

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
23816.292-0001	Ceramic Tile/Grout	B hall girls restroom; 1" by 1" ceramic floor tile with gray grout		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	ceramic tile, white	No Asbestos Detected
	Layer 2	granular compact powder, gray	No Asbestos Detected	
23816.292-0002	Gypsum Wallboard/Joint Compound	B hall girls restroom; gypsum wallboard with joint compound		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	paint, light yellow with fine compact powder, off-white	4% Chrysotile
		Layer 2	fine compact powder, off-white with paper backing, white	4% Chrysotile
	Layer 3	compact chalky material with paper, white	No Asbestos Detected	
23816.292-0003	Lay-in Ceiling Tile	B hall girls restroom; 2' by 4' white pinhole ceiling tile		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	coating, white	No Asbestos Detected
	Layer 2	compressed fibers, gray	No Asbestos Detected	
23816.292-0004	Ceramic Tile/Grout	B hall boys restroom; 4" by 4" white wall tile and grout		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	ceramic tile, white	No Asbestos Detected
	Layer 2	granular compact powder, gray	No Asbestos Detected	
23816.292-0005	Gypsum Wallboard/Joint Compound	B hall boys restroom; gypsum wallboard with joint compound		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	paint, light yellow with fine compact powder, off-white	4% Chrysotile
	Layer 2	compact chalky material with paper, white	No Asbestos Detected	
23816.292-0006	Ceramic Tile/Grout	B hall boys restroom; ceramic floor tile with gray grout		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	ceramic tile, gray	No Asbestos Detected
	Layer 2	granular compact powder, gray	No Asbestos Detected	

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
23816.292-0007	Ceramic Tile/Grout	Main hall; womens restroom, 1" by 1" ceramic floor tile with gray grout		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	ceramic tile, beige	No Asbestos Detected
		Layer 2	granular compact powder, gray	No Asbestos Detected
23816.292-0008	Ceramic Tile/Grout	Main hall; unisex restroom, 2" by 2" ceramic wall tile with gray grout		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	hard compact powder, off-white	No Asbestos Detected
		Layer 2	loose particulate, brown/off-white	No Asbestos Detected
23816.292-0009	Ceramic Tile/Grout	A hall; boys restroom, 1" by 1" ceramic floor tile with gray grout		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	hard compact powder, off-white/tan	No Asbestos Detected
		Layer 2	loose particulate, black/brown	No Asbestos Detected
23816.292-0010	Mortar	A hall; boys restroom, gray mortar with black wall		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	loose granular material, off-white/gray	No Asbestos Detected
23816.292-0011	Gypsum Wallboard/Joint Compound	A hall; boys restroom, gypsum wallboard with joint compound		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	fine compact powder, off-white, with paint, green	2% Chrysotile
		Layer 2	fine compact powder, off-white, with paper, off-white	<1% Chrysotile
		Layer 3	compact chalky material with paper, white	No Asbestos Detected
23816.292-0012	Lay-in Ceiling Tile	A hall; boys restroom, 2' by 4" white pinhole ceiling tile		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	loose fibrous material, gray, with paint, white	No Asbestos Detected

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
23816.292-0013	Material Debris	B hall; boys restroom, roofing debris on top of lay-in ceiling tile		Lab Cor
		Layer: Layer 1	Description: fibrous tar, black, with tar, black	Analysis: No Asbestos Detected
23816.292-0014	Ceramic Tile/Grout	A hall; girls restroom, 4" by 4" white ceramic wall tile with gray grout		Lab Cor
		Layer: Layer 1	Description: loose particulate, white/brown	Analysis: No Asbestos Detected
23816.292-0015	Material Debris	A hall; girls restroom, roofing debris on top of lay-in ceiling tile		Lab Cor
		Layer: Layer 1	Description: loose particulate, black/tan	Analysis: No Asbestos Detected

PLM - Visual Estimate Extended Final Report**Job Number: 201476****Client: PBS Engineering and Environmental****Address: 4412 SW Corbett Avenue
Portland, OR 97239****Report Number: 201476R01****Report Date: 4/24/2020****Project Name:****Project No.: 23816.292 Phase 0001****PO Number:****Sub Project:****Reference No.:**

Enclosed please find results for samples submitted to our laboratory. A list of samples and analyses follows:

