of three rooms, to include a large workshop on the west side of the building, with a small toolroom in the southeast corner, a small office in the northeast corner. A hallway on the east side of the building links all three rooms.

The building has a concrete slab foundation with partial concrete walls around the exterior. The walls above the concrete are wooden frame with wooden siding. The wooden siding on the upper exterior walls is covered with granulated asphalt paper or corrugated metal. The roof is pitched wooden frame with corrugated aluminum. There are wooden frame windows along the north and south building walls.

The workshop, toolroom, and hallway have bare concrete floors and exposed wooden walls and framing. There is a chimney in the southeast corner of the workshop, where a wood stove was recently removed. The office has recently been finished with wood paneling over plaster walls. The office floor is covered by brown 9’ x 9’ vinyl floor tiles.

The age of the building is unknown as of this writing, but is estimated to be 50 years old or older.

North Exterior of Office Building

2.3 Bays

To the west of the Office Building there are three simple adjoining wooden frame buildings. The eastern-most bay (Bay 1) is constructed adjacent to the Office Building. Each Bay has a concrete slab floor and corrugated metal roof. Siding is a combination of corrugated metal, wood, or corrugated fiberglass panels. The age of the Bays is unknown.

South side of Office Building and Bays 1 and 2

South side of Bay 3

West side of Bay 3

3.0 APPLICABLE REGULATIONS

3.1 Asbestos-Containing Materials

The Washington State Division of Occupational Safety and Health (DOSH) and the Environmental Protection Agency (EPA) regulate building materials that contain more than one percent asbestos as ACM for protection of human health and the environment.

DOSH also regulates worker exposure to airborne asbestos fibers during general work activities and construction and demolition activities (WAC 296-62-077). 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 fibers/cubic centimeter (cc) of air. DOSH regulations establish engineering controls and work practices that are designed to mitigate workers exposure to asbestos in the workplace.

The Washington State Department of Ecology (Ecology) Northwest Regional Office regulates the release of airborne asbestos fibers in San Juan County. Specifically, Ecology under regulation 40 CFR Part 61.145 Standard for demolition and renovation regulates emissions of asbestos during building renovation and demolition projects. This regulation requires that an asbestos survey be conducted prior to demolition, that Ecology 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 EPA requires asbestos abatement workers and supervisors to be trained and certified in accordance with Appendix C to Subpart E of 40 CFR 763. The Washington Department of Labor and Industries (L&I) also has training requirements for abatement workers in WAC 296-65. The EPA and L&I training and certification requirements apply to abatement work for buildings at the subject property.

3.2 Lead in Building Materials

Washington State requires generators of solid waste to determine whether their waste is a dangerous waste for the purpose of handling and disposing of the waste properly. For demolition debris-related waste that potentially contains lead or other heavy metals, a representative sample(s) of the debris must be analyzed by TCLP analysis in accordance with 40 CFR 261.24. Solid wastes containing leachable lead detected at a concentration of 5 milligrams per liter (mg/L) or higher must be managed and disposed of as a dangerous waste.

3.3 PCBs in Building Materials

Under the Toxics Substances Control Act (TSCA), PCB-containing building materials are considered PCB bulk product waste if the concentration of PCBs is greater than or equal to 50 parts per million (ppm). The disposal of PCB bulk product waste is regulated under 40 CFR § 761.62 of TSCA. Under this provision, PCB bulk product waste must be disposed of in one of two ways: disposal in a permitted solid waste landfill or via risk-based disposal approval process.

3.4 Other Regulated Building Materials

3.4.1 Fluorescent Light Tubes

Fluorescent light tubes may contain mercury vapor and are regulated by the State of Washington as hazardous waste lamps. Used tubes become a waste on the date they are discarded. A generator may accumulate and manage the tubes as a Universal Waste in accordance with the requirements of WAC 173-303-573. Tubes that are crushed prior to disposal must be managed and disposed of as a dangerous waste.

3.4.2 PCB-Containing Fluorescent Light Ballasts

Fluorescent light fixtures manufactured prior to 1979 may have PCB-containing ballasts inside the fixture. EPA regulates the disposal of PCB-containing ballasts under the Toxic Substances Control Act (TSCA). Ballasts that are not marked “No PCBs” or that do not contain a post-1979 date stamp must be managed and disposed of as PCB-containing ballasts. Per 40 CFR 761.60(a)(6)(iii), PCB-containing ballasts must be disposed of in a TSCA-approved landfill.

