

Limited Pre-Renovation Hazardous Materials Survey Report

Zosel Dam Gate Improvements
1 14th Avenue
Oroville, Washington

Prepared for:
Washington State Department of Enterprise Services
4304 South Evergreen Road
Veradale, WA 99307

March 8, 2024
PBS Project 64598.016



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Table of Contents

1	INTRODUCTION	1
1.1	Project Background.....	1
1.2	Facility Description.....	1
1.3	Survey Process	1
2	FINDINGS.....	2
2.1	Asbestos-Containing Materials (ACMs).....	2
2.2	Lead-Containing Components.....	4
2.3	Polychlorinated Biphenyls (PCBs)/Mercury Investigation.....	5
3	RECOMMENDATIONS.....	7
3.1	ACMs	7
3.2	Lead-Containing Paint.....	8
3.3	PCBs & Mercury-Containing Components.....	8
4	LIMITATIONS.....	9

APPENDICES

APPENDIX A: Sample Location Field Forms

APPENDIX B: PLM Bulk Sampling Information

PLM Bulk Sample Inventory

PLM Point Count Data

PLM Bulk Sample Laboratory Data Sheets and Chain of Custody Documentation

APPENDIX C: AA Lead Paint Chip Sampling Information

AA Lead Paint Chip Sample Inventory

AA Lead Paint Chip Laboratory Data Sheets and Chain of Custody Documentation

APPENDIX D: Bulk PCB Sampling Information

Bulk PCB Sample Inventory

Bulk PCB Laboratory Data Sheets and Chain of Custody Documentation

APPENDIX E: Laboratory Certifications

APPENDIX F: Inspector Certifications

1 INTRODUCTION

1.1 Project Background

On February 16, 2024, PBS performed a limited pre-renovation hazardous materials survey of Zosel Dam located in Oroville, Washington. The survey was requested by Washington State Department of Enterprise Services in anticipation of renovation of the dam gates.

The purpose of the survey was to locate, identify, and quantify accessible friable and non-friable hazardous building materials for removal prior to renovation.

The survey is also intended to satisfy Washington State Department of Labor and Industries (L&I) hazard communication requirements as well as requirements by the Washington Administrative Code (WAC) to perform an asbestos inspection prior to renovation or demolition activities under WAC 296-62-07721 and WAC 296-155-176.

1.2 Facility Description

Zosel Dam

Located at 1 14th Avenue in Oroville, Washington serving as a water control structure between Washington and Canada. Reconstruction of the current structure was completed in 1987. The dam currently consists of a control structure, gantron lift system, 4 spillways with 4 gates, a roof, generator room, and the control room.

1.3 Survey Process

Accessible areas included in the project scope were inspected by the following AHERA Certified Building Inspector(s):

Inspector Name: Cienna Landon
Inspector Certificate Number: IMR-23-0507C
Certificate Expiration Date: June 20, 2024
Inspector Email: cienna.landon@pbsusa.com
Inspector Phone: 509-416-5455

Inspector Name: J. Kanani Patricio-Young
Inspector Certificate Number: IRO-23-8648B
Certificate Expiration Date: June 5, 2024
Inspector Email: kanani.young@pbsusa.com
Inspector Phone: 509-375-7833

PBS endeavored to inspect all accessible areas of the scope of work. Inaccessible areas consist of those requiring selective demolition, fall protection, or confined space entry protocols to gain access.

When observed, suspect materials were sampled. All samples were assigned a unique identification number and transmitted to the appropriate laboratory for analysis. See section 2 for findings.

2 FINDINGS

2.1 Asbestos-Containing Materials (ACMs)

The Zosel Dam was inspected by a PBS Asbestos Hazard Emergency Response Act (AHERA) accredited inspector to determine the presence, location, and approximate quantity of asbestos-containing materials (ACMs). PBS collected a total of 46 bulk samples of building materials, suspected of containing asbestos, and submitted them under chain of custody to EMC Labs of Phoenix, Arizona, for polarized light microscopy (PLM) analysis. Suspect ACMs may exist in inaccessible areas. PBS endeavored to determine the presence and estimate the condition of suspect materials in all inaccessible areas included in the scope of work. While PBS has endeavored to identify ACMs that may be found in concealed locations, additional unidentified ACMs may exist. A regulated asbestos-containing material is defined as containing greater than 1% asbestos content.

The materials listed in Table 1 below, were determined to **contain asbestos**:

TABLE 1: ASBESTOS-CONTAINING MATERIALS

MATERIAL DESCRIPTION / SUBSTRATE	HOMOGENOUS MATERIAL ID	COLOR/ PATTERN / TEXTURE	ROOM / LOCATION SAMPLED	ASBESTOS PERCENT % / ASBESTIFORM	CAT	FRIABLE	CONDITION	QUANTITY
Roof Penetration Caulk	HM1	Gray / Silver	Roof	3% Chrysotile	M	NF	Fair	~40 LF
Silver heat tempered TSI	HM2	Silver	Upper Level Generator Room	8% Chrysotile	TSI	F	Fair	~6 LF
Fire Door Frame Caulk	HM3	Gray	Upper Level Generator Room	3% Chrysotile	M	NF	Fair	~40 LF
(2) Fire Doors and frames	HM4	N/A	Control Room & Generator Room	PACM	M	NF	Fair	2 EA
Electrical Grounding Paper/Insulation	HM5	Silver	Main Level & Upper Level Control Room	PACM	M	NF	Fair	NQ
Square Shaped Socket Light Fixture heat shield backing	HM6	Silver	Throughout	PACM	M	NF	Fair	25 EA
CAT: CATEGORY: S= Surfacing, TSI = Thermal System Insulation, M = Miscellaneous					LF = Linear Feet		NQ = Not Quantified	
PACM = Presumed Asbestos Containing Material					SF = Square Feet			
FRIABILITY: F = Friable, NF = Non-Friable					EA = Each unit			
CONDITION: GOOD = Material had no visible damage or surface marring, DAMAGED = Material had visible damage evenly distributed on < 10% surface area or Material had visible localized damage over <25% of specific material as whole. SIGNIFICANTLY DAMAGED = Material had visible damage evenly distributed over > 10% surface area or Material had visible localized damage over > 25% of specific material as whole. *or reference AHERA ACBM Condition Categories Hazard Ranks 1-7*								

PBS observed approximately twenty-five (25) square shaped socket light fixtures with heatshield backing and wiring insulation that should be presumed to contain asbestos.

PBS observed two (2) fire doors and door frames that should be presumed to contain asbestos.

PBS observed two (2) electrical enclosures and numerous electrical grounding boxes that may contain suspect electrical grounding paper/insulation that should be presumed to contain asbestos.

At the time of this survey, all asbestos-containing building materials were observed to be in fair condition.

Please refer to the asbestos bulk sample inventory for more sample details.

*The following materials were determined **not to contain asbestos**:*

- *Green Metal Beam Paint – South Control Structure*
- *Green/Black Wheel Crank – South Control Structure*
- *Cementitious Concrete Mix Structure – North/South/Mid Control Structure*
- *Green Painted Coating on Metal Ceiling Panels – Control Structure*
- *Green/Gray Lifting Arms – South Control Structure*
- *Old Screw Boot Debris – Control Structure*
- *Yellow Gasket – Gantron Lifting System*
- *Paint – Gantron Lifting System*
- *Anti-Rust Primer – Spillway Gates*
- *Seam Caulk – Corrugated Metal Roof*
- *Gray Generator Paint – Upper-Level Generator Room*
- *Black 3" Gasket – Merlin Generator*
- *White/Black Gasket – Merlin Generator*
- *Wire Insulation – Merlin Generator*
- *White Wrapped TSI Fiberglass – Generator Room*
- *Hydraulic Gaskets – Upper-Level Control Room*
- *Conduit Gaskets - Upper-Level Control*
- *Lift Gate Screws - Upper-Level Control Room*
- *White Fibrous Insulation - Upper-Level Control*
- *Black Rubber Air Flow Stop – Upper-Level Main Room Platform*
- *Blue Pump Gasket – South Pump Vault*

For a complete listing of representative bulk sampling and associated laboratory analysis, refer to the attachments, Appendix A.

Asbestos Regulations

Regulations define ACM as any material containing more than 1% asbestos. Although materials with <1% asbestos are not considered by regulatory agencies to be an ACM, they still have some asbestos content, and WAC has specific requirements for situations in which workers may encounter, disturb, or remove materials containing any concentration of asbestos. For the sake of hazard communication, these materials are included in the asbestos-containing materials section of this report.

L&I does require training for workers who impact materials with any amount of asbestos if that impact could result in airborne fiber concentrations over the permissible exposure limit (PEL) of 0.1 fibers per cubic centimeter (f/cc) of air.

The EPA defines ACM as "any material containing more than one percent asbestos." PBS recommends that all ACM to be impacted by the planned demolition be removed and disposed of by a Washington State certified asbestos abatement contractor in accordance with all local, state, and federal regulations. Impact of ACM should be performed according to Washington Industrial Safety and Health Act (WISHA) requirements, including WACs 296-62 and 296-65. Proper worker training, personal protective equipment, engineering controls, and housekeeping procedures must be utilized as required.

OSHA provides federal regulations governing asbestos (29 CFR Part 1926, 1101). These regulations detail work procedures and how ACM is removed. OSHA believes that the single biggest problem is to workers who unknowingly or improperly disturb ACM. Hazard communication, training, personal protection, work practices, exposure monitoring, and recordkeeping are all major components of the regulation. Work impacting asbestos is subject to the requirements of various regulations, including, but not limited to 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants (NESHAPS); 40 CFR Part 763, AHERA; WAC 296-62 and 296-65; and local clean air agency regulations.

2.2 Lead-Containing Components

Lead-Containing Paint

Paint was sampled for lead content for the sake of hazard communication. The table below summarizes lead findings in paint sampled on site.

PBS collected (5) five paint chip samples were collected from representative building components from the dam platform and the upper level submitted under chain of custody to EMC labs of Phoenix, Arizona, (NVLAP # 101926-0) for analysis of lead content via flame atomic absorption (FLAA). The concentration of lead in the samples ranges from 990 parts per million (ppm) to 103,000 ppm.

See the lead sample inventory section for representative building components and corresponding results.

TABLE 2: LEAD-CONTAINING PAINT							
Paint Color	Room Equivalent (Room #)	Building Component Type	Substrate	Location / Room Side: A/B/C/D	Result % by Weight	Result ppm	BRL/LCP/LBP
Green Paint	Control Structure	Lifting Arm	Metal	Dam Platform	0.266	2,660	LCP
Yellow Paint	Gantron	Lifting System	Metal	Dam Platform	10.3	103,000	LBP
Brown Paint	Main Room	Siding	Metal	Upper Level	1.90	19,000	LBP
Cream Paint	Main Room	Pipe	Metal	Upper Level	0.099	990	LCP
Gray Paint	Generator Room	Merlin Generator	Metal	Upper Level	0.242	2,420	LCP

BRL = Below Labs Reportable Limits

LCP = Lead-containing-paint 0.006 % – 0.499 % (less than 5,000 ppm)

LBP = Lead-based-paint 0.5 % by weight or more (5,000 ppm or more)

Paint testing for this survey was limited in scope. The report information and testing results are not to be construed as an exhaustive investigation of lead-containing paint on all building surfaces. All paint on painted surfaces not identified in this report should be presumed to contain lead.

Peeling and flaking paint was observed throughout the dam control structure. Accumulations of paint chips were noted in various areas. Caution should be exercised so as not to disturb peeling, flaking or accumulated paint chips. Applicable regulations in conjunction with construction activities are provided below.

Lead-Containing Paint Regulations

The Consumer Product Safety Commission limit for lead in consumer paint products is 0.009% or 90 ppm or greater. The Department of Housing and Urban Development (HUD) and the EPA define lead-based paint as

that which contains 0.5% or 5,000 ppm. Under L&I, any lead concentration in paint that may become airborne during construction operations triggers requirements in the Lead in Construction Standard WAC 296-155-176 to protect employees impacting the paint.

Disposal

According to Washington State Department of Ecology, Lead in Construction and Demolition Waste guidance generally requires hazardous waste determination (i.e., Toxicity Characteristic Leaching Procedures [TCLP] testing) if demolition debris is disposed of at a solid waste landfill that meets the current design standards for municipal solid waste disposal facilities of 40 CFR Part 258.

2.3 Polychlorinated Biphenyls (PCBs) / Mercury Investigation

PBS conducted a visual inspection of the dam for suspect PCB lamp ballasts, mercury-containing fluorescent lamp tubes, and mercury-containing thermostat switches. PBS observed the following materials in the following locations:

- Upper Level Control Room: Eight (8) 4-foot mercury light tubes & Four (4) PCB light ballasts.
- Throughout Dam Structure: Eight (8) Caged light fixtures w/ mercury HID/lighting.
- Hydraulic grease used in the upper level on the horizontal gate lifting shaft contained PCB at levels ≥ 50 ppm.

PBS inspected representative fluorescent light fixture ballasts throughout the structure included in this investigation. The majority of ballasts throughout all buildings were found to be presumed to contain PCBs due to lack of indication stating “No PCBs”. PBS did not observe any leaking ballast on the fixtures inspected as part of our current investigation.

Mercury-Containing Fluorescent Light Tubes/Switches

All mercury-containing compact fluorescent light bulbs and switches should be carefully handled, packaged, and recycled or disposed of in the appropriate manner. Please refer to the following documents for requirements for removal and disposal of mercury-containing waste:

- US Environmental Protection Agency Toxic Substance Control Act, TSCA, (Code of Federal Regulations Title 40, Part 761).
- RCRA, Resource Conservation and Recovery Act, 40 CFR Part 2761, Subpart D., 40 CFR 273.

This report is not suitable as a bid document or an asbestos abatement design. The purpose of this report is risk hazard communication only.

Polychlorinated Biphenyls (PCBs) Containing Materials

Suspect building products were sampled for PCBs. Results indicated that the Hydraulic grease used in the upper level on the horizontal gate lifting shaft contained PCB at levels ≥ 50 ppm.

The hydraulic grease staining was also present throughout the upper level main area decking directly beneath the gate lifting shaft and should be taken into consideration during and remedial activities.

The table below summarizes PCB findings sampled on site.

PCB Sample #	Location	Material Type	Mg/Kg	Results in PPM
2001	Control Structure	Bulk/Gasket/Caulk	< 1.2	<1.2

PCB Sample #	Location	Material Type	Mg/Kg	Results in PPM
2002	Upper Level - Gate Lifting Shaft	Bulk/Hydraulic Grease	230	230
2003	Upper Level - Gate Screw Housing	Bulk/Hydraulic Grease	< 1.8	< 1.8
2004	Upper Level - Merlin Generator	Bulk/Hydraulic Grease	< 6.1	< 6.1

Caulking and sealants of certain vintages can contain varying levels of PCBs. PBS tested representative caulking and sealants for the presence of PCBs. The samples were assigned unique identification numbers and transmitted to NVL Laboratories, Inc. in Seattle, Washington under chain-of-custody protocols for analysis. The samples were analyzed by EPA Method 8082A. Sampling and analysis revealed the following materials to contain PCBs: Sample # 2002 gate lifting shaft hydraulic oil in the upper level contained PCB at levels ≥ 50 ppm which is not authorized under TSCA and the federal PCB regulations at 40 CFR part 761. Manufactured PCB products that contain PCBs ≥ 50 ppm are unauthorized for use and must be removed for disposal as a PCB bulk product waste.