Lab/Cor Sample #	Client Sample # and Description	Analysis	Analysis Notes	Date Received:
201476 - S1	23816.292-0001 -	PLM - Visual Estimate Extended		4/21/2020
201476 - S2	23816.292-0002 -	PLM - Visual Estimate Extended		4/21/2020
201476 - S3	23816.292-0003 -	PLM - Visual Estimate Extended		4/21/2020
201476 - S4	23816.292-0004 -	PLM - Visual Estimate Extended		4/21/2020
201476 - S5	23816.292-0005 -	PLM - Visual Estimate Extended		4/21/2020
201476 - S6	23816.292-0006 -	PLM - Visual Estimate Extended		4/21/2020
201476 - S7	23816.292-0007 -	PLM - Visual Estimate Extended		4/21/2020
201476 - S8	23816.292-0008 -	PLM - Visual Estimate Extended		4/21/2020
201476 - S9	23816.292-0009 -	PLM - Visual Estimate Extended		4/21/2020
201476 - S10	23816.292-0010 -	PLM - Visual Estimate Extended		4/21/2020
201476 - S11	23816.292-0011 -	PLM - Visual Estimate Extended		4/21/2020
201476 - S12	23816.292-0012 -	PLM - Visual Estimate Extended		4/21/2020
201476 - S13	23816.292-0013 -	PLM - Visual Estimate Extended		4/21/2020
201476 - S14	23816.292-0014 -	PLM - Visual Estimate Extended		4/21/2020
201476 - S15	23816.292-0015 -	PLM - Visual Estimate Extended		4/21/2020



PLM - Visual Estimate Extended Final Report

Job Number: 201476

Client: PBS Engineering and Environmental

Report Number: 201476R01

Report Date: 4/24/2020

Project Name:

PLM - Visual Estimate Extended The submitted sample(s) were analyzed according to the EPA 600-R-93-116 "Method for the Determination of Asbestos in Bulk Building Materials". The sample(s) were analyzed with a digital microscope in order to determine homogeneity, the presence of fibers, and make a preliminary estimate of any asbestos fibers present in the sample. The sample(s), and any observed layers, were then homogenized through techniques appropriate to that material and prepared for analysis by polarized light microscopy (PLM).

Three slide mount preparations were made from random subsamples of the homogenized material. This material was then mounted in the suitable refractive index liquid needed to perform a full optical characterization of the observed fibers. When necessary, dilute HCl, instead of RI liquids, were used to remove cementitious binders to facilitate analysis. The entirety of the slide mount preparations were then analyzed by PLM. Any observed fibers were reported and their optical characteristics recorded according to the EPA 600-R-93-116 method.

Disclaimer This report, and the data contained therein, cannot be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government. The results found in this report are based only on the submitted sample(s). LabCor has no control over sampling procedures. This report is only valid when signed by an analyst.

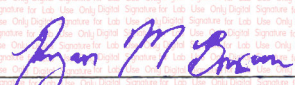
NAD indicates no asbestos detected. Asbestos consists of the six following minerals: chrysotile, amosite, crocidolite, anthophyllite, actinolite, and tremolite.

Additional gravimetric, point-count or TEM analysis may be recommended for samples testing at < or = 1% asbestos, or those with material binders that prevent the detection of small diameter fibers.

The following estimate of error for this method by visual estimation of asbestos percent are as follows:

- 1% asbestos: >0-3% error,
- 5% asbestos: 1-9% error,
- 10% asbestos: 5-15% error,
- 20% asbestos: 10-30% error.

Sincerely,

Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only


Ryan Brown
PLM Technical Manager

BULK SAMPLE ASBESTOS ANALYSIS

Client: PBS Engineering and Environmental
4412 SW Corbett Avenue
Portland, OR 97239

Report Number: 201476R01
Report Date: 04/24/2020

Job Number: 201476

P.O. No: n/a

Project Name:

Project Number: 23816.292 Phase 0001

Project Notes:

Client Sample ID: 23816.292-0001	Sample ID: S1	Date Analyzed: 04/24/2020	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite
			Crocidolite
			Percent Asbestos:
Layer 01			
ceramic tile, white	50 %	-	-
			NAD
Layer 02			
granular compact powder, gray	50 %	-	-
			NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool
			Synthetic
			Other
			Matrix
Layer 01	-	-	-
			100 %
Layer 02	-	-	-
			100 %

Client Sample ID: 23816.292-0002	Sample ID: S2	Date Analyzed: 04/24/2020	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite
			Crocidolite
			Percent Asbestos:
Layer 01			
paint, light yellow with fine compact powder, off-white	30 %	4 %	-
			4 %
Layer 02			
fine compact powder, off-white with paper backing, white	30 %	4 %	-
			4 %
Layer 03			
compact chalky material with paper, white	40 %	-	-
			NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool
			Synthetic
			Other
			Matrix
Layer 01	-	-	-
			96 %
Layer 02	-	-	-
			96 %
Layer 03	-	-	-
			100 %