3.4.3 Mercury-Containing Thermostat Switches

Mercury-containing thermostat switches must be collected and disposed of as a dangerous waste in accordance with Chapter 173-303 WAC.

3.4.4 Universal Waste Lamps

High-intensity discharge lamps (HID) are Universal Waste Lamps and should be managed as dangerous waste because they are known to contain regulated amounts of lead as well as other metals in the base of the lamps. Mercury vapor, metal halide, and high-pressure sodium lamps are HID lamps. They are used as streetlights, emergency lighting, photography lamps, and as flood lights. A generator may accumulate and manage the lamps as Universal Waste in accordance with the requirements of WAC 173-303-573.

4.0 SURVEY METHODOLOGY

4.1 Asbestos-Containing Materials

Samples of suspect materials were collected in the field by Elisabeth Black, CIH, an AHERA-certified Building Inspector on April 26 and 27, 2023. A complete list of the samples collected, sample locations, and results is provided in Table 1 attached to this report. The figure is attached to this report. Finally, the laboratory report is attached to this report.

Sample bags were labeled at the time of sample collection with the Sample ID number. The labeled samples were then placed in a larger Ziploc™ type bag and sealed for additional protection during handling and transportation. Samples were recorded on a Chain of Custody for delivery to the laboratory for analysis.

Suspect asbestos samples and chain of custody were sent to EMLab P&K of Bothell, Washington for analysis. Suspect ACM bulk samples were analyzed using polarized light microscopy (PLM) by the Interim Method for Determination of Asbestos in Bulk Insulation Samples (EPA Method 600/M4 82 020). EMLab P&K is accredited for asbestos analysis by the National Institute of Standards and Technology (NIST) under the National Voluntary Laboratory Accreditation Program (NVLAP). Materials were considered to be positive for asbestos if they contained more than one percent asbestos.

For materials that were identified as ACM or assumed to be ACM, EMB Consulting calculated estimated quantities of material that will require abatement prior to demolition. ACM quantity estimates are provided in Table 1 for each structure.

4.2 TCLP-Lead

EMB Consulting collected one composite sample each for the Boat Building, Office, and a composite of the three Bays for TCLP-Lead analysis. Samples represent composites of materials intended to represent the building demolition waste stream.

TCLP-Lead samples were hand-delivered to ALS Laboratories, Incorporated, in Everett, Washington, where the samples were analyzed by toxicity characteristic leaching procedure (TCLP, EPA Method 1311/7000B). Certificates of analysis are included in Attachment B. The results of the TCLP Lead analysis are provided in Table 2.

4.3 PCBs in Building Materials

EMB Consulting collected one bulk sample of caulk from the man door on the west end of the Office building that might contain PCBs. The PCB sample and chain of custody were delivered to ALS Environmental of Everett, Washington for analysis by EPA Method 8082A. For the purposes of this report, materials containing PCBs greater than 50 mg/kg are considered PCB bulk product waste. The results of the PCB sampling are provided in Table 3. Certificates of analysis are included in Attachment B.

4.4 Other Regulated Building Materials

EMB Consulting conducted a visual inventory of each structure for other regulated building materials, to include mercury-containing fluorescent light tubes, PCB-containing fluorescent light ballasts, mercury-containing thermostat switches, transformers, and high-intensity discharge lamps. The results of the miscellaneous regulated building material inventory are provided in Table 4.

5.0 INSPECTION RESULTS

The results of the ACM, TCLP-Lead, PCB, and miscellaneous regulated building materials inspection are summarized in the following sections. All confirmed and assumed ACMs and a summary of quantities of ACM identified by EMB Consulting are presented in Table 1 in **bold** print. Table 2 summarizes the results for TCLP-lead samples. Table 3 provides results for PCBs in building materials. Finally, an inventory of other miscellaneous regulated building materials is provided in Table 4.

5.1 Boat Building

- Six samples of asphalt roofing paper were collected from the Boat Building and associated debris pile. Two samples of window putty were collected, and three samples of electrical wire wrap were collected from the Boat Building. None of the materials sampled from the Boat Building were confirmed as ACM.

- One composite sample of wood, asphalt roofing, and sheet metal was collected from the Boat Building and associated debris pile for TCLP-Lead analysis. The sample did not contain regulated concentrations of leachable lead.