PBS recommends all light ballasts be inspected prior to disposal. Magnetic ballasts should be presumed to contain PCBs and properly removed, stored, transported, and disposed of in accordance with WAC 173-303 Dangerous Waste Regulations and 40 CFR Part 761 Subpart D. Electronic ballasts do not contain PCBs. None of the suspect caulking sampled by PBS contained greater than 50 mg/kg PCBs and does not require removal and disposal as a regulated PCB Bulk Product Waste prior to demolition. Comply with L&I regulations related to PCBs for materials containing less than 50 ppm PCBs.

For the locations, quantities and results of PCB sampling see attachments in Appendix C.

For laboratory reports, sample locations and constituent concentrations see Appendix D.

Polychlorinated Biphenyls (PCBs) Regulations

Various building products from the 1950's through the 1970's were manufactured with polychlorinated biphenyls (PCBs) as a key ingredient because of its non-flammability, chemical stability, high boiling point, and electrical and thermal insulating properties. PCBs were also added to many building products as a plasticizer, which imparted flexibility.

Buildings constructed or renovated from the 1950's through the 1970's may include building products manufactured with PCBs. Examples of potentials PCB-containing building products include:

- Caulking and grout in floor and wall joints
- Oil-based paint coating floors and walls
- Mastic and adhesives used under flooring (tiles and carpets)
- Sealants and finishing used on flooring
- Gaskets around windows and doors and in heating, ventilation, and air conditioning systems and ducting
- Window glazing
- Roofing and Siding

Building products found to contain greater than or equal to 50 ppl PCBs are classified as PCB bulk product waste under federal regulations through the Toxics Substances Control Act (TSCA) found in Chapter 40 of the Code of Federal Regulations (CFR) (40 CFR 761). PCB bulk product waste is “unauthorized for use” and must be removed and disposed of in accordance with 40 CFR 761.62. Materials that have come into contact with PCB bulk product waste may have been contaminated with PCBs. These materials may be considered PCB bulk product waste or PCB remediation waste, as defined below. PCB remediation waste must be managed in accordance with 40 CFR 761.61.

On October 24, 2012, USEPA (EPA) issued a reinterpretation of its definitions of PCB bulk product waste and PCB remediation waste. This reinterpretation allows building material (i.e. substrates) that are “coated or serviced” with PCB bulk product waste at the time of designation for disposal to be managed and disposed of as PCB bulk product waste. However, PCB contaminated substrates that remain in place after the PCB bulk product waste has been removed must be managed as PCB remediation waste. This reinterpretation allows PCB-contaminated substrate (regardless of concentration) if removed and designated for disposal at the same time as the PCB bulk product waste to be disposed of at a State licensed non-hazardous landfill. Disposal of PCB bulk product waste is generally less costly than disposal of PCB remediation waste.

Under EPA’s reinterpretation, examples of PCB bulk product waste include:

- Caulk, paint, mastic, adhesives, sealants, etc.
- The PCB contaminated substrate if the substrate is removed and designated for disposal at the same time as the associated PCB bulk product waste. Examples of the types of substrates that would then be considered PCB bulk product waste include:
 - Concrete adjacent to caulked or grouted joints
 - Concrete, wood, or other substrate coated with PCB-containing paint
 - Flooring materials, including tiles and carpets, coated with mastic, adhesives, sealants, etc.
 - Window materials in contact with gaskets and glazing

Examples of PCB remediation waste in buildings include:

- Substrate (concrete, wood, flooring materials, etc.) contaminated with PCBs from a PCB bulk product waste (caulk, paint, etc.), if the PCB bulk product waste has been removed and the substrate remains in place.
- Soil beneath caulked or grouted joints.
- Flooring impacted by a release of PCB-containing hydraulic, cutting, or transformer oils.
- Light fixtures impacted by a release of PCBs from PCB-containing ballast.

3 RECOMMENDATIONS

3.1 ACMs

PBS recommends that all ACMs to be impacted by the renovation be removed prior to renovation activities. A qualified Washington State licensed asbestos abatement contractor should be employed to remove all such ACMs according to applicable local, state, and federal regulations.

The possibility exists that suspect ACMs may be present in equipment, wall, and ceiling cavities, and buried/below slab areas included in the scope of demolition. These may include, but are not limited to, waterproofing membrane, buried pipe insulation, buried transite water and sewer piping, internal gaskets, caulking and sealants, construction adhesives and mastics. If suspect ACMs are uncovered during construction, contractors should stop work immediately and inform the owner promptly for confirmation testing. All untested materials should be presumed asbestos-containing or tested for asbestos content prior to impact.

Materials found to contain less than one percent (<1%) asbestos require compliance with Occupational Safety and Health Regulations (OSHA). These materials may be demolished by any contractor employing an asbestos supervisor using all the work practices and engineering controls specified in 29 CFR 1926.1101. In addition, the contractor must maintain administrative programs such as respiratory protection and, in some cases, medical monitoring of employees.

Additional suspect ACMs may be present in concealed spaces, which are discussed above. Caution should be exercised during demolition to prevent impact of suspect ACMs. All suspect ACMs should be presumed asbestos-containing until properly sampled and analyzed.

3.2 Lead-Containing Paint

Representative painted coatings from the project locations were found to contain lead by laboratory analysis. Impact of painted surfaces with detectable concentrations of lead requires construction activities to be performed according to applicable regulations. Workers impacting LCP should be provided the proper personal protective equipment and use proper work methods to limit occupational and environmental exposure to lead until an initial exposure assessment has been conducted.

The OSHA Lead in Construction Standard (29 CFR 1926.62) outlines worker exposure limits, personal protection requirements and employer responsibility for exposure assessment, training, housekeeping, and recordkeeping. OSHA's lead standard applies to all work where employees may be exposed to lead in construction, alteration, or repair activities. This includes demolition and/or renovation of structures where lead-containing materials are present. Under OSHA, any amount of lead triggers the OSHA Lead in Construction Standard, 29 CFR 1926.62. Painted coatings may exist in inaccessible areas of the project or in secondary coatings. Any previously unidentified painted coatings should be considered lead containing until sampled and proven otherwise.

3.3 PCBs & Mercury-Containing Components

Fluorescent lamps are known to contain concentrations of mercury, which is toxic to mammals. All fluorescent lamps and tubes should be handled and recycled in accordance with applicable regulations during demolition activities. Breakage of lamps is to be prevented. All lamps and tubes should be properly packaged and recycled or disposed of at a facility permitted to accept such material. Trained workers, handling, engineering controls and disposal practices should be used when performing this work. All waste should be handled in accordance with applicable regulations.

Any electronic equipment with liquid mercury bulbs or Merciod switches should have the mercury components carefully removed by properly trained personnel using appropriate work practices. The mercury components should then be containerized prior to transporting to a recycling facility permitted to accept such waste. Any broken tubes or switches should be promptly cleaned by properly trained personnel using appropriate work practices and worker protection.

PBS recommends all light ballasts be inspected prior to disposal. All magnetic ballasts should be presumed to contain PCBs and properly removed, stored, transported, and disposed of in accordance and 40 CFR Part 761 Subpart D. Electronic ballasts do not contain PCBs and can be disposed of as general debris in compliance with applicable codes and endpoint facility requirements.

PCBs were detected in levels over 50 ppm in the hydraulic grease used on the gate lifting shaft in the upper level main room. The hydraulic grease staining was also present throughout the upper level main area decking directly beneath the gate lifting shaft and should be taken into consideration during and remedial activities.

This report is not suitable as a bid document or an abatement design. The purpose of this report is risk hazard communication only.

4 LIMITATIONS

This study was limited to the tests, locations and depths as indicated to determine the absence or presence of certain contaminants. The site as a whole may have other contamination that was not characterized by this study. The findings and conclusions of this report are not scientific certainties, but rather probabilities based on professional judgment concerning the significance of the data gathered during this investigation.

Please do not hesitate to contact us if you have any questions regarding this report or require additional information.

Report prepared by:
Cienna Landon
Industrial Hygiene Inspector
Cert. # IMR-23-0507c, exp. 6/20/2024

Report reviewed by:
J. Kanani Patricio-Young
Sr. Project Manager, Lead IH
Cert. #IRO-23-8648B, exp. 6/05/2024

Signature Date

Signature Date

APPENDICIES

APPENDIX A

Sample Location Field Form(s)



Project Name/Scope: Zase / Dam PBS Project No. 64598.016
Project Address: Orville, Washington Proj. Date: 2/16/24
Client Name/POC: Washington State DES - Lester Client Proj. No.

EMAIL RESULTS TO:

☒ Karani.Young@Pbsusa.com

☒ Cicenna.Jordan@Pbsusa.com

☐ _____

☐ _____

MOLD:

☐ Tape (Direct) ☐ Swab (Direct)

PCBS:

☒ Bulk ☐ Wipe ☐ Oil

TURN AROUND TIME:

☐ Rush ☐ 4-Hour ☐ 6-Hour ☒ 5 days

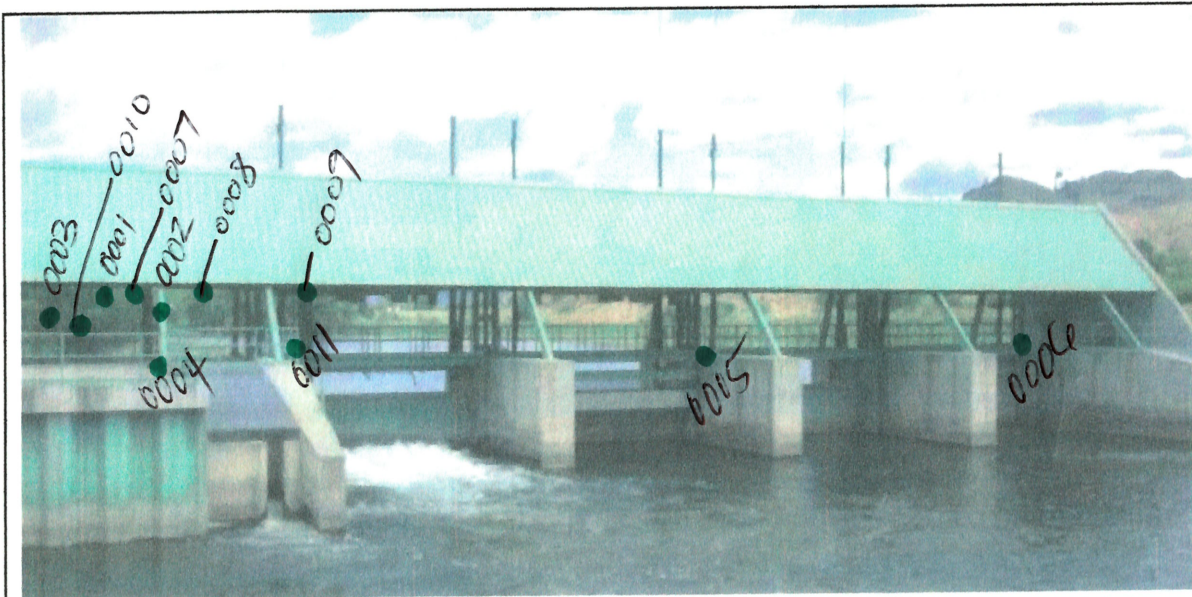
☐ 24-Hour ☐ 48-Hour ☐ 72-Hour ☐ _____

ASBESTOS:

☒ PLM Bulk
☐ Vermiculite

LEAD:

☐ Pb Soil
☐ Pb Paint Chip
☐ Pb Dust/Wipe



Codes / ARCHIVE	Sample ID	Building / Floor / Location / Material Description / Mastic Color / Substrate	QUANTITY: SF/LF	Category / Friability / Cond.	Material Types
	0001	Control Structure / metal beam paint (Green) S.		☐ TSI Insulation ☐ Miscellaneous	☐ Gypsum/JC ☐ TSI ☐ Plaster ☐ CAB ☐ CMU ☐ GCT
	0002	" " " S.		☐ Surfacing ☒ Friable	☐ Brick ☐ DCT ☐ ceramic ☐ covebase ☐ grout ☐ laminate ☐ caulk ☐ vinyl tile
	0003	" wheel crank (Green/Black) S.		☐ Non-Friable	
	0004	Cementitious Concrete Mix (Struct) M.		☐ TSI Insulation	☐ Gypsum/JC ☐ TSI
	0005	" Cementitious Concrete Mix (Structure) S.		☐ Miscellaneous	☐ Plaster ☐ CAB ☐ CMU ☐ GCT
	0006	" " " Mid.		☐ Surfacing ☒ Friable	☐ Brick ☐ DCT ☐ ceramic ☐ covebase ☐ grout ☐ laminate ☐ caulk ☐ vinyl tile
	0007	" Green Painted Coating on Metal panels		☐ TSI Insulation ☐ Miscellaneous	☐ Gypsum/JC ☐ TSI ☐ Plaster ☐ CAB ☐ CMU ☐ GCT
	0008	" " " "		☐ Surfacing ☒ Friable	☐ Brick ☐ DCT ☐ ceramic ☐ covebase ☐ grout ☐ laminate ☐ caulk ☐ vinyl tile
	0009	" " " "		☐ Non-Friable	
	0010	" Lifting Arms (Green/Gray) S.		☐ TSI Insulation ☐ Miscellaneous	☐ Gypsum/JC ☐ TSI ☐ Plaster ☐ CAB ☐ CMU ☐ GCT
				☐ Surfacing ☒ Friable	☐ Brick ☐ DCT ☐ ceramic ☐ covebase ☐ grout ☐ laminate ☐ caulk ☐ vinyl tile
				☐ Non-Friable	
NORTH Drawing Not to Scale	0011	" Old screw boot debris		☐ TSI Insulation ☐ Miscellaneous	☐ Gypsum/JC ☐ TSI ☐ Plaster ☐ CAB ☐ CMU ☐ GCT
				☐ Surfacing ☐ Friable	☐ Brick ☐ DCT ☐ ceramic ☐ covebase ☐ grout ☐ laminate ☐ caulk ☐ vinyl tile
				☒ Non-Friable	

Relinquished by: <u>DeAngelo Nelson</u>	Date: <u>2/23/24</u>	Received by: _____	Date: _____
Relinquished by: <u>DTW</u>	Date: <u>2/23/24</u>	Received by: _____	Date: _____
Sampled By: _____	Exp: _____	Analyzed By: _____	Date: _____



Project Name/Scope: Zosel Dam PBS Project No. 64598.016
Project Address: Orville, Washington Proj. Date: 2/16/24
Client Name/POC: Washington State DES - Lester Client Proj. No. _____

EMAIL RESULTS TO:

☒ kanani.young@pbsusa.com
☒ cienna.landon@pbsusa.com
☐ _____
☐ _____

MOLD:

☐ Tape (Direct) ☐ Swab (Direct)

PCBs:

☒ Bulk ☐ Wipe ☐ Oil

TURN AROUND TIME:

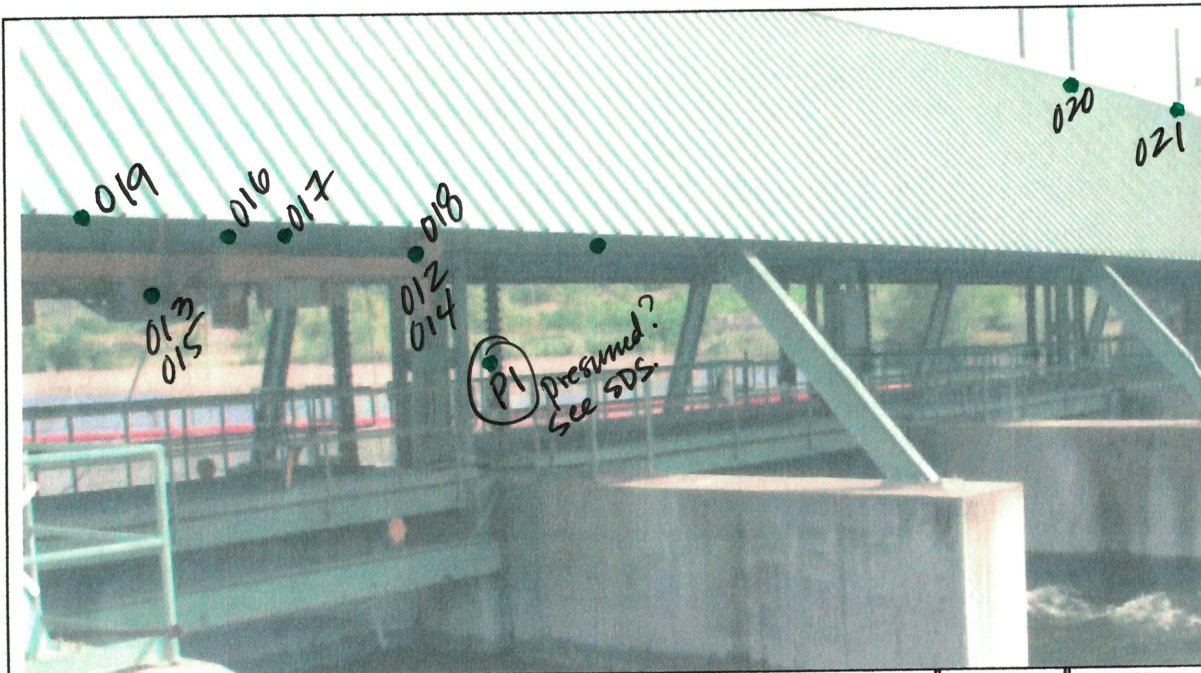
☐ Rush ☐ 4-Hour ☐ 6-Hour ☒ 5 days
☐ 24-Hour ☐ 48-Hour ☐ 72-Hour ☐ _____

ASBESTOS:

☒ PLM Bulk
☐ Vermiculite

LEAD:

☐ Pb Soil
☐ Pb Paint Chip
☐ Pb Dust/Wipe



Codes / ARCHIVE	Sample ID	Building / Floor / Location / Material Description / Mastic Color / Substrate	QUANTITY: SF/LF	Category / Friability / Cond.	Material Types
	0012	Grantron Lift System (yellow) Gasket		☐ TSI Insulation	☐ Gypsum/JC ☐ TSI
	0013	" " " Gasket		☐ Miscellaneous	☐ Plaster ☐ CAB
	0014	" " " Paint		☐ Surfacing	☐ CMU ☐ GCT
	0015	" " " Paint		☐ Friable	☐ Brick ☐ DCT
	0016	Spill-way Gates Paint Primer (Anti Rust) #1		☒ Non-Friable	☐ ceramic ☐ covebase
	0017	" " " " GATE #2		☐ TSI Insulation	☐ grout ☐ laminate
	0018	" " " " GATE #4		☐ Miscellaneous	☐ caulk ☐ vinyl tile
	0019	Corrugated Metal Roof Seam Caulk		☐ Surfacing	☐ Gypsum/JC ☐ TSI
	0020	Roof Penetration Caulk (Gray/Silver)		☐ Friable	☐ Plaster ☐ CAB
	0021	" " "		☒ Non-Friable	☐ CMU ☐ GCT
	P1	TBC Rod & Screw Boot Bellows		☐ TSI Insulation	☐ Brick ☐ DCT
	P2	* See SDS or Presume		☐ Miscellaneous	☐ ceramic ☐ covebase
	P3	" " "		☐ Surfacing	☐ grout ☐ laminate
				☐ Friable	☐ caulk ☐ vinyl tile
				☐ Non-Friable	

Relinquished by: <u>Debra Nelson</u>	Date: <u>2/23/24</u>	Received by:	Date:
Relinquished by: <u>AL</u>	Date: <u>2/23/24</u>	Received by:	Date:
Sampled By:	Exp:	Analyzed By:	Date:



Project Name/Scope: Zosel Dam PBS Project No. 64598.016
Project Address Orville, Washington Proj. Date: 2/16/24
Client Name/POC: Washington State DES - Lester Client Proj. No. -

EMAIL RESULTS TO:

☒ Kanaani.young@pbsusa.com
☒ cienna.landon@pbsusa.com

☐ _____
☐ _____

MOLD:

☐ Tape (Direct) ☐ Swab (Direct)

PCBs:

☒ Bulk ☐ Wipe ☐ Oil

TURN AROUND TIME:

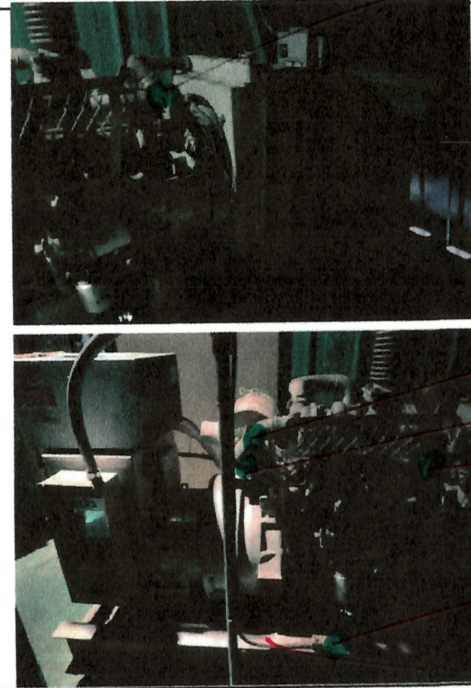
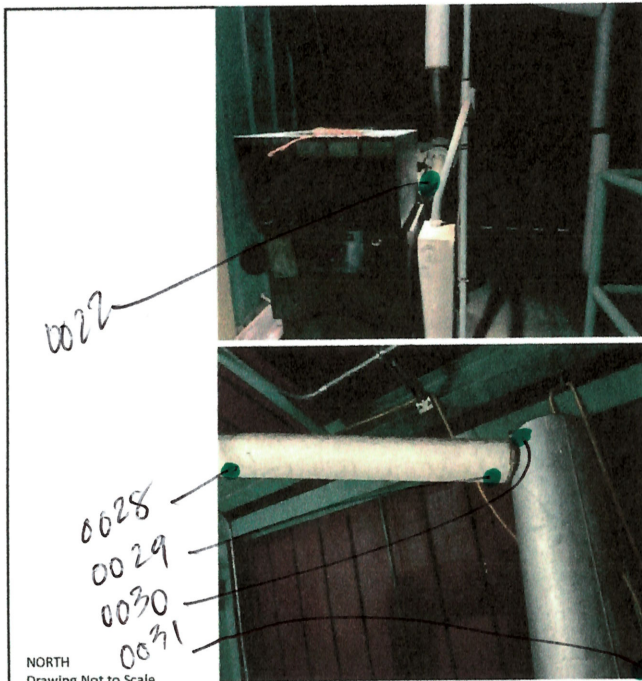
☐ Rush ☐ 4-Hour ☐ 6-Hour ☒ 5 days
☐ 24-Hour ☐ 48-Hour ☐ 72-Hour ☐ _____

ASBESTOS:

☒ PLM Bulk
☐ Vermiculite

LEAD:

☐ Pb Soil
☐ Pb Paint Chip
☐ Pb Dust/Wipe



NORTH
Drawing Not to Scale

Codes / ARCHIVE	Sample ID	Building / Floor / Location / Material Description / Mastic Color / Substrate	QUANTITY: SF/LF	Category / Friability / Cond.	Material Types
	0022	Generator Room (UL) Generator Paint - Gray		☐ TSI Insulation ☐ Miscellaneous	☐ Gypsum/JC ☐ TSI ☐ Plaster ☐ CAB. ☐ CMU ☐ GCT
	0023	" " " "	" "	☐ Surfacing	☐ Brick ☐ DCT
	0024	" " " "	" "	☒ Friable ☐ Non-Friable	☐ ceramic ☐ cobase ☐ grout ☐ laminate ☐ caulk ☐ vinyl tile
	0025	Merlin Generator 3" gasket (black)		☐ TSI Insulation	☐ Gypsum/JC ☐ TSI
	0026	" " " gasket (White/Black)		☐ Miscellaneous	☐ Plaster ☐ CAB. ☐ CMU ☐ GCT
	0027	" " Wire Insulation		☐ Surfacing	☐ Brick ☐ DCT
	0028	Generator Room-White-wrapped TSI - Fiberglass		☐ Friable ☐ Non-Friable	☐ ceramic ☐ cobase ☐ grout ☐ laminate ☐ caulk ☐ vinyl tile
	0029	" " " "	" "	☒ Friable ☐ Non-Friable	☐ Gypsum/JC ☐ TSI ☐ Plaster ☐ CAB. ☐ CMU ☐ GCT
	0030	" " Silver-wrapped HT TSI		☐ TSI Insulation	☐ Gypsum/JC ☐ TSI
	0031	" " " "	" "	☐ Miscellaneous	☐ Plaster ☐ CAB. ☐ CMU ☐ GCT
				☐ Surfacing	☐ Brick ☐ DCT
				☒ Friable ☐ Non-Friable	☐ ceramic ☐ cobase ☐ grout ☐ laminate ☐ caulk ☐ vinyl tile
	0032	Upper Level North Fire Door Frame Caulk		☐ TSI Insulation	☐ Gypsum/JC ☐ TSI
	0033	Upper level South Fire Door Frame Caulk		☐ Miscellaneous	☐ Plaster ☐ CAB. ☐ CMU ☐ GCT
				☐ Surfacing	☐ Brick ☐ DCT
				☐ Friable ☒ Non-Friable	☐ ceramic ☐ cobase ☐ grout ☐ laminate ☐ caulk ☐ vinyl tile

Relinquished by: <u>Derran Nelson</u>	Date: <u>2/23/24</u>	Received by: _____	Date: _____
Relinquished by: <u>Lyn</u>	Date: <u>2/23/24</u>	Received by: _____	Date: _____
Sampled By: _____	Exp: _____	Analyzed By: _____	Date: _____

* UL = Upper Level *



Project Name/Scope: Zosel Dam PBS Project No. 64598.016
Project Address Orville, Washington Proj. Date: 2/16/24
Client Name/POC: Washington State OES - Lester Client Proj. No. _____

EMAIL RESULTS TO:

* Kanani.young@pbswa.com

* Cienna.landon@pbswa.com

☐

☐

MOLD:

☐ Tape (Direct) ☐ Swab (Direct)

PCBs:

* ☒ Bulk ☐ Wipe ☐ Oil

TURN AROUND TIME:

☐ Rush ☐ 4-Hour ☐ 6-Hour ☒ 5 days

☐ 24-Hour ☐ 48-Hour ☐ 72-Hour ☐

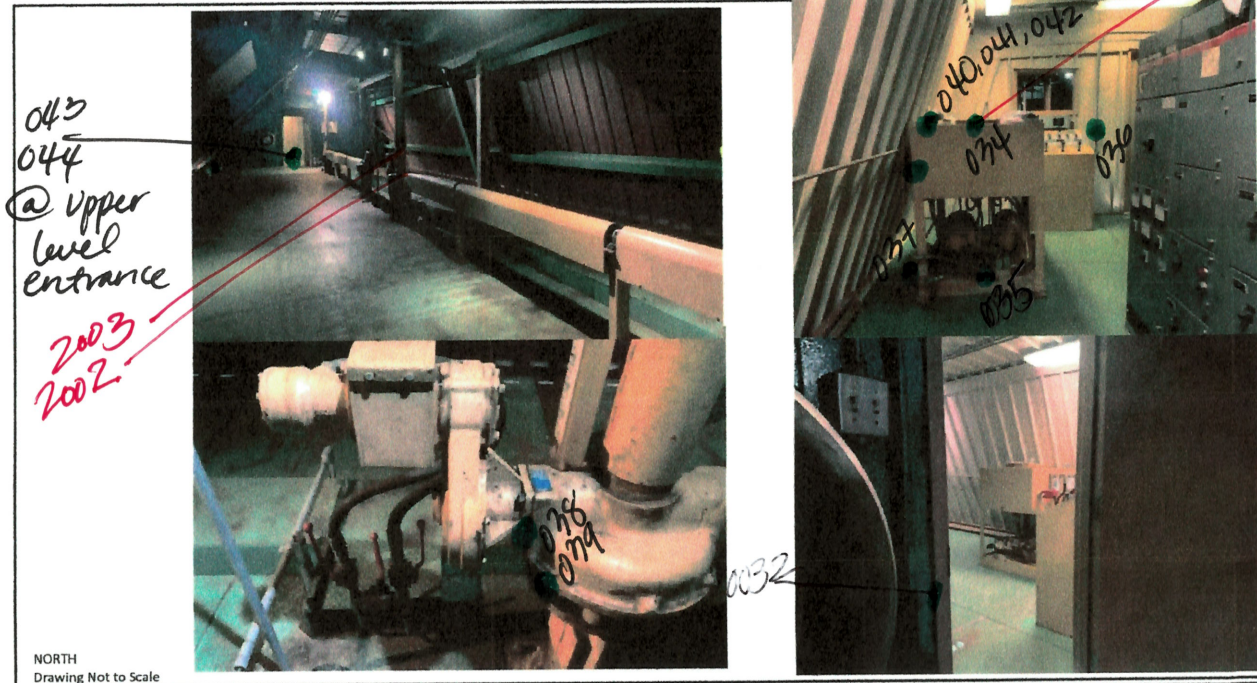
ASBESTOS:

* ☒ PLM Bulk
☐ Vermiculite

LEAD:

☐ Pb Soil
☐ Pb Paint Chip
☐ Pb Dust/Wipe

2001



NORTH
Drawing Not to Scale

Codes / ARCHIVE	Sample ID	Building / Floor / Location / Material Description / Mastic Color / Substrate	QUANTITY: SF/LF	Category / Friability / Cond.	Material Types
	0034	Upper Level/Control Room/Hydraulics Basket		☐ TSI Insulation	☐ Gypsum/JC ☐ TSI
	0035	" " "		☐ Miscellaneous	☐ Plaster ☐ CAB.
	0036	" " Conduit Baskets		☐ Surfacing	☐ CMU ☐ GCT
	0037	" " "		☐ Friable	☐ Brick ☐ DCT
	0038	" " Lift Gate Screws		☒ Non-Friable	☐ ceramic ☐ cobase
	0039	" " "			☐ grout ☐ laminate
	0040	" " White Fibrous Insulation			☐ caulk ☐ vinyl tile
	0041	" " "		☐ TSI Insulation	☐ Gypsum/JC ☐ TSI
	0042	" " "		☐ Miscellaneous	☐ Plaster ☐ CAB.
	0043	Upper Level/Main Room Platform ^{airflow} stop		☐ Surfacing	☐ CMU ☐ GCT
	0044	" " Black Rubber		☒ Friable	☐ Brick ☐ DCT
				☒ Non-Friable	☐ ceramic ☐ cobase
	P4	Electrical Panel in Control Room			☐ grout ☐ laminate
	P5	Heat Shield light fixture			☐ caulk ☐ vinyl tile

Relinquished by: <u>Douglas Nelson</u>	Date: <u>2/23/24</u>	Received by:	Date:
Relinquished by: <u>DNL</u>	Date: <u>2/23/24</u>	Received by:	Date:
Sampled By:	Exp:	Analyzed By:	Date:



Project Name/Scope: Iosef Dam PBS Project No. 64598.016
Project Address Orville, Washington Proj. Date: 2/16/24
Client Name/POC: Washington State DES - Lester Client Proj. No. —

EMAIL RESULTS TO:

X Karani.young@pbsusa.com

X Cienna.landon@pbsua.com

☐ _____
☐ _____

MOLD:

☐ Tape (Direct) ☐ Swab (Direct)

PCBs:

X Bulk ☐ Wipe ☐ Oil

TURN AROUND TIME:

☐ Rush ☐ 4-Hour ☐ 6-Hour X 5 days

☐ 24-Hour ☐ 48-Hour ☐ 72-Hour ☐ _____

ASBESTOS:

X PLM Bulk
☐ Vermiculite

LEAD:

☐ Pb Soil
☐ Pb Paint Chip
☐ Pb Dust/Wipe



NORTH
Drawing Not to Scale

Codes / ARCHIVE	Sample ID	Building / Floor / Location / Material Description / Mastic Color / Substrate	QUANTITY: SF/LF	Category / Friability / Cond.	Material Types
	0045	South Pump Vault / Blue Pump Gasket		☐ TSI Insulation	☐ Gypsum/JC ☐ TSI
	0046	" "	" "	☐ Miscellaneous	☐ Plaster ☐ CAB.
				☐ Surfacing	☐ CMU ☐ GCT
				☐ Friable	☐ Brick ☐ DCT
				X Non-Friable	☐ ceramic ☐ cobase
					☐ grout ☐ laminate
					☐ caulk ☐ vinyl tile
	P6	Other Pump Vaults Inaccessible		☐ TSI Insulation	☐ Gypsum/JC ☐ TSI
				☐ Miscellaneous	☐ Plaster ☐ CAB.
				☐ Surfacing	☐ CMU ☐ GCT
				☐ Friable	☐ Brick ☐ DCT
				☐ Non-Friable	☐ ceramic ☐ cobase
					☐ grout ☐ laminate
					☐ caulk ☐ vinyl tile
				☐ TSI Insulation	☐ Gypsum/JC ☐ TSI
				☐ Miscellaneous	☐ Plaster ☐ CAB.
				☐ Surfacing	☐ CMU ☐ GCT
				☐ Friable	☐ Brick ☐ DCT
				☐ Non-Friable	☐ ceramic ☐ cobase
					☐ grout ☐ laminate
					☐ caulk ☐ vinyl tile
				☐ TSI Insulation	☐ Gypsum/JC ☐ TSI
				☐ Miscellaneous	☐ Plaster ☐ CAB.
				☐ Surfacing	☐ CMU ☐ GCT
				☐ Friable	☐ Brick ☐ DCT
				☐ Non-Friable	☐ ceramic ☐ cobase
					☐ grout ☐ laminate
					☐ caulk ☐ vinyl tile

Relinquished by: <u>Demetrius Nelson</u>	Date: <u>2/23/24</u>	Received by:	Date:
Relinquished by: <u>RAL</u>	Date: <u>2/23/24</u>	Received by:	Date:
Sampled By:	Exp:	Analyzed By:	Date:

APPENDIX B

Photograph Log

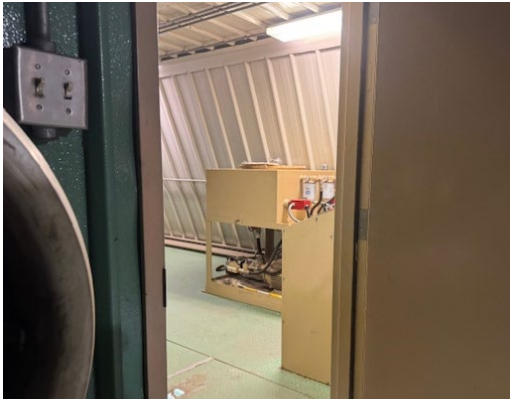


Photo 1. Fire door frame caulk (south door), gray - contained asbestos.



Photo 2. Fire door frame caulk (north door), gray - contained asbestos.



Photo 3. Merlin generator in generator room – presumed to contain asbestos components.



Photo 4. Silver heat-tempered thermal system pipe insulation in generator room contained asbestos.



Photo 5. Exterior roof penetration caulk, gray/silver, contained asbestos. It should be presumed all penetration locations contain asbestos.



Photo 5. Square socket lamp fixtures are presumed to contain asbestos heat shielding and insulated wire – all square socket lamp fixtures throughout.



Photo 7. PCBs were identified in the hydraulic grease used on the gate lifting shaft in the main upper level of the control structure.



Photo 8. PCBs were identified in the hydraulic grease used on the gate lifting shaft in the main upper level of the control structure and was observed throughout upper level decking and decking areas where staining is present, should be considered contaminated.



Photo 9. Square shaped socket lamps with square covers contain heat shield backing and insulated wiring that should be presumed to contain asbestos. Lead paint was identified throughout the structure and was peeling, chipping, flaking primarily on ceilings of dam platform main level of the structure.



Photo 10. Square shaped socket lamps with square covers contain heat shield backing and insulated wiring that should be presumed to contain asbestos. oval caged light fixtures should be presumed to house mercury-containing HID/bulbs.

APPENDIX C

PLM Bulk Sampling Information

PLM Bulk Sample Inventory

PLM Bulk Sample Laboratory Data Sheets

PLM Point Count Data

PLM Bulk Sample Chain of Custody Documentation



400 BRADLEY BOULEVARD, SUITE 210, RICHLAND, WA 99352
509.942.1600 MAIN ■ 866.727.0140 FAX ■ WWW.PBSUSA.COM

Sample No.	Material Type	Sample Location	Layer	Lab Description	Lab Result	Lab
0001	Green Metal Beam Paint	South Control Structure	1	Metal Beam Paint, Green	NAD	EMC Labs
0002	Green Metal Beam Paint	South Control Structure	1	Metal Beam Paint, Green	NAD	EMC Labs
0003	Green/Black Wheel Crank	South Control Structure	1	Wheel Crank Paint, Green	NAD	EMC Labs
0004	Cementitious Concrete Mix Structure	North Control Structure	1	Concrete Mix, Gray	NAD	EMC Labs
0005	Cementitious Concrete Mix Structure	South Control Structure	1	Concrete Mix, Gray	NAD	EMC Labs
0006	Cementitious Concrete Mix Structure	Mid Control Structure	1	Concrete Mix, Gray	NAD	EMC Labs
0007	Green Painted Coating on Metal Ceiling Panels	Control Structure	1	Coating on Metal, Green	NAD	EMC Labs
0008	Green Painted Coating on Metal Ceiling Panels	Control Structure	1	Coating on Metal, Green	NAD	EMC Labs
0009	Green Painted Coating on Metal Ceiling Panels	Control Structure	1	Coating on Metal, Green	NAD	EMC Labs
0010	Green/Gray Ligfing Arms	South Control Structure	1	Lifting Amrs, Green	NAD	EMC Labs
0011	Old Screw Boot Debris	Control Structure	1	Screw Boot Debris, Black/Gray	NAD	EMC Labs
0012	Yellow Gasket	Gantron Lifting System	1	Gasket, Yellow	NAD	EMC Labs
0013	Yellow Gasket	Gantron Lifting System	1	Gasket, Yellow	NAD	EMC Labs
0014	Paint	Gantron Lifting System	1	Paint, Yellow	NAD	EMC Labs
0015	Paint	Gantron Lifting System	1	Paint, Yellow	NAD	EMC Labs
0016	Anti-Rust Paint Primer	Spillway Gates - Gate #1	1	Spillway Gates Paint Primer, Green	NAD	EMC Labs
0017	Anti-Rust Paint Primer	Spillway Gates - Gate #2	1	Spillway Gates Paint Primer, Green	NAD	EMC Labs
0018	Anti-Rust Paint Primer	Spillway Gates - Gate #3	1	Spillway Gates Paint Primer, Green	NAD	EMC Labs
0019	Seam Caulk	Currogated Metal Roof	1	Roof Seam Caulk, Brown	NAD	EMC Labs



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509.942.1600 MAIN ■ 866.727.0140 FAX ■ WWW.PBSUSA.COM

Sample No.	Material Type	Sample Location	Layer	Lab Description	Lab Result	Lab
0020	Gray/Silver Roof Penetration Caulk	Currogated Metal Roof	1	Roof Penetration Caulk, Silver/Black	3% Chrysotile	EMC Labs
0021	Gray/Silver Roof Penetration Caulk	Currogated Metal Roof	1	Roof Penetration Caulk, Silver/Black	3% Chrysotile	EMC Labs
0022	Gray Generator Paint	Upper Level Generator Room	1	Generator Paint, Lt. Gray	NAD	EMC Labs
0023	Gray Generator Paint	Upper Level Generator Room	1	Generator Paint, Gray	NAD	EMC Labs
0024	Gray Generator Paint	Upper Level Generator Room	1	Generator Paint, Gray	NAD	EMC Labs
0025	Black 3" Gasket	Merlin Generator	1	3" Gasket, Black	NAD	EMC Labs
0026	White/Black Gasket	Merlin Generator	1	3" Gasket, White / Black	NAD	EMC Labs
0027	Wire Insulation	Merlin Generator	1	Wire Insulation, Gray / Black	NAD	EMC Labs
0028	White Wrapped TSI Fiberglass	Generator Room	1	TSI Fiberglass, Lt. Yellow	NAD	EMC Labs
0029	White Wrapped TSI Fiberglass	Generator Room	1	TSI Fiberglass, Lt. Yellow	NAD	EMC Labs
0030	Silver Wrapped HT TSI	Generator Room	1	HT TSI, Yellow	NAD	EMC Labs
		Generator Room	2	Vapor Barrier, Black / Brown	NAD	EMC Labs
0031	Silver Wrapped HT TSI	Generator Room	1	Wrap, Silver	8% Chrysotile	EMC Labs
		Generator Room	2	HT TSI, Yellow	NAD	EMC Labs
		Generator Room	3	Vapor Barrier, Black / Brown	NAD	EMC Labs
0032	Frame Caulk	Upper Level Generator Room North Fire Door	1	Fire Door Frame Caulk, Gray	3% Chrysotile	EMC Labs
0033	Frame Caulk	Upper Level Generator Room South Fire Door	1	Fire Door Frame Caulk, Gray	3% Chrysotile	EMC Labs
0034	Hydraulics Gasket	Upper Level Control Room	1	Hydraulics Gasket, Black	NAD	EMC Labs
0035	Hydraulics Gasket	Upper Level Control Room	1	Hydraulics Gasket, Black	NAD	EMC Labs



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Sample No.	Material Type	Sample Location	Layer	Lab Description	Lab Result	Lab
0036	Conduit Gaskets	Upper Level Control Room	1	Conduit Gasket, Black	NAD	EMC Labs
0037	Conduit Gaskets	Upper Level Control Room	1	Conduit Gasket, Black	NAD	EMC Labs
0038	Lift Gate Screws	Upper Level Control Room	1	Lift gate Screw Gasket, Black	NAD	EMC Labs
0039	Lift Gate Screws	Upper Level Control Room	1	Lift gate Screw Gasket, Black	NAD	EMC Labs
0040	White Fibrious Insulation	Upper Level Control Room	1	Fibrous Insulation, White	NAD	EMC Labs
0041	White Fibrious Insulation	Upper Level Control Room	1	Fibrous Insulation, White	NAD	EMC Labs
0042	White Fibrious Insulation	Upper Level Control Room	1	Fibrous Insulation, White	NAD	EMC Labs
0043	Black Rubber Air Flow Stop	Upper Level Main Room Platform	1	Rubber Airflow Stop, Black	NAD	EMC Labs
0044	Black Rubber Air Flow Stop	Upper Level Main Room Platform	1	Rubber Airflow Stop, Black	NAD	EMC Labs
0045	Blue Pump Gasket	South Pump Vault	1	Pump[Gasket, Gray / Blue	NAD	EMC Labs
0046	Blue Pump Gasket	South Pump Vault	1	Pump[Gasket, Gray / Blue	NAD	EMC Labs

EMC LABS, INC.

9830 S. 51st Street, Suite B109, Phoenix, AZ 85044
Phone: 800-362-3373 or 480-940-5294 - Fax: (480) 893-1726

Laboratory Report
0307057

Bulk Asbestos Analysis by Polarized Light Microscopy

NVLAP#101926-0

Client: PBS ENGINEERING & ENVIRONMENTAL Job# / P.O. #: 64598.016
Address: 3500 CHAD DR, STE 100 Date Received: 02/28/2024
EUGENE OR 97408 Date Analyzed: 03/04/2024
Collected: 02/16/2024 Date Reported: 03/04/2024
Project Name: ZOSEL DAM Submitted By: DeANGELO NELSON
Address: Collected By:
EPA Method: App.E to Sub.E of 40 CFR Part 763 and EPA/600/R-93

Lab ID Client ID	Sample Location	Layer Name / Sample Description	Asbestos Detected	Asbestos Type (%)	Non-Asbestos Constituents
0307057-001 0001		Metal Beam Paint, Green	No	None Detected	Carbonates Gypsum Quartz Binder/Filler 100%
0307057-002 0002		Metal Beam Paint, Green	No	None Detected	Carbonates Gypsum Quartz Binder/Filler 100%
0307057-003 0003		Wheel Crank Paint, Green	No	None Detected	Gypsum Quartz Binder/Filler 100%
0307057-004 0004		Concrete Mix, Gray	No	None Detected	Gypsum Carbonates Quartz Binder/Filler 100%
0307057-005 0005		Concrete Mix, Gray	No	None Detected	Gypsum Carbonates Quartz Binder/Filler 100%
0307057-006 0006		Concrete Mix, Gray	No	None Detected	Gypsum Carbonates Quartz Binder/Filler 100%

EMC LABS, INC.