Client Sample ID: 23816.292-0003	Sample ID: S3	Date Analyzed: 04/24/2020	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite
			Crocidolite
			Percent Asbestos:
Layer 01			
coating, white	5 %	-	-
			NAD
Layer 02			
compressed fibers, gray	95 %	-	-
			NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool
			Synthetic
			Other
			Matrix
Layer 01	-	-	-
			100 %
Layer 02	10 %	30 %	10 %
			50 %

Client: PBS Engineering and Environmental
4412 SW Corbett Avenue
Portland, OR 97239

Report Number: 201476R01
Report Date: 04/24/2020

Job Number: 201476

P.O. No: n/a

Project Name:

Project Number: 23816.292 Phase 0001

Project Notes:

Client Sample ID: 23816.292-0004		Sample ID: S4			Date Analyzed: 04/24/2020		Percent Asbestos:
Client Sample Description:		Analyst: Ryan Brown					
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite			
Layer 01 ceramic tile, white	50 %	-	-	-	NAD		
Layer 02 granular compact powder, gray	50 %	-	-	-	NAD		
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
Layer 01	-	-	-	-	-	100 %	
Layer 02	-	-	-	-	-	100 %	

Client Sample ID: 23816.292-0005		Sample ID: S5			Date Analyzed: 04/24/2020		Percent Asbestos:
Client Sample Description:		Analyst: Ryan Brown					
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite			
Layer 01 paint, light yellow with fine compact powder, off-white	20 %	4 %	-	-	4 %		
Layer 02 compact chalky material with paper, white	80 %	-	-	-	NAD		
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
Layer 01	-	-	-	-	-	96 %	
Layer 02	-	-	-	-	-	100 %	

Client Sample ID: 23816.292-0006		Sample ID: S6			Date Analyzed: 04/24/2020		Percent Asbestos:
Client Sample Description:		Analyst: Ryan Brown					
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite			
Layer 01 ceramic tile, gray	90 %	-	-	-	NAD		
Layer 02 granular compact powder, gray	10 %	-	-	-	NAD		
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
Layer 01	-	-	-	-	-	100 %	
Layer 02	-	-	-	-	-	100 %	

Asbestos and Environmental Analysis

Client: PBS Engineering and Environmental
4412 SW Corbett Avenue
Portland, OR 97239

Report Number: 201476R01
Report Date: 04/24/2020

Job Number: 201476

P.O. No: n/a

Project Name:

Project Number: 23816.292 Phase 0001

Project Notes:

Client Sample ID: 23816.292-0007	Sample ID: S7	Date Analyzed: 04/24/2020	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite
			Crocidolite
Layer 01			
ceramic tile, beige	40 %	-	-
Layer 02			
granular compact powder, gray	60 %	-	-
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool
			Synthetic
			Other
Layer 01	-	-	-
Layer 02	-	-	-
			Matrix
			100 %
			100 %

Client Sample ID: 23816.292-0008	Sample ID: S8	Date Analyzed: 04/24/2020	
Client Sample Description:		Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite
			Crocidolite
Layer 01			
hard compact powder, off-white	30 %	-	-
Layer 02			
loose particulate, brown/off-white	70 %	-	-
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool
			Synthetic
			Other
Layer 01	-	-	-
Layer 02	-	-	-
			Matrix
			100 %
			100 %

Client Sample ID: 23816.292-0009	Sample ID: S9	Date Analyzed: 04/24/2020	
Client Sample Description:		Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite
			Crocidolite
Layer 01			
hard compact powder, off-white/tan	95 %	-	-
Layer 02			
loose particulate, black/brown	5 %	-	-
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool
			Synthetic
			Other
Layer 01	-	-	-
Layer 02	-	-	-
			Matrix
			100 %
			100 %

Client: PBS Engineering and Environmental
4412 SW Corbett Avenue
Portland, OR 97239

Report Number: 201476R01
Report Date: 04/24/2020

Job Number: 201476

P.O. No: n/a

Project Name:

Project Number: 23816.292 Phase 0001

Project Notes:

Client Sample ID: 23816.292-0010	Sample ID: S10	Date Analyzed: 04/24/2020	
Client Sample Description:		Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Homogeneous			
loose granular material, off-white/gray	100 % - - -		NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other		Matrix
	- Trace - - -		100 %