- No materials suspected of containing PCBs (other than fluorescent ballasts) were identified during the inspection of the Boat Building

- 26 fluorescent bulbs were visible during the inspection of the Boat Building and an assumed 13 ballasts are associated with those fixtures. Due to the partial collapse of the building, there may be additional fluorescent fixtures in the debris pile.

5.2 Office Building

- For the Office Building, two samples of exterior asphalt paper siding were collected and three samples of mortar, brick, and sealant were collected from the former wood burning stove stack. In addition, the 9” x 9” brown vinyl floor tile in the office was sampled. Only the 9” x 9” brown vinyl floor tile is confirmed ACM. There is an estimated 100 square feet of this material in the building. No other ACMs were identified during the inspection of the Office Building.

- One composite sample of wood, sheet metal, concrete, and fiberglass insulation was collected from the Office Building for TCLP-Lead analysis. The sample did not contain regulated concentrations of leachable lead.

- One sample of door sealant (caulk) was sampled and analyzed as suspect for PCBs. The sample did not contain detectable concentrations of PCBs. The laboratory limit of detection for PCBs is well below the regulatory criteria of 50 ppm.

- At the time of inspection, there were 48 fluorescent bulbs and 24 suspect ballasts in the Office Building.

5.3 Bays

- Two samples of fire brick from the former wood burning stove in the Office workroom were sampled from Bays 2 and 3 for asbestos analysis. In addition, white coating on the exterior of Bay 3 was sampled and tested for asbestos. No ACMs were identified in the Bays.

- One composite sample of wood, sheet metal, concrete, and fiberglass panel was collected from the three Bays for TCLP-Lead analysis. The sample did not contain regulated concentrations of leachable lead.

- No materials suspected of containing PCBs (other than fluorescent ballasts) were identified during the inspection of the Bays.

- At the time of inspection, there were 54 fluorescent ballasts and 28 bulbs.

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Asbestos-Containing Materials

EMB Consulting identified one type of ACM during this inspection. The confirmed ACM must be removed prior to building demolition by Washington-certified asbestos abatement workers in compliance with applicable regulations.

6.2 TCLP-Lead

Based on the results of the survey for leachable lead in building materials, demolition debris from the subject structures should not require disposal as a dangerous lead-containing waste.

6.3 PCBs in Building Materials

PCBs were not detectable in the sample submitted for analysis.

6.4 Other Regulated Building Materials

The remaining regulated building materials identified in the structures must be removed and recycled or disposed of prior to building demolition. Some materials will require abatement prior to demolition and proper disposal, such as the high-intensity discharge lamps, in accordance with Chapter 173-303 WAC.

7.0 LIMITATIONS

The regulated building materials presented in this report represent those observed on the dates the environmental survey was conducted. Work for this project was performed, and this report prepared, in accordance with generally accepted professional practices for the nature and conditions of the work completed in the same or similar localities, at the time the work was performed. It is intended for the exclusive use of Leon Environmental and its client for specific application to this property. No other warranty, express or implied, is made.

Table 1: Bulk Asbestos Sample Results
Port of San Juan Island
Jensen Boatyard Structures
Friday Harbor, Washington

Sample ID	Material Description (color)	Sample Location	Asbestos (in Percent)	Estimated Material Quantity (if ACM)
BB-AP1	Asphalt Paper (black)	Boat Building Exterior E Side Debris Pile	ND	
BB-AP2	Asphalt Paper (black/silver granules)	Boat Building Exterior E Side Debris Pile	ND	
BB-AP3	Asphalt Paper (black/white granules)	Boat Building Exterior W Side Shed Roof	ND	
BB-AP4	Asphalt Paper (black/white granules	Boat Building Exterior E Side Debris Pile	ND	
BB-AP5	Asphalt Paper L1: roofing material (black) L2: shingle with granules (black/green) L3: roofing material (black)	Boat Building Exterior W Side Shed Roof	 L1: ND L2: ND L3: ND	
BB-AP7	Asphalt Paper (black/grey granules)	Boat Building Exterior W Side Shed Roof	ND	
BB-WP1	Window Putty (off-white)	Boat Building Exterior W Side 2nd window from N to S	ND	

Table 1: Bulk Asbestos Sample Results
Port of San Juan Island
Jensen Boatyard Structures
Friday Harbor, Washington