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Project Name: ZOSEL DAM Submitted By: DeANGELO NELSON
Address: Collected By:
EPA Method: App.E to Sub.E of 40 CFR Part 763 and EPA/600/R-93

Lab ID Client ID	Sample Location	Layer Name / Sample Description	Asbestos Detected	Asbestos Type (%)	Non-Asbestos Constituents
0307057-007 0007		Coating On Metal, Green	No	None Detected	Gypsum Quartz Binder/Filler 100%
0307057-008 0008		Coating On Metal, Green	No	None Detected	Gypsum Quartz Binder/Filler 100%
0307057-009 0009		Coating On Metal, Green	No	None Detected	Gypsum Quartz Binder/Filler 100%
0307057-010 0010		Lifting Arms, Green	No	None Detected	Carbonates Quartz Binder/Filler 100%
0307057-011 0011		Screw Boot Debris, Black/ Gray	No	None Detected	Synthetic Fiber Carbonates Quartz Binder/Filler 25% 75%
0307057-012 0012		Gasket, Yellow	No	None Detected	Carbonates Quartz Binder/Filler 100%
0307057-013 0013		Gasket, Yellow	No	None Detected	Carbonates Quartz Binder/Filler 100%

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Project Name: ZOSEL DAM Submitted By: DeANGELO NELSON
Address: Collected By:
EPA Method: App.E to Sub.E of 40 CFR Part 763 and EPA/600/R-93

Lab ID Client ID	Sample Location	Layer Name / Sample Description	Asbestos Detected	Asbestos Type (%)	Non-Asbestos Constituents
0307057-014 0014		Paint, Yellow	No	None Detected	Cellulose Fiber 1% Carbonates Quartz Binder/Filler 99%
0307057-015 0015		Paint, Yellow	No	None Detected	Cellulose Fiber 1% Carbonates Quartz Binder/Filler 99%
0307057-016 0016		Spillway Gates Paint Primer, Green	No	None Detected	Carbonates Gypsum Quartz Binder/Filler 100%
0307057-017 0017		Spillway Gates Paint Primer, Green	No	None Detected	Carbonates Gypsum Quartz Binder/Filler 100%
0307057-018 0018		Spillway Gates Paint Primer, Green	No	None Detected	Carbonates Gypsum Quartz Binder/Filler 100%
0307057-019 0019		Roof Seam Caulk, Brown	No	None Detected	Cellulose Fiber 20% Carbonates Gypsum Binder/Filler 80%

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EUGENE OR 97408 Date Analyzed: 03/04/2024
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Project Name: ZOSEL DAM Submitted By: DeANGELO NELSON
Address: Collected By:
EPA Method: App.E to Sub.E of 40 CFR Part 763 and EPA/600/R-93

Lab ID Client ID	Sample Location	Layer Name / Sample Description	Asbestos Detected	Asbestos Type (%)	Non-Asbestos Constituents
0307057-020 0020		Roof Penetration Caulk, Silver/ Black	Yes	Chrysotile 3%	Cellulose Fiber 5% Gypsum Quartz Carbonates Binder/Filler 92%
0307057-021 0021		Roof Penetration Caulk, Silver/ Black	Yes	Chrysotile 3%	Cellulose Fiber 5% Gypsum Quartz Carbonates Binder/Filler 92%
0307057-022 0022		Generator Paint, Lt. Gray	No	None Detected	Gypsum Binder/Filler 100%
0307057-023 0023		Generator Paint, Gray	No	None Detected	Gypsum Quartz Binder/Filler 100%
0307057-024 0024		Generator Paint, Gray	No	None Detected	Gypsum Quartz Binder/Filler 100%
0307057-025 0025		3" Gasket, Black	No	None Detected	Synthetic Fiber 20% Gypsum Binder/Filler 80%
0307057-026 0026		3" Gasket, White/ Black	No	None Detected	Synthetic Fiber 20% Gypsum Quartz Binder/Filler 80%

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Project Name: ZOSEL DAM Submitted By: DeANGELO NELSON
Address: Collected By:
EPA Method: App.E to Sub.E of 40 CFR Part 763 and EPA/600/R-93

Lab ID Client ID	Sample Location	Layer Name / Sample Description	Asbestos Detected	Asbestos Type (%)	Non-Asbestos Constituents
0307057-027 0027		Wire Insulation, Gray/ Black	No	None Detected	Cellulose Fiber 40% Synthetic Fiber 20% Gypsum Binder/Filler 40%
0307057-028 0028		TSI Fiberglass, Lt. Yellow	No	None Detected	Fibrous Glass 97% Gypsum 3%
0307057-029 0029		TSI Fiberglass, Lt. Yellow	No	None Detected	Fibrous Glass 97% Gypsum 3%
0307057-030 0030		LAYER 1 HT TSI, Yellow	No	None Detected	Fibrous Glass 95% Gypsum 5%
		LAYER 2 Vapor Barrier, Black/ Brown	No	None Detected	Cellulose Fiber 65% Gypsum Binder/Filler 35%
0307057-031 0031		LAYER 1 Wrap, Silver	Yes	Chrysotile 8%	Carbonates Gypsum Quartz Binder/Filler 92%
		LAYER 2 HT TSI, Yellow	No	None Detected	Fibrous Glass 97% Gypsum 3%
		LAYER 3 Vapor Barrier, Black/ Brown	No	None Detected	Fibrous Glass 5% Carbonates Binder/Filler 95%
0307057-032 0032		Fire Door Frame Caulk, Gray	Yes	Chrysotile 3%	Carbonates Quartz Binder/Filler 97%

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Client: PBS ENGINEERING & ENVIRONMENTAL Job# / P.O. #: 64598.016
Address: 3500 CHAD DR, STE 100 Date Received: 02/28/2024
EUGENE OR 97408 Date Analyzed: 03/04/2024
Collected: 02/16/2024 Date Reported: 03/04/2024
Project Name: ZOSEL DAM Submitted By: DeANGELO NELSON
Address: Collected By:
EPA Method: App.E to Sub.E of 40 CFR Part 763 and EPA/600/R-93

Lab ID Client ID	Sample Location	Layer Name / Sample Description	Asbestos Detected	Asbestos Type (%)	Non-Asbestos Constituents
0307057-033 0033		Fire Door Frame Caulk, Gray	Yes	Chrysotile 3%	Carbonates Quartz Binder/Filler 97%
0307057-034 0034		Hydraulics Gasket, Black	No	None Detected	Gypsum Binder/Filler 100%
0307057-035 0035		Hydraulics Gasket, Black	No	None Detected	Gypsum Binder/Filler 100%
0307057-036 0036		Conduit Gasket, Black	No	None Detected	Gypsum Binder/Filler 100%
0307057-037 0037		Conduit Gasket, Black	No	None Detected	Gypsum Binder/Filler 100%
0307057-038 0038		Lift Gate Screw Gasket, Black	No	None Detected	Carbonates Binder/Filler 100%
0307057-039 0039		Lift Gate Screw Gasket, Black	No	None Detected	Carbonates Binder/Filler 100%
0307057-040 0040		Fibrous Insulation, White	No	None Detected	Synthetic Fiber 100%

EMC LABS, INC.

9830 S. 51st Street, Suite B109, Phoenix, AZ 85044
Phone: 800-362-3373 or 480-940-5294 - Fax: (480) 893-1726

Laboratory Report
0307057

Bulk Asbestos Analysis by Polarized Light Microscopy

NVLAP#101926-0

Client: PBS ENGINEERING & ENVIRONMENTAL Job# / P.O. #: 64598.016
Address: 3500 CHAD DR, STE 100 Date Received: 02/28/2024
EUGENE OR 97408 Date Analyzed: 03/04/2024
Collected: 02/16/2024 Date Reported: 03/04/2024
Project Name: ZOSEL DAM Submitted By: DeANGELO NELSON
Address: Collected By:
EPA Method: App.E to Sub.E of 40 CFR Part 763 and EPA/600/R-93

Lab ID Client ID	Sample Location	Layer Name / Sample Description	Asbestos Detected	Asbestos Type (%)	Non-Asbestos Constituents	
0307057-041 0041		Fibrous Insulation, White	No	None Detected	Synthetic Fiber	100%
0307057-042 0042		Fibrous Insulation, White	No	None Detected	Synthetic Fiber	100%
0307057-043 0043		Rubber Airflow Stop, Black	No	None Detected	Gypsum Binder/Filler	100%
0307057-044 0044		Rubber Airflow Stop, Black	No	None Detected	Gypsum Binder/Filler	100%
0307057-045 0045		Pump Gasket, Gray Blue	No	None Detected	Gypsum Quartz Binder/Filler	100%
0307057-046 0046		Pump Gasket, Gray Blue	No	None Detected	Gypsum Quartz Binder/Filler	100%



Analyst - Matt Kettler



Signatory - Lab Director - Kurt Kettler

Distinctly stratified, easily separable layers of samples are analyzed as subsamples of the whole and are reported separately for each discernible layer. All analyses are derived from calibrated visual estimate and measured in area percent unless otherwise noted. The report applies to the standards or procedures identified and to the sample(s) tested. The test results are not necessarily indicative or representative of the qualities of the lot from which the sample was taken or of apparently identical or similar products, nor do they represent an ongoing quality assurance program unless so noted. This report is for the exclusive use of the addressed client and will not be reproduced wholly or in part for advertising or other purposes over our signature or in connection with our name without special written permission. The report shall not be reproduced except in full, without written approval by our laboratory. The samples not destroyed in testing are retained a maximum of sixty days. The laboratory measurement of uncertainty for the test method is approximately less than 1 by area percent. Accredited by the National Institute of Standards and Technology, Voluntary Laboratory Accreditation Program for selected test method(s) for asbestos. The accreditation or any reports generated by this laboratory in no way constitutes or implies product certification, approval, or endorsement by the National Institute of Standards and Technology. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.



Project Name/Scope: Zase/ Dam PBS Project No. 64598.016
Project Address: Orville, Washington Proj. Date: 2/16/24
Client Name/POC: Washington State DES - Lester Client Proj. No. _____

EMAIL RESULTS TO:

X Karani-Young @ Pbsusa.com
X Cienna-Landon @ Pbsusa.com

☐ _____
☐ _____

MOLD:

☐ Tape (Direct) ☐ Swab (Direct)

PCBs:

X Bulk ☐ Wipe ☐ Oil

TURN AROUND TIME:

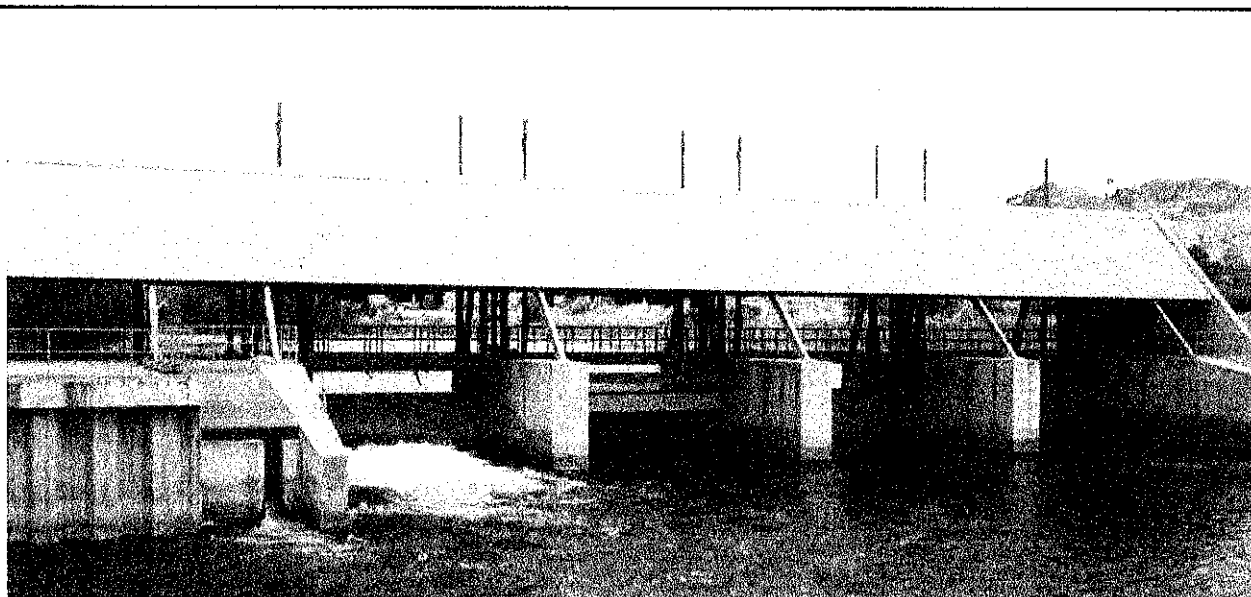
☐ Rush ☐ 4-Hour ☐ 6-Hour X 5 days
☐ 24-Hour ☐ 48-Hour ☐ 72-Hour ☐ _____

ASBESTOS:

X PLM Bulk
☐ Vermiculite

LEAD:

☐ Pb Soil
☐ Pb Paint Chip
☐ Pb Dust/Wipe



Codes / ARCHIVE	Sample ID	Building / Floor / Location / Material Description / Mastic Color / Substrate	QUANTITY: SF/LF	Category / Friability / Cond.	Material Types
	0001	Control Structure/metal beam paint (Green) S.		☐ TSI Insulation	☐ Gypsum/IC ☐ TSI
	0002	" " " S.		☐ Miscellaneous	☐ Plaster ☐ CAB.
	0003	" wheel crank (Green/Black) S.		☐ Surfacing	☐ CMU ☐ GCT
	0004	" Cementitious Concrete Mix (Struct) Al.		X Friable	☐ Brick ☐ DCT
	0005	" Cementitious Concrete Mix (Structure) S.		☐ Non-Friable	☐ ceramic ☐ cobestase
	0006	" " " Mid.			☐ grout ☐ laminate
	0007	" Green Painted Coating on Metal Ceiling panels		X Non-Friable	☐ caulk ☐ vinyl tile
	0008	" " " "		☐ TSI Insulation	☐ Gypsum/IC ☐ TSI
	0009	" " " "		☐ Miscellaneous	☐ Plaster ☐ CAB.
	0010	" Lifting Arms (Green/Gray) S.		☐ Surfacing	☐ CMU ☐ GCT
				X Friable	☐ Brick ☐ DCT
				☐ Non-Friable	☐ ceramic ☐ cobestase
					☐ grout ☐ laminate
					☐ caulk ☐ vinyl tile
NORTH Drawing Not to	0011	" Old screw boot debris		☐ TSI Insulation	☐ Gypsum/IC ☐ TSI
				☐ Miscellaneous	☐ Plaster ☐ CAB.
				☐ Surfacing	☐ CMU ☐ GCT
				X Friable	☐ Brick ☐ DCT
				☐ Non-Friable	☐ ceramic ☐ cobestase
					☐ grout ☐ laminate
					☐ caulk ☐ vinyl tile