Sample ID	Material Description (color)	Sample Location	Asbestos (in Percent)	Estimated Material Quantity (if ACM)
BB-WP2	Window Putty (off-white)	Boat Building Exterior W Side 2nd window from S to N	ND	
BB-EW1	Electrical Wire Wrap (black/white)	Boat Building Exterior NE Corner	ND	
BB-EW2	Electrical Wire Wrap (black)	Boat Building Exterior NE Corner	ND	
BB-EW3	Electrical Wire Wrap (black)	Boat Building Exterior NE Corner	ND	
Off-AP1	Asphalt Paper (black/white granules)	Office Building Exterior E Wall	ND	
Off-AP2	Asphalt Paper (black/white granules)	Office Building Exterior W Wall	ND	
Off-CB1	Chimney Brick (gray)	Office Building Interior Shop SE Corner	ND	
Off-CM1	Chimney Mortar (white)	Office Building Interior Shop SE Corner	ND	

Table 1: Bulk Asbestos Sample Results
Port of San Juan Island
Jensen Boatyard Structures
Friday Harbor, Washington

Sample ID	Material Description (color)	Sample Location	Asbestos (in Percent)	Estimated Material Quantity (if ACM)
Off-CS1	Chimney Sealant (grey)	Office Building Interior Shop SE Corner	ND	
Off-VFT1	Vinyl Floor Tile and Mastic L1: 9x9 vinyl floor tile (brown) L2: mastic (black)	Office Building Interior Office At threshold	L1: 4% Chrysotile L2: ND	100 ft^2
Bay2-FB1	Fire Brick (white)	Bay 2 Interior Scattered on benches and floor	ND	
Bays3-FB2	Fire Brick (white)	Bay 3 Interior On floor NW corner	ND	
Bay3-Coat	Coating (white)	Bay 3 Exterior W Wall	ND	

ACM = Asbestos-Containing Material

L = Layer

ND = Non-Detect

ft^2 = square feet

Table 2: TCLP Lead Sample Results
Port of San Juan Island
Jensen Boatyard Structures
Friday Harbor, Washington

Sample ID	Composite Sample Materials	Lead (in mg/L)	EPA TCLP-Lead Regulatory Limit (in mg/L)
BB-TCLP	Wood Tar Paper Sheet Metal Roofing	0.038	5.0
Office-TCLP	Wood Concrete Sheet Metal Fiberglass Insulation	0.084	
Bays-TCLP	Wood Sheet Metal Fiberglass Siding Concrete	0.041	

mg/L = milligrams per liter

Table 3: PCB Sample Results
Port of San Juan Island
Jensen Boatyard Structures
Friday Harbor, Washington

Structure	Sample ID	Material Description	Sample Location	PCB Results by Aroclor in mg/kg		EPA Criteria in mg/kg
Office	Off-PCB	Caulk	West Door	Aroclor 1016	<0.1	**50.00**
				Aroclor 1221	<0.1	
				Aroclor 1232	<0.1	
				Aroclor 1242	<0.1	
				Aroclor 1248	<0.1	
				Aroclor 1254	<0.1	
				Aroclor 1260	<0.1	
				Aroclor-1268	<0.1	
				Total PCBs	***not detected***	

PCBs = polychlorinated biphenyls
mg/kg = milligrams per kilogram (parts per million)

Table 4: Universal Waste Inventory
Port of San Juan Island
Jensen Boatyard Structures
Friday Harbor, Washington

Building	HID Lamps	Mercury Thermostat Switches	Fluorescent Light Bulbs	Fluorescent Light Ballasts
Boat Building			26	13
Office Building			48	24
Bay 1			26	13
Bay 2			28	15
Bay 3				

Attachment A
Laboratory Report of Asbestos Results
EMLab P&K
May 9, 2023

eurofins | Built Environment Testing

Report for:

Ms. Elisabeth Black
EM Black Consulting
3607 219th Street SW
Brier, WA 98036

Regarding: Eurofins EPK Built Environment Testing, LLC
Project: 1730; Jensen BY
EML ID: 3248064

Approved by:

Approved Signatory
Marisa Braziel

Dates of Analysis:
Asbestos PLM: 05-09-2023

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267)
NVLAP Lab Code 600266-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC
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(866) 888-6653 www.eurofinsus.com/Built