Relinquished by: <u>DeMaggio Nelson</u>	Date: <u>2/23/24</u>	Received by: _____	Date: _____
Relinquished by: <u>R. Noel</u>	Date: <u>2/23/24</u>	Received by: _____	Date: <u>FEB 28 2024</u>
Sampled By: _____	Exp: _____	Analyzed By: <u>1/7/18</u>	Date: <u>MAR 04 2024</u>



Project Name/Scope: Zosel Dam PBS Project No. 64598.016
Project Address Orville, Washington Proj. Date: 2/10/24
Client Name/POC: Washington State DES- Lester Client Proj. No. —

☒ ~~kanapi.young@pbsusa.com~~

☒ ~~Cienra.landon@pbsusa.com~~

☐ _____

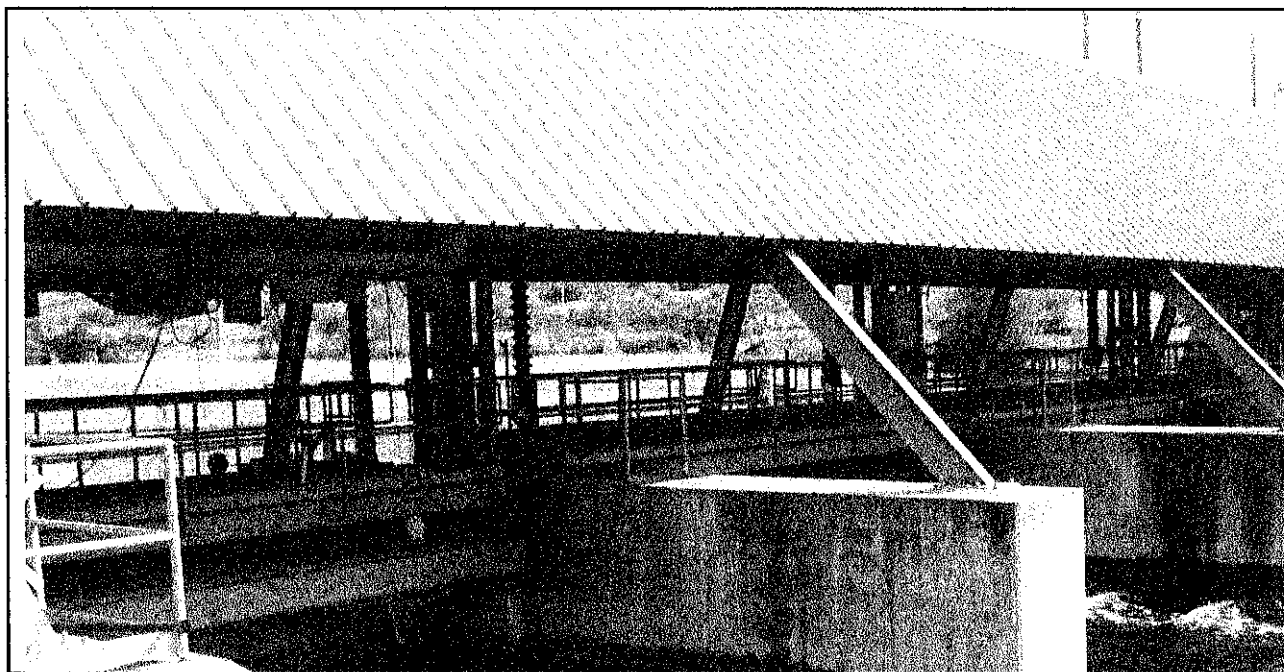
☐ _____

☐ Tape (Direct) ☐ Swab (Direct)☒ Bulk ☐ Wipe ☐ Oil

☐ Rush ☐ 4-Hour ☐ 6-Hour ☒ 5 days
☐ 24-Hour ☐ 48-Hour ☐ 72-Hour ☐ _____

☒ PLM Bulk
☐ Vermiculite

- ☐ Pb Soil
- ☐ Pb Paint Chip
- ☐ Pb Dust/Wipe



Codes / ARCHIVE	Sample ID	Building / Floor / Location / Material Description / Mastic Color / Substrate	QUANTITY: SF/LF	Category / Friability / Cond.	Material Types
	0012	Grantron Lift System (yellow)	Gasket	☐ TSI Insulation	☐ Gypsum/JC ☐ TSI
	0013	"	" Gasket	☐ Miscellaneous	☐ Plaster ☐ CAB.
				☐ Surfacing	☐ CMU ☐ GCT
				☐ Friable	☐ Brick ☐ DCT
				☒ Non-Friable	☐ ceramic ☐ cobestase
					☐ grout ☐ laminate
					☐ caulk ☐ vinyl tile
	0014	"	" Paint	☐ TSI Insulation	☐ Gypsum/JC ☐ TSI
	0015	"	" Paint	☐ Miscellaneous	☐ Plaster ☐ CAB.
				☐ Surfacing	☐ CMU ☐ GCT
				☒ Friable	☐ Brick ☐ DCT
				☐ Non-Friable	☐ ceramic ☐ cobestase
					☐ grout ☐ laminate
					☐ caulk ☐ vinyl tile
	0016	Spill-way Gates Paint Primer (Anti Rust) #1		☐ TSI Insulation	☐ Gypsum/JC ☐ TSI
	0017	"	"	☐ Miscellaneous	☐ Plaster ☐ CAB.
	0018	"	" GATE #2	☐ Surfacing	☐ CMU ☐ GCT
			" GATE #4	☒ Friable	☐ Brick ☐ DCT
				☐ Non-Friable	☐ ceramic ☐ cobestase
					☐ grout ☐ laminate
					☐ caulk ☐ vinyl tile
	0019	Corrugated Metal Roof Seam Caulk		☐ TSI Insulation	☐ Gypsum/JC ☐ TSI
	0020	Roof Penetration Caulk (Gray/Silver)		☐ Miscellaneous	☐ Plaster ☐ CAB.
	0021	"	"	☐ Surfacing	☐ CMU ☐ GCT
				☐ Friable	☐ Brick ☐ DCT
				☒ Non-Friable	☐ ceramic ☐ cobestase
					☐ grout ☐ laminate
					☐ caulk ☐ vinyl tile
	P1	ZBC Roof Screw Roof Bolts		☐ TSI Insulation	☐ Gypsum/JC ☐ TSI
	P2	* See SDS or Presume		☐ Miscellaneous	☐ Plaster ☐ CAB.
	P3	"	"	☐ Surfacing	☐ CMU ☐ GCT
				☐ Friable	☐ Brick ☐ DCT
				☐ Non-Friable	☐ ceramic ☐ cobestase
					☐ grout ☐ laminate
					☐ caulk ☐ vinyl tile

Relinquished by: <i>Debrah Nelson</i>	Date: <i>2/23/24</i>	Received by:	Date:
Relinquished by: <i>ASL</i>	Date: <i>2/23/24</i>	Received by:	Date: <i>FEB 28 2024</i>
Sampled By:	Exp:	Analyzed By: <i>17 18</i>	Date: <i>MAR 04 2024</i>



Project Name/Scope: Zosel Dam PBS Project No. 64598.016
Project Address Orville, Washington Proj. Date: 2/16/24
Client Name/POC: Washington State DES - Lester Client Proj. No. -

EMAIL RESULTS TO:

X Kanani.young@pbsusa.com
X cienna.landon@pbsusa.com

☐ _____
☐ _____

MOLD:

☐ Tape (Direct) ☐ Swab (Direct)

PCBs:

X Bulk ☐ Wipe ☐ Oil

TURN AROUND TIME:

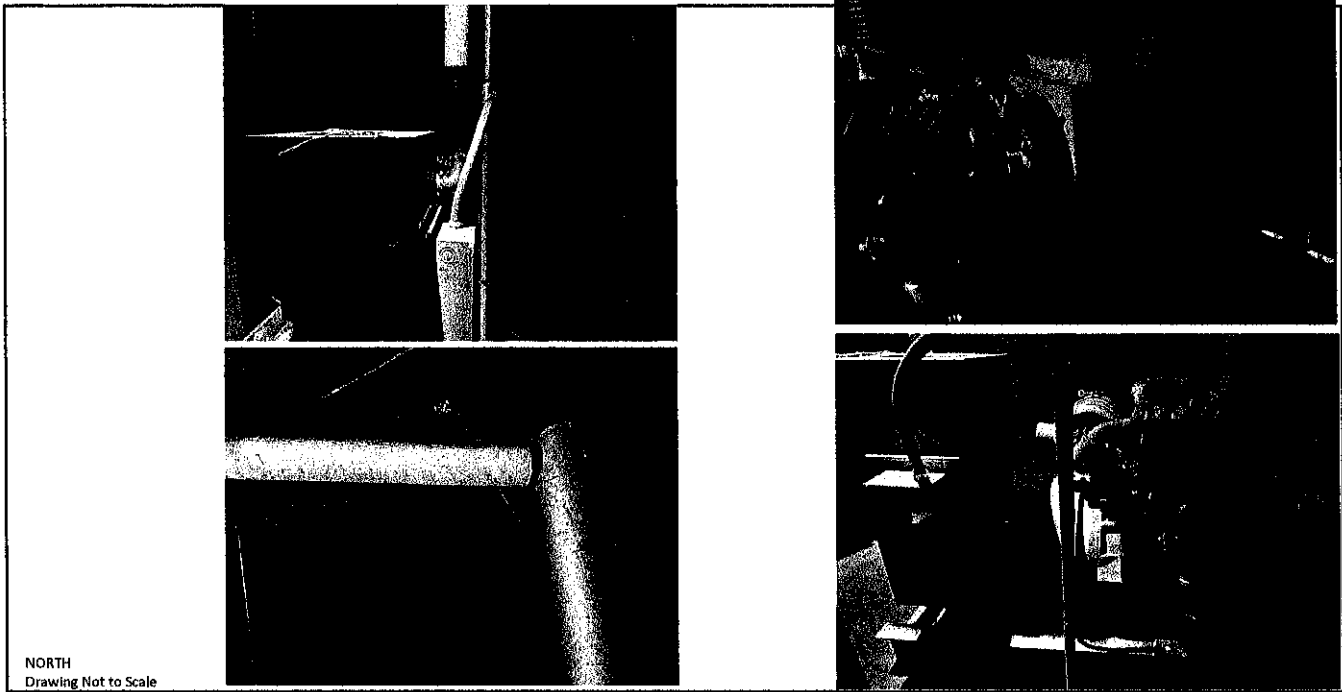
☐ Rush ☐ 4-Hour ☐ 6-Hour X ☒ 5 days
☐ 24-Hour ☐ 48-Hour ☐ 72-Hour ☐ _____

ASBESTOS:

X PLM Bulk
☐ Vermiculite

LEAD:

☐ Pb Soil
☐ Pb Paint Chip
☐ Pb Dust/Wipe



NORTH
Drawing Not to Scale

Codes / ARCHIVE	Sample ID	Building / Floor / Location / Material Description / Mastic Color / Substrate	QUANTITY: SF/LF	Category / Friability / Cond.	Material Types
	0022	Generator Room (UL) Generator Paint - Gray		☐ TSI Insulation	☐ Gypsum/JC ☐ TSI
	0023	" " " "		☐ Miscellaneous	☐ Plaster ☐ CAB.
	0024	" " " "		☐ Surfacing	☐ CMU ☐ GCT
	0025	Martin Generator 3" gasket (black)		X ☒ Friable	☐ Brick ☐ DCT
	0026	" " " gasket (White/Black)		☐ Non-Friable	☐ ceramic ☐ covebase
	0027	" " Wire Insulation		☐ TSI Insulation	☐ grout ☐ laminate
	0028	Generator Room-White-wrapped TSI - Fiber glass		☐ Miscellaneous	☐ caulk ☐ vinyl tile
	0029	" " " "		☐ Surfacing	☐ Gypsum/JC ☐ TSI
	0030	" " Silver-wrapped HT TSI		X ☒ Friable	☐ Plaster ☐ CAB.
	0031	" " " "		☐ Non-Friable	☐ CMU ☐ GCT
	0032	Upper Level North Fire Door Frame Caulk		☐ TSI Insulation	☐ Brick ☐ DCT
	0033	Upper Level South Fire Door Frame Caulk		☐ Miscellaneous	☐ ceramic ☐ covebase
				☐ Surfacing	☐ grout ☐ laminate
				☐ Friable	☐ caulk ☐ vinyl tile
				X ☒ Non-Friable	

Relinquished by: <u>Demario Nelson</u>	Date: <u>2/23/24</u>	Received by: _____	Date: <u>FEB 28 2024</u>
Relinquished by: <u>Ryd</u>	Date: <u>2/23/24</u>	Received by: <u>KT/ES</u>	Date: <u>MAR 04 2024</u>
Sampled By: _____	Exp: _____	Analyzed By: _____	Date: _____

X UL = Upper Level X



Project Name/Scope: Zosel Dam PBS Project No. 64598.016
Project Address Orville, Washington Proj. Date: 2/16/24
Client Name/POC: Washington State DCS - Lester Client Proj. No.

EMAIL RESULTS TO:

☒ Kanani.young@pbsusa.com

☒ Cienna.landon@pbsusa.com

☐ _____
☐ _____

MOLD:

☐ Tape (Direct) ☐ Swab (Direct)

PCBs:

☒ Bulk ☐ Wipe ☐ Oil

TURN AROUND TIME:

☐ Rush ☐ 4-Hour ☐ 6-Hour ☒ 5 days
☐ 24-Hour ☐ 48-Hour ☐ 72-Hour ☐ _____

ASBESTOS:

☒ PLM Bulk
☐ Vermiculite

LEAD:

☐ Pb Soil
☐ Pb Paint Chip
☐ Pb Dust/Wipe



NORTH
Drawing Not to Scale



Codes / ARCHIVE	Sample ID	Building / Floor / Location / Material Description / Mastix Color / Substrate	QUANTITY: SF/LF	Category / Friability / Cond.	Material Types
	0034	Upper Level/Control Room/Hydraulics Basket		☐ TSI Insulation	☐ Gypsum/JC ☐ TSI
	0035	" " "		☐ Miscellaneous	☐ Plaster ☐ CAB.
	0036	" " " Conduit Baskets		☐ Surfacing	☐ CMU ☐ GCT
	0037	" " "		☐ Friable	☐ Brick ☐ DCT
	0038	" " " Lift Gate Screws		☒ Non-Friable	☐ ceramic ☐ covebase
	0039	" " "			☐ grout ☐ laminate
	0040	" " " White Fibrous Insulation			☐ caulk ☐ vinyl tile
	0041	" " "		☐ TSI Insulation	☐ Gypsum/JC ☐ TSI
	0042	" " "		☐ Miscellaneous	☐ Plaster ☐ CAB.
	0043	Upper Level/Main Room Platform ^{airflow} Stop		☐ Surfacing	☐ CMU ☐ GCT
	0044	" " " Black Rubber"		☐ Friable	☐ Brick ☐ DCT
				☒ Non-Friable	☐ ceramic ☐ covebase
	P4	Electrical Panel in Control Room			☐ grout ☐ laminate
	P5	Heat Shield light fixture			☐ caulk ☐ vinyl tile

Relinquished by: <u>DeAngelo Nelson</u>	Date: <u>2/23/24</u>	Received by: _____	Date: _____
Relinquished by: <u>Dehl</u>	Date: <u>2/23/24</u>	Received by: _____	Date: <u>FEB 28 2024</u>
Sampled By: _____	Exp: _____	Analyzed By: <u>1/1/18</u>	Date: <u>MAR 04 2024</u>



Project Name/Scope: Zose/ Dam PBS Project No. 64598.016
Project Address Orville, Washington Proj. Date: 2/16/24
Client Name/POC: Washington State DES - Lester Client Proj. No. —

EMAIL RESULTS TO:

X kanani.young@pbsusa.com

X Cienna.landon@pbsusa.com

☐ _____
☐ _____

MOLD:

☐ Tape (Direct) ☐ Swab (Direct)

PCBs:

X Bulk ☐ Wipe ☐ Oil

TURN AROUND TIME:

☐ Rush ☐ 4-Hour ☐ 6-Hour X 5 days
☐ 24-Hour ☐ 48-Hour ☐ 72-Hour ☐ _____

ASBESTOS:

X PLM Bulk
☐ Vermiculite

LEAD:

☐ Pb Soil
☐ Pb Paint Chip
☐ Pb Dust/Wipe



NORTH
Drawing Not to Scale

Codes / ARCHIVE	Sample ID	Building / Floor / Location / Material Description / Mastic Color / Substrate	QUANTITY: SF/LF	Category / Friability / Cond.	Material Types
	0045	South Pump Vault / Blue Pump Gasket		☐ TSI Insulation	☐ Gypsum/JC ☐ TSI
	0046	" "		☐ Miscellaneous	☐ Plaster ☐ CAB.
				☐ Surfacing	☐ CMU ☐ GCT
				☐ Friable	☐ Brick ☐ DCT
				X Non-Friable	☐ ceramic ☐ covebase
					☐ grout ☐ laminate
					☐ caulk ☐ vinyl tile
	P6	Other Pump Vaults Inaccessible		☐ TSI Insulation	☐ Gypsum/JC ☐ TSI
				☐ Miscellaneous	☐ Plaster ☐ CAB.
				☐ Surfacing	☐ CMU ☐ GCT
				☐ Friable	☐ Brick ☐ DCT
				☐ Non-Friable	☐ ceramic ☐ covebase
					☐ grout ☐ laminate
					☐ caulk ☐ vinyl tile
				☐ TSI Insulation	☐ Gypsum/JC ☐ TSI
				☐ Miscellaneous	☐ Plaster ☐ CAB.
				☐ Surfacing	☐ CMU ☐ GCT
				☐ Friable	☐ Brick ☐ DCT
				☐ Non-Friable	☐ ceramic ☐ covebase
					☐ grout ☐ laminate
					☐ caulk ☐ vinyl tile

Relinquished by: <u>Detrick Nelson</u>	Date: <u>2/23/24</u>	Received by:	Date:
Relinquished by: <u>RNL</u>	Date: <u>2/23/24</u>	Received by:	Date: <u>FEB 28 2024</u>
Sampled By:	Exp:	Analyzed By: <u>1/7/18</u>	Date: <u>MAR 04 2024</u>

APPENDIX D

AA Lead Paint Chip Sampling Information

AA Lead Paint Chip Sample Inventory

AA Lead Paint Chip Laboratory Data Sheets

AA Lead Paint Chip Chain of Custody Documentation



400 BRADLEY BOULEVARD, SUITE 210, RICHLAND, WA 99352
509.942.1600 MAIN ■ 866.727.0140 FAX ■ WWW.PBSUSA.COM

Sample No.	Paint Color / Component or Substrate	Sample Location	Result (ppm)	Lab
1001	Green Paint / Metal	Dam Platform - Lifting Arm	26660	EMC Labs
1002	Yellow Paint / Metal	Dam Paltform - Lifting System	103000	EMC Labs
1003	Brown Paint / Metal	Upper Level Siding	19000	EMC Labs
1004	Cream Paint / Metal	Upper Level Pipe	990	EMC Labs
1005	Gray Paint / Metal	Upper Level - Merlin Generator	2420	EMC Labs



9830 South 51st Street, Suite B-109 / PHOENIX, ARIZONA 85044 / 480-940-5294 or 800-362-3373 / FAX 480-893-1726
emclab@emclabs.com

LEAD (Pb) IN PAINT CHIP SAMPLES
EMC SOP METHOD #L01/1 EPA SW-846 METHOD 7420

EMC LAB #: L103171			DATE RECEIVED: 02/28/2024		
CLIENT: PBS Engineering & Environmental			REPORT DATE: 03/04/2024		
			DATE OF ANALYSIS: 03/04/2024		
CLIENT ADDRESS: 400 Bradley Blvd, Ste 106 Richland, WA 99352			P.O. NO.:		
PROJECT NAME: Losel Dam Gates Improvements – Oroville, WA			PROJECT NO.: 64598.016		

EMC # L103171-	SAMPLE DATE /24	CLIENT SAMPLE #	DESCRIPTION	REPORTING LIMIT (%Pb by weight)	%Pb BY WEIGHT
1	02/16	1001	Green Paint on Metal-Dam Platform-Lifting Arm	0.010	0.266
2	02/16	1002	Yellow Paint on Metal-Dam Platform-Lifting System	0.010	10.3 #
3	02/16	1003	Brown Paint On Metal-Upper Level Siding	0.010	1.90 ##
4	02/16	1004	Cream Paint on Metal-Upper Level Pipe	0.010	0.099
5	02/16	1005	Gray Paint on Metal-Upper Level-Merlin Generator	0.010	0.242

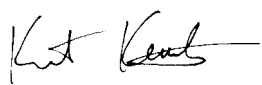
^ = Dilution Factor Changed * = Excessive Substrate May Bias Sample Results **BRL** = Below Reportable Limits # = Very Small Amount Of Sample Submitted, May Affect Result

This report applies to the standards or procedures identified and to the samples tested only. The test results are not necessarily indicative or representative of the qualities of the lot from which the sample was taken or of apparently identical or similar products, nor do they represent an ongoing quality assurance program unless so noted. Unless otherwise noted, all quality control analyses for the samples noted above were within acceptable limits.

Where it is noted that a sample with excessive substrate was submitted for laboratory analysis, such analysis may be biased. The lead content of such sample may, in actuality, be greater than reported. EMC makes no warranty, express or implied, as to the accuracy of the analysis of samples noted to have been submitted with excessive substrate. Resampling is recommended in such situations to verify original laboratory results. EMC Labs, Inc. (ID 101586) is accredited by the AIHA Laboratory Accreditation Programs, LLC (AIHA-LAP, LLC) in the Environmental Lead accreditation program(s) for Paint, Settled Dust by Wipe, Soil and Airborne Dust Fields of Testing as documented by the Scope of Accreditation Certificate and associated Scope. AIHA-LAP, LLC accreditation complies with the ISO/IEC Standard 17025:2017 requirements. The customer provides the Project number, name, address, sampling date, identification, and description. EMC Labs, Inc. is an EPA Recognized Testing Lab.

These reports are for the exclusive use of the addressed client and are rendered upon the condition that they will not be reproduced wholly or in part for advertising or other purposes over our signature or in connection with our name without special written permission. Samples not destroyed in testing are retained a maximum of sixty (60) days.

ANALYST: 
 Jason Thompson

QA COORDINATOR: 
 Kurt Kettler

CHAIN OF CUSTODY

EMC Labs, Inc.
9830 S. 51st St., Ste B-109
Phoenix, AZ 85044
(480) 940-5294 Fax (480) 893-1726

LAB#: L103171

TAT: 3 Day

Rec'd: 2/28/2024

COMPANY NAME: **PBS Engineering & Environmental**

BILL TO: (If Different Location)

Address: 400 Bradley Blvd, Ste 106

Richland, WA 99352

CONTACT: J. Kanani Patricio-Young

Phone/Fax: 509-375-7840

Email: USE GROUP EMAIL

Now Accepting: **VISA - MASTERCARD**

Price Quoted: \$ _____ / Sample \$ _____ / Layers

COMPLETE ITEMS 1-4: (Failure to complete any items may cause a delay in processing or analyzing your samples)**1. TURNAROUND TIME:** [Same Day Rush] [1 Day] [2 Days] [3-4-5 Days] [6-10 Days]****Prior confirmation of turnaround time is required

****Additional charges for rush analysis (please call marketing department for pricing details)

****Laboratory analysis may be subject to delay if credit terms are not met

2. TYPE OF ANALYSIS: [Bulk-Asbestos PLM] [Air-PCM] [Lead] [Point Count] [Fungi: AOC, W-C, Bulk, Swab, Tape]**3. DISPOSAL INSTRUCTIONS:** [Dispose of samples at EMC] / [Return samples to me at my expense]

(If you do not indicate preference, EMC will dispose of samples 30 days from analysis.)

4. Project Name: Loisel Dam Gates Improvements

P.O. Number: _____

Project Number: 64598.016

EMC SAMPLE #	CLIENT SAMPLE #	DATE & TIME SAMPLED	LOCATION/MATERIAL TYPE	Samples Accepted Yes / No	AIR SAMPLE INFO / COMMENTS		
					ON	OFF	FLOW RATE
1	1001	2/1/6		<u>Y</u> N			
2	1002			Y N			
3	1003			Y N			
4	1004			Y N			
5	1005			<u>Y</u> N			
				Y N			
				Y N			
				Y N			
				Y N			
				Y N			
				Y N			
				Y N			
				Y N			
				Y N			
				Y N			
				Y N			

SPECIAL INSTRUCTIONS: _____

Sample Collector: (Print) _____

(Signature) _____

Relinquished by: _____ Date/Time: _____

Received by: DMDate/Time: 2/28/24Relinquished by: DM Date/Time: 2/28/24Received by: ffDate/Time: 2/28/24

Relinquished by: _____ Date/Time: _____

Received by: _____

Date/Time: _____

** In the event of any dispute between the above parties for these services or otherwise, parties agree that jurisdiction and venue will be in Phoenix, Arizona and prevailing party will be entitled to attorney's fees and court costs.

APPENDIX E

Bulk PCB Sampling Information

Bulk PCB Sample Inventory

Bulk PCB Laboratory Data Sheets

Bulk PCB Chain of Custody Documentation

March 4, 2024

J. Kanani Patricio-Young
PBS Environmental - Richland
400 Bradley Blvd. Suite 106
Richland, WA 99352



NVL Batch # 2403625.00

RE: Organics PCB
Method: 8082 PCB Aroclors <Bulk>
Item Code: ORG-05

Client Project: 64598.016
Location: Zosel Dam DES Gate Repair, 1 14th Ave Oroville, WA

Dear Ms. Patricio-Young,

Enclosed please find test results for samples submitted to our laboratory for analysis. Preparation and analysis of these samples were conducted in accordance with published industry standards and methods specified on the attached analytical report.

The content of this package consists of the following:

- Case Narrative & Definition of Data Qualifiers
- Analytical Test Results
- Applicable QC Summary
- Client Chain-of-Custody (CoC)
- NVL Receiving Record

The report is considered highly confidential and will not be released without your approval. Samples are archived for two weeks following analysis. Samples that are not retrieved by the client will be discarded after two weeks.

Thank you for using our laboratory services. If you need further assistance, please contact us at 206-547-0100 or 1-888-NVLLABS.

Sincerely,

A handwritten signature in black ink, appearing to read 'Shalini Patel', with a horizontal line underneath.

Shalini Patel, Manager Metals Lab

Enc.: Sample results



NVL Batch # 2403625.00

Case Narrative:

The following summarizes samples received on date as shown on the accompanied Chain of custody by NVL Laboratories, Inc. from PBS Environmental - Richland for Project Number 64598.016. Samples were logged in for PCB analysis per client request using both customer sample ID's and laboratory assigned ID's as listed on the Chain-of-Custody (CoC). All samples as received were processed and analyzed within specified turnaround time without any abnormalities and deviations that may affect the analytical results. All quality control requirements were acceptable unless stated otherwise. The conditions of all samples were acceptable at time of receipt and all samples submitted with this batch were analyzed unless stated otherwise on the CoC.

Test Results are reported in milligrams per kilogram (mg/kg) for PCB samples as shown on the analytical reports.

Definition Appendix**Terms**

% Rec	Percent recovery.
<	Below Reporting Limit(RL) or Limit of Quantitation(LoQ) of the instrument.
B	Blank contamination. The recorded results is associated with a contaminated blank.
DF	Dilution Factor
J	The reported concentration is an estimated value because something may be present in the sample that interfered with the analysis.
J1	The reported concentration is an estimated value because the laboratory control sample (LCS) is out of control limits.
J2	The reported concentration is an estimated value because the percent recovery for matrix spike is out of control limits.
J3	The reported concentration is an estimated value because the relative percent difference(RPD) for duplicate analysis is out of control limits.
J4	Percent recovery is outside of established control limits.
LCS	Laboratory Control Sample.
LFS	Laboratory Fortified Spike
Limits	The upper and lower control limits for spike recoveries.
LN	Quality control sample is outside of control limits. This analyte was not detected in the sample.
LOQ	Limit of quantitation(same as RL)
mg/kg	Milligrams per kilogram.
ND	Analyte not detected or below the reporting limit of the instrument or methodology

Definition Appendix**Terms**

PPM	Parts per Million.
QC Batch Group	Quality Control Batch Group. The entity that links analytical results and supporting quality control results.
R	The data are not reliable due to possible contamination or loss of material during preparation or analysis. Re-sampling and reanalysis are necessary for verification.
RL	Reporting Limit. The minimum concentration that can be quantified under routine operating conditions.
RPD	Relative Percent Difference. The relative difference between duplicate results(matrix spike, blank spike, or samples duplicate) expressed as a percentage.
RPD Limit	The maximum RPD allowed for a set of duplicate measurements(see RPD).
SSMI	Surrogate has matrix interference.
Spike Conc	The measured concentration, in sample basis units, of a spiked sample.
SURR-ND	Surrogate was not detected due to matrix interference or dilution.
ug/m ³	Micrograms per cubic meter.
ug/100cm ²	Micrograms per hundred square centimeter.