Client: EM Black Consulting
C/O: Ms. Elisabeth Black
Re: 1730; Jensen BY

Date of Submittal: 05-01-2023
Date of Receipt: 05-02-2023
Date of Report: 05-09-2023

ASBESTOS PLM REPORT

Total Samples Submitted:	20
Total Samples Analyzed:	20
Total Samples with Layer Asbestos Content > 1%:	1

Location: BB-AP1, Asphalt paper Lab ID-Version‡: 15743699-1

Sample Layers	Asbestos Content
Black Roofing Material	ND
Composite Non-Asbestos Content:	30% Cellulose
Sample Composite Homogeneity:	Good

Location: BB-AP2, Asphalt paper Lab ID-Version‡: 15743700-1

Sample Layers	Asbestos Content
Black Roofing Material	ND
Composite Non-Asbestos Content:	30% Cellulose
Sample Composite Homogeneity:	Good

Location: BB-AP3, Asphalt paper Lab ID-Version‡: 15743701-1

Sample Layers	Asbestos Content
Black Roofing Shingle w/ White Rocks	ND
Composite Non-Asbestos Content:	20% Glass Fibers 10% Cellulose
Sample Composite Homogeneity:	Good

Location: BB-AP4, Asphalt paper Lab ID-Version‡: 15743702-1

Sample Layers	Asbestos Content
Black Roofing Shingle w/ White Rocks	ND
Composite Non-Asbestos Content:	20% Glass Fibers 10% Cellulose
Sample Composite Homogeneity:	Good

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

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ASBESTOS PLM REPORT

Location: BB-AP5, Asphalt paper

Lab ID-Version‡: 15743703-1

Sample Layers	Asbestos Content
Black Roofing Material (1)	ND
Black Roofing Shingle w/ Green Rocks	ND
Black Roofing Material (2)	ND
Composite Non-Asbestos Content:	20% Cellulose 10% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: BB-AP7, Asphalt paper

Lab ID-Version‡: 15743704-1

Sample Layers	Asbestos Content
Black Roofing Material	ND
Composite Non-Asbestos Content:	30% Cellulose
Sample Composite Homogeneity:	Good

Location: BB-WP1, Window putty

Lab ID-Version‡: 15743705-1

Sample Layers	Asbestos Content
Off-White Window Putty	ND
Sample Composite Homogeneity:	Good

Location: BB-WP2, Window putty

Lab ID-Version‡: 15743706-1

Sample Layers	Asbestos Content
Off-White Window Putty	ND
Sample Composite Homogeneity:	Good

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
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ASBESTOS PLM REPORT

Location: BB-EW1, Electrical wire wrap

Lab ID-Version‡: 15743707-1

Sample Layers	Asbestos Content
Black/White Wrap	ND
Composite Non-Asbestos Content:	60% Cellulose
Sample Composite Homogeneity:	Good

Location: BB-EW2, Electrical wire wrap

Lab ID-Version‡: 15743708-1

Sample Layers	Asbestos Content
Black Wrap	ND
Composite Non-Asbestos Content:	60% Cellulose
Sample Composite Homogeneity:	Good

Location: BB-EW3, Electrical wire wrap

Lab ID-Version‡: 15743709-1

Sample Layers	Asbestos Content
Black Wrap	ND
Composite Non-Asbestos Content:	60% Cellulose
Sample Composite Homogeneity:	Good

Location: OFF-AP1, Asphalt paper

Lab ID-Version‡: 15743710-1

Sample Layers	Asbestos Content
Black Roofing Shingle w/ White Rocks	ND
Composite Non-Asbestos Content:	20% Glass Fibers 10% Cellulose
Sample Composite Homogeneity:	Good

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
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ASBESTOS PLM REPORT

Location: OFF-AP2, Asphalt paper

Lab ID-Version‡: 15743711-1

Sample Layers	Asbestos Content
Black Roofing Shingle w/ White Rocks	ND
Composite Non-Asbestos Content:	20% Glass Fibers 10% Cellulose
Sample Composite Homogeneity:	Good

Location: OFF-CB1, Chimney brick

Lab ID-Version‡: 15743712-1

Sample Layers	Asbestos Content
Gray Brick	ND
Sample Composite Homogeneity:	Good

Location: OFF-CM1, Chimney mortar

Lab ID-Version‡: 15743713-1

Sample Layers	Asbestos Content
White Mortar	ND
Sample Composite Homogeneity:	Good