Analysis Report

Polychlorinated Biphenyls by Gas Chromatography



Client: PBS Environmental - Richland

Address: 400 Bradley Blvd. Suite 106
Richland, WA 99352

Batch #: 2403625.00

Matrix: Bulk

Analysis Method: EPA 8082

Preparation Method: EPA 3546

Client Project #: 64598.016

Date Received: 2/29/2024

Samples Received: 4

Samples Analyzed: 4

Attention: Ms. J. Kanani Patricio-Young

Project Location: Zosel Dam DES Gate Repair, 1 14th Ave Oroville, WA

Sample Number 64598.016-2001

Lab Sample ID 24021327

Initial Sample Size 0.8654 gm

Matrix

Bulk

Units of Result

mg/Kg

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	1.2	< 1.2	2/29/2024
Aroclor-1221	1.2	< 1.2	2/29/2024
Aroclor-1232	1.2	< 1.2	2/29/2024
Aroclor-1242	1.2	< 1.2	2/29/2024
Aroclor-1248	1.2	< 1.2	2/29/2024
Aroclor-1254	1.2	< 1.2	2/29/2024
Aroclor-1260	1.2	< 1.2	2/29/2024
PCBs, Total	1.2	< 1.2	

Analysis Report

Polychlorinated Biphenyls by Gas Chromatography



Client: PBS Environmental - Richland

Address: 400 Bradley Blvd. Suite 106
Richland, WA 99352

Batch #: 2403625.00

Matrix: Bulk

Analysis Method: EPA 8082

Preparation Method: EPA 3546

Client Project #: 64598.016

Date Received: 2/29/2024

Samples Received: 4

Samples Analyzed: 4

Attention: Ms. J. Kanani Patricio-Young

Project Location: Zosel Dam DES Gate Repair, 1 14th Ave Oroville, WA

Sample Number 64598.016-2002

Lab Sample ID 24021328

Initial Sample Size 0.0535 gm

Matrix

Bulk

Units of Result

mg/Kg

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	19	< 19	2/29/2024
Aroclor-1221	19	< 19	2/29/2024
Aroclor-1232	19	< 19	2/29/2024
Aroclor-1242	19	< 19	2/29/2024
Aroclor-1248	19	< 19	2/29/2024
Aroclor-1254	19	180	2/29/2024
Aroclor-1260	19	53	2/29/2024
PCBs, Total	19	230	

Comments: Reporting limit raised due to small sample size.

Analysis Report

Polychlorinated Biphenyls by Gas Chromatography



Client: PBS Environmental - Richland

Address: 400 Bradley Blvd. Suite 106
Richland, WA 99352

Batch #: 2403625.00

Matrix: Bulk

Analysis Method: EPA 8082

Preparation Method: EPA 3546

Client Project #: 64598.016

Date Received: 2/29/2024

Samples Received: 4

Samples Analyzed: 4

Attention: Ms. J. Kanani Patricio-Young

Project Location: Zosel Dam DES Gate Repair, 1 14th Ave Oroville, WA

Sample Number 64598.016-2003

Lab Sample ID 24021329

Initial Sample Size 0.5621 gm

Matrix

Bulk

Units of Result

mg/Kg

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	1.8	< 1.8	2/29/2024
Aroclor-1221	1.8	< 1.8	2/29/2024
Aroclor-1232	1.8	< 1.8	2/29/2024
Aroclor-1242	1.8	< 1.8	2/29/2024
Aroclor-1248	1.8	< 1.8	2/29/2024
Aroclor-1254	1.8	< 1.8	2/29/2024
Aroclor-1260	1.8	< 1.8	2/29/2024
PCBs, Total	1.8	< 1.8	

Comments: Reporting limit raised due to small sample size.

Analysis Report

Polychlorinated Biphenyls by Gas Chromatography



Client: PBS Environmental - Richland

Address: 400 Bradley Blvd. Suite 106
Richland, WA 99352

Batch #: 2403625.00

Matrix: Bulk

Analysis Method: EPA 8082

Preparation Method: EPA 3546

Client Project #: 64598.016

Date Received: 2/29/2024

Samples Received: 4

Samples Analyzed: 4

Attention: Ms. J. Kanani Patricio-Young

Project Location: Zosel Dam DES Gate Repair, 1 14th Ave Oroville, WA

Sample Number 64598.016-2004

Lab Sample ID 24021330

Initial Sample Size 0.1645 gm

Matrix

Bulk

Units of Result

mg/Kg

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	6.1	< 6.1	2/29/2024
Aroclor-1221	6.1	< 6.1	2/29/2024
Aroclor-1232	6.1	< 6.1	2/29/2024
Aroclor-1242	6.1	< 6.1	2/29/2024
Aroclor-1248	6.1	< 6.1	2/29/2024
Aroclor-1254	6.1	< 6.1	2/29/2024
Aroclor-1260	6.1	< 6.1	2/29/2024
PCBs, Total	6.1	< 6.1	

Comments: Reporting limit raised due to small sample size.

Quality Control Results

Client Project #: 64598.016		Batch #: 2403625.00	
		Project Manager: Ms. J. Kanani	
Preparation Method: EPA 3546		Analysis Method: EPA 8082	
Preparation Date: 2/29/2024		Analysis Description: Polychlorinated Biphenyls by Gas Chromatography	
Blank: 2403625			

Analyte	Blank Results	Units	DF	RL	Control Limit	Qualifiers
Aroclor-1016	ND	mg/Kg	1	1.00	1.00	
Aroclor-1221	ND	mg/Kg	1	1.00	1.00	
Aroclor-1232	ND	mg/Kg	1	1.00	1.00	
Aroclor-1242	ND	mg/Kg	1	1.00	1.00	
Aroclor-1248	ND	mg/Kg	1	1.00	1.00	
Aroclor-1254	ND	mg/Kg	1	1.00	1.00	
Aroclor-1260	ND	mg/Kg	1	1.00	1.00	
PCBs, Total	ND	mg/Kg	1			
<i>Surrogates:</i>				% Rec		
Tetrachloro-m-xylene			1	92	40-140	
Decachlorobiphenyl			1	110	40-140	

Lab Control Sample: LCS 1254-2403625

Analyte	Blank Spike Results	Units	DF	Spike Conc	% Rec	Limits	Qualifiers
Aroclor-1254	18	mg/Kg	1	20.00	90	40-140	
<i>Surrogates:</i>							
Tetrachloro-m-xylene			1		93	40-140	
Decachlorobiphenyl			1		110	40-140	

Lab Control Sample: LCS 1016+1260-2403625

Lab Control Sample Duplicate: LCS Dup 1016+1260

Analyte	Blank Spike Results	Units	DF	Spike Conc	% Rec	Limits	RPD %	RPD Limit	Qualifiers
Aroclor-1016	16	mg/Kg	1	20.00	80	40-140			
	16			20.00	80	40-140	3	50%	
Aroclor-1260	19	mg/Kg	1	20.00	95	40-140			
	18			20.00	90	40-140	3	50%	
<i>Surrogates:</i>									
Tetrachloro-m-xylene			1		97	40-140			
					100	40-140			
Decachlorobiphenyl			1		110	40-140			
					100	40-140			

* Recovery outside of control limits

Surrogate Recovery Summary Report

Client PBS Environmental - Richland

Batch # 2403625.00

Project 64598.016

Customer Sample ID	Lab Sample ID	Analyte	Recovery	Limits
64598.016-2001	24021327	Decachlorobiphenyl	53%	40-140
64598.016-2001	24021327	Tetrachloro-m-xylene	75%	40-140
64598.016-2002	24021328	Decachlorobiphenyl	63%	40-140
64598.016-2002	24021328	Tetrachloro-m-xylene	75%	40-140
64598.016-2003	24021329	Decachlorobiphenyl	46%	40-140
64598.016-2003	24021329	Tetrachloro-m-xylene	79%	40-140
64598.016-2004	24021330	Decachlorobiphenyl	75%	40-140
64598.016-2004	24021330	Tetrachloro-m-xylene	75%	40-140

*Recovery outside of the limits

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Sample	Analyzed	Analyte	Target	Solution Conc	Unit	% Rec	Limits
ICV-1016	2/29/2024	Aroclor-1016	5.0	4.90	ug/mL	98	85-115
ICV-1254	2/29/2024	Aroclor-1254	5.0	5.06	ug/mL	101	85-115
ICV-1260	2/29/2024	Aroclor-1260	5.0	5.30	ug/mL	106	85-115
CCV1-1016	2/29/2024	Aroclor-1016	5.0	5.00	ug/mL	100	80-120
CCV1-1254	2/29/2024	Aroclor-1254	5.0	5.00	ug/mL	100	80-120
CCV1-1260	2/29/2024	Aroclor-1260	5.0	5.00	ug/mL	100	80-120
CCV2-1016	2/29/2024	Aroclor-1016	5.0	5.23	ug/mL	105	80-120
CCV2-1254	2/29/2024	Aroclor-1254	5.0	5.34	ug/mL	107	80-120
CCV2-1260	2/29/2024	Aroclor-1260	5.0	5.09	ug/mL	102	80-120
CCV3-1016	2/29/2024	Aroclor-1016	5.0	5.29	ug/mL	106	80-120
CCV3-1254	2/29/2024	Aroclor-1254	5.0	4.97	ug/mL	99	80-120
CCV3-1260	2/29/2024	Aroclor-1260	5.0	4.92	ug/mL	98	80-120

% Rec - Percent recovery

* Percent recovery not within control limits

ORGANICS LABORATORY SERVICES



Company PBS Environmental - Richland
Address 400 Bradley Blvd. Suite 106
 Richland, WA 99352
Project Manager Ms. J. Kanani Patricio-Young
Phone (509) 942-1600
Cell (808) 346-1128
NVL Batch Number 2403625.00
TAT 3 Days **AH** No
Rush TAT
Due Date 3/5/2024 **Time** 9:30 AM
Email kanani.young@pbsusa.com
Fax (866) 727-0140

Project Name/Number: 64598.016 **Project Location:** Zosel Dam DES Gate Repair, 1 14th Ave Oroville, WA

Subcategory Quantitative analysis

Item Code ORG-05 8082 PCB Aroclors <Bulk>

Total Number of Samples 4

Rush Samples

	Lab ID	Sample ID	Description	A/R
1	24021327	64598.016-2001		A
2	24021328	64598.016-2002		A
3	24021329	64598.016-2003		A
4	24021330	64598.016-2004		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Fatima Khan		NVL	2/29/24	930
Analyzed by	Evelyn Ahulu		NVL	2/29/24	
Results Called by					
☐ Faxed ☐ Emailed					

Special Instructions:

Date: 2/29/2024
 Time: 9:48 AM
 Entered By: Kelly AuVu

APPENDIX F

Laboratory Certifications

United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 101926-0

EMC Labs, Inc.

Phoenix, AZ

*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).*

2023-07-01 through 2024-06-30

Effective Dates



A handwritten signature in blue ink, reading "Dana S. Laman".

For the National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

EMC Labs, Inc.
9830 S. 51st St. Suite B-109
Phoenix, AZ 85044-5677
Mr. Kurt A. Kettler
Phone: 480-940-5294 Fax: 480-893-1726
Email: kkettler@earthlink.net
<http://www.emclabs.com>

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 101926-0

Bulk Asbestos Analysis

Code

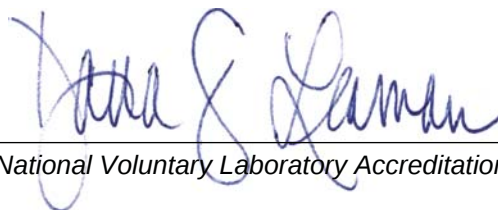
Description

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



AIHA Laboratory Accreditation Programs, LLC
acknowledges that
EMC Labs, Inc.
9830 S. 51st Street, Suite B-109, Phoenix, AZ 85044-5671
Laboratory ID: LAP-101586

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs, LLC (AIHA LAP) accreditation to the ISO/IEC 17025:2017 international standard, General Requirements for the Competence of Testing and Calibration Laboratories in the following:

LABORATORY ACCREDITATION PROGRAMS

☒	INDUSTRIAL HYGIENE	Accreditation Expires: February 01, 2026
☒	ENVIRONMENTAL LEAD	Accreditation Expires: February 01, 2026
☒	ENVIRONMENTAL MICROBIOLOGY	Accreditation Expires: February 01, 2026
☐	FOOD	Accreditation Expires:
☐	UNIQUE SCOPES	Accreditation Expires:
☐	BE FIELD/MOBILE	Accreditation Expires:

Specific Field(s) of Testing/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached Scope of Accreditation. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2017 and AIHA LAP requirements. This certificate is not valid without the attached Scope of Accreditation. Please review the AIHA LAP website (www.aihaaccreditedlabs.org) for the most current Scope.

A handwritten signature in black ink that reads 'Cheryl O. Morton'.

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

United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

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).*

2023-10-01 through 2024-09-30

Effective Dates



A handwritten signature in blue ink, reading "Dana S. Laman".

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@nvlabs.com
<http://www.nvlabs.com>

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 102063-0

Bulk Asbestos Analysis

<u>Code</u>	<u>Description</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

APPENDIX G

Inspector Certifications

THIS IS TO CERTIFY THAT

JAYLICIA K PATRICIO-YOUNG

HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE

for

ONLINE AHERA ASBESTOS INSPECTOR REFRESHER

In accordance with TSCA Title II, Part 763, Subpart E, Appendix C of 40 CFR

Course Date: 06/05/2023

Course Location: Online

Certificate: IRO-23-8648B



CCB #SRA0615 4-Hr Training

4-Hour Online AHERA Inspector Refresher Training; AHERA is the Asbestos Hazard Emergency Response Act enacting Title II of Toxic Substance Control Act (TSCA)

Expiration Date: 06/05/2024

For verification of the authenticity of this certificate contact:
PBS Engineering and Environmental Inc.
4412 S Corbett Avenue
Portland, OR 97239

503.248.1939

A handwritten signature in black ink, reading "Andy Fridley".

Andy Fridley, Instructor

STATE OF WASHINGTON

Department of Commerce

Lead-Based Paint Activities Program

Jaylicia-Jinei Kanimauloa Patricio-Young

*Has fulfilled the certification requirements of
WAC 365-230
and has been certified to conduct lead based
paint activities as a
Risk Assessor.*

Certification #

7905

Issuance Date

08/28/2023

Expiration Date

08/14/2026

THIS IS TO CERTIFY THAT

CIENNA LANDON

HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE

for

ASBESTOS INSPECTOR / MANAGEMENT

PLANNER REFRESHER

In accordance with TSCA Title II, Part 763, Subpart E, Appendix C of 40 CFR

Course Date: 06/20/2023

Course Location: Online Training,

Certificate: IMR-23-0507C



CCB #SRA0615 4-Hr Training

AHERA is the Asbestos Hazard Emergency Response Act enacting Title II of Toxic Substance Control Act (TSCA)

Expiration Date: 06/20/2024

For verification of the authenticity of this certificate contact:
PBS Engineering and Environmental Inc.
4412 S Corbett Avenue
Portland, OR 97239
503.248.1939

A handwritten signature in black ink, which appears to read "Andy Fridley", is written over a horizontal line.

Andy Fridley, Instructor

STATE OF WASHINGTON

Department of Commerce

Lead-Based Paint Activities Program

Cienna Molique Landon

*Has fulfilled the certification requirements of
WAC 365-230
and has been certified to conduct lead based
paint activities as a
Inspector.*

Certification #

8878

Issuance Date

06/14/2023

Expiration Date

04/04/2026