Location: OFF-CS1, Chimney sealant

Lab ID-Version‡: 15743714-1

Sample Layers	Asbestos Content
Dark Gray Sealant	ND
Sample Composite Homogeneity:	Good

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
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ASBESTOS PLM REPORT

Location: OFF-VFT1, Vinyl floor tile Lab ID-Version‡: 15743715-1

Sample Layers	Asbestos Content
Dark Brown Floor Tile	4% Chrysotile
Black Mastic	ND
Sample Composite Homogeneity:	Moderate

Location: Bay2-FB, Fire brick Lab ID-Version‡: 15743716-1

Sample Layers	Asbestos Content
Light Brown Brick	ND
Sample Composite Homogeneity:	Good

Location: Bay3-FB, Fire brick Lab ID-Version‡: 15743717-1

Sample Layers	Asbestos Content
Light Brown Brick	ND
Sample Composite Homogeneity:	Good

Location: Bay3-Coat, Coating Lab ID-Version‡: 15743718-1

Sample Layers	Asbestos Content
Gray Coating	ND
Sample Composite Homogeneity:	Good

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Attachment B
Laboratory Report of TCLP-Lead and PCB Results
ALS Environmental
May 9, 2023

May 9, 2023

Ms. Elisabeth Black
EMB Consulting
22725 - 44th Ave W., # 203
Mountlake Terrace, WA 98043

Dear Ms. Black,

On May 2nd, 4 samples were received by our laboratory and assigned our laboratory project number EV23050007. The project was identified as your 1730. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rob Greer
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	EMB Consulting 22725 - 44th Ave W., # 203 Mountlake Terrace, WA 98043	DATE:	5/9/2023
		ALS JOB#:	EV23050007
		ALS SAMPLE#:	EV23050007-01
CLIENT CONTACT:	Elisabeth Black	DATE RECEIVED:	05/02/2023
CLIENT PROJECT:	1730	COLLECTION DATE:	4/28/2023 12:00:00 PM
CLIENT SAMPLE ID	BB-TCLP	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Lead (TCLP)	EPA-6020/1311	**0.038**	0.031	6.25	MG/L	05/08/2023	RAL

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	EMB Consulting 22725 - 44th Ave W., # 203 Mountlake Terrace, WA 98043	DATE:	5/9/2023
		ALS JOB#:	EV23050007
		ALS SAMPLE#:	EV23050007-02
CLIENT CONTACT:	Elisabeth Black	DATE RECEIVED:	05/02/2023
CLIENT PROJECT:	1730	COLLECTION DATE:	4/28/2023 12:00:00 PM
CLIENT SAMPLE ID	Off-TCLP	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Lead (TCLP)	EPA-6020/1311	**0.084**	0.031	6.25	MG/L	05/08/2023	RAL

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ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	EMB Consulting 22725 - 44th Ave W., # 203 Mountlake Terrace, WA 98043	DATE:	5/9/2023
		ALS JOB#:	EV23050007
		ALS SAMPLE#:	EV23050007-03
CLIENT CONTACT:	Elisabeth Black	DATE RECEIVED:	05/02/2023
CLIENT PROJECT:	1730	COLLECTION DATE:	4/28/2023 12:00:00 PM
CLIENT SAMPLE ID	Bays-TCLP	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Lead (TCLP)	EPA-6020/1311	**0.041**	0.031	6.25	MG/L	05/08/2023	RAL

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CERTIFICATE OF ANALYSIS

CLIENT:	EMB Consulting 22725 - 44th Ave W., # 203 Mountlake Terrace, WA 98043	DATE:	5/9/2023
		ALS JOB#:	EV23050007
		ALS SAMPLE#:	EV23050007-04
CLIENT CONTACT:	Elisabeth Black	DATE RECEIVED:	05/02/2023
CLIENT PROJECT:	1730	COLLECTION DATE:	4/28/2023 12:00:00 PM
CLIENT SAMPLE ID	Off-PCB	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
PCB-1016	EPA-8082	U	0.10	1	MG/KG	05/04/2023	DBA
PCB-1221	EPA-8082	U	0.10	1	MG/KG	05/04/2023	DBA
PCB-1232	EPA-8082	U	0.10	1	MG/KG	05/04/2023	DBA
PCB-1242	EPA-8082	U	0.10	1	MG/KG	05/04/2023	DBA
PCB-1248	EPA-8082	U	0.10	1	MG/KG	05/04/2023	DBA
PCB-1254	EPA-8082	U	0.10	1	MG/KG	05/04/2023	DBA
PCB-1260	EPA-8082	U	0.10	1	MG/KG	05/04/2023	DBA
PCB-1268	EPA-8082	U	0.10	1	MG/KG	05/04/2023	DBA

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8082	**71.2**	05/04/2023	DBA
DCB	EPA-8082	**77.7**	05/04/2023	DBA

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
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CERTIFICATE OF ANALYSIS

CLIENT: EMB Consulting
22725 - 44th Ave W., # 203
Mountlake Terrace, WA 98043
CLIENT CONTACT: Elisabeth Black
CLIENT PROJECT: 1730

DATE: 5/9/2023
ALS SDG#: EV23050007
WDOE ACCREDITATION: C601

LABORATORY BLANK RESULTS

MB-050323S - Batch 193337 - Soil by EPA-8082

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
PCB-1016	EPA-8082	U	MG/KG	0.10	05/04/2023	DBA
PCB-1221	EPA-8082	U	MG/KG	0.10	05/04/2023	DBA
PCB-1232	EPA-8082	U	MG/KG	0.10	05/04/2023	DBA
PCB-1242	EPA-8082	U	MG/KG	0.10	05/04/2023	DBA
PCB-1248	EPA-8082	U	MG/KG	0.10	05/04/2023	DBA
PCB-1254	EPA-8082	U	MG/KG	0.10	05/04/2023	DBA
PCB-1260	EPA-8082	U	MG/KG	0.10	05/04/2023	DBA
PCB-1268	EPA-8082	U	MG/KG	0.10	05/04/2023	DBA

U - Analyte analyzed for but not detected at level above reporting limit.

MBLK-R434775 - Batch R434775 - TCLP Extract by EPA-6020

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Lead	EPA-6020	U	MG/L	0.031	05/08/2023	RAL

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
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CERTIFICATE OF ANALYSIS

CLIENT:	EMB Consulting 22725 - 44th Ave W., # 203 Mountlake Terrace, WA 98043	DATE:	5/9/2023
		ALS SDG#:	EV23050007
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Elisabeth Black		
CLIENT PROJECT:	1730		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 193337 - Soil by EPA-8082

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
PCB-1016 - BS	EPA-8082	**66.8**			50	150	05/04/2023	DBA
PCB-1016 - BSD	EPA-8082	**61.9**	**8**		50	150	05/04/2023	DBA
PCB-1260 - BS	EPA-8082	**62.3**			50	150	05/04/2023	DBA
PCB-1260 - BSD	EPA-8082	**59.3**	**5**		50	150	05/04/2023	DBA

ALS Test Batch ID: R434775 - TCLP Extract by EPA-6020

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Lead - BS	EPA-6020	**98.0**			87.5	107	05/08/2023	RAL
Lead - BSD	EPA-6020	**100**	**2**		87.5	107	05/08/2023	RAL

APPROVED BY

Rob Greer
Laboratory Director

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ALS Environmental
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Everett, WA 98208
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http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): EV2305 0007

Date 05.01.23 Page 1 Of 1

PROJECT ID: 1730
REPORT TO COMPANY: EMB Consulting LLC
PROJECT MANAGER: Elisabeth Black
ADDRESS: 22725. 44th Ave W, #203 Mountlake Terrace, WA 98043
PHONE: 206.915.239 FAX:
P.O. #: E-MAIL: emblackconsult@gmail.com
INVOICE TO COMPANY: 11
ATTENTION:
ADDRESS: WOOD

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. BB-TCLP	4/28	12:00	Solid	1															X	Lead only	1	
2. Off-TCLP	↓	↓	↓	2															X		1	
3. Bays-TCLP				3															X		1	
4.																						
5. Off-PCB			other	4												X					1	
6.																						
7.																						
8.																						
9.																						
10.																						

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: E Black
   Received By: Cynthia Cole ALSE 10:00a 5/2/23
2. Relinquished By:
   Received By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: ~~10~~ Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: 5 Standard | 3 | 1 | SAME DAY

OTHER: Specify:

*Turnaround request less than standard may incur Rush Charges