Client Sample ID: 23816.292-0011	Sample ID: S11	Date Analyzed: 04/24/2020	
Client Sample Description:		Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Layer 01			
fine compact powder, off- white, with paint, green	30 % 2 % - -		2 %
Layer 02			
fine compact powder, off- white, with paper, off- white	10 % Trace - -		< 1 %
Layer 03			
compact chalky material with paper, white	60 % - - -		NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other		Matrix
Layer 01	- Trace - - -		98 %
Layer 02	- 3 % - - -		97 %
Layer 03	3 % 3 % - - -		94 %

Client Sample ID: 23816.292-0012	Sample ID: S12	Date Analyzed: 04/24/2020	
Client Sample Description:		Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Homogeneous			
loose fibrous material, gray, with paint, white	100 % - - -		NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other		Matrix
	- 35 % 40 % - -		25 %

Client: PBS Engineering and Environmental
4412 SW Corbett Avenue
Portland, OR 97239

Report Number: 201476R01
Report Date: 04/24/2020

Job Number: 201476

P.O. No: n/a

Project Name:

Project Number: 23816.292 Phase 0001

Project Notes:

Client Sample ID: 23816.292-0013	Sample ID: S13	Date Analyzed: 04/24/2020	
Client Sample Description:		Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Homogeneous			
fibrous tar, black, with tar, black	100 % - - -		NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other		Matrix
	- 80 % - - -		20 %

Client Sample ID: 23816.292-0014	Sample ID: S14	Date Analyzed: 04/24/2020	
Client Sample Description:		Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Homogeneous			
loose particulate, white/brown	100 % - - -		NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other		Matrix
	- - - - -		100 %

Client Sample ID: 23816.292-0015	Sample ID: S15	Date Analyzed: 04/24/2020	
Client Sample Description:		Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Homogeneous			
loose particulate, black/tan	100 % - - -		NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other		Matrix
	- 10 % - - -		90 %



Asbestos and Environmental Analysis

Client: PBS Engineering and Environmental
4412 SW Corbett Avenue
Portland, OR 97239

Report Number: 201476R01
Report Date: 04/24/2020

Job Number: 201476

P.O. No: n/a

Project Name:

Project Number: 23816.292 Phase 0001

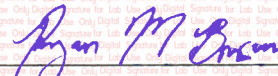
Project Notes:

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Testing method is per 40 CFR 763 Subpart E, Appendix E, PLM. This report and the data contained therein cannot be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

- "NAD" is No Asbestos Detected.
- Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite.
- Material binders, such as those found in vinyl floor tiles, may prevent the detection of small diameter asbestos fibers. A gravimetric preparation and point-count is recommended for such samples.
- Quantitative analysis by PLM point count or TEM may be recommended for samples testing at \leq to 1% asbestos.
- The following estimate of error for this method by visual estimation of asbestos percent are as follows:
1% asbestos: $>0-3\%$ error, 5% asbestos: $1-9\%$ error, 10% asbestos: $5-15\%$ error, 20% asbestos: $10-30\%$ error.
- This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only
for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only
Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only
for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only
Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only
for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only
Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only
for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only
Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only
for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only

X 
Ryan Brown
PLM Technical Manager



201476 1/2

1/3



TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Project No.: 23816.292 Phase 0001

Individuals signing this form warrant that the information provided is correct and complete. The Sender should keep a copy and send the original. The Receiver should complete the form, keep a copy and return the original to the Sender. Receiver shall report damage of package immediately to Sender.

SENDER

Date Sent: April 21, 2020

PBS Engineering and Environmental Inc.
4412 SW Corbett Avenue
Portland, OR 97239
503.248.1939, Fax: 866.727.0140

Alex Johnson for Sean Grabiner

Name Date: 2020.04.21

Signature 11:54:45 -07'00'

Authorized Signature Date Time

RECEIVER

Date Received: 4/21/20

Company: Lab Cor
Address: 4321 SW Corbett Ave Ste A
Portland, OR 97239
503-224-5055

Katie Schmitz

Name Signature 4/21/20 12:30AM

Authorized Signature Date Time

Table with 3 columns: Sender's ID No., Brief Description, Receiver's ID No. Rows 1-14.

201476 2 1/2
2/3 PB 424



TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

23816.292-0015 _____

Please analyze the enclosed 15 sample(s) for asbestos content using PLM with dispersion staining. PBS requests prior notification if samples will be disposed.

Request verbal results by: _____ AM/PM _____ Date.

Please fax and mail the results to the above address.

TURNAROUND DESIRED: ~~Rush~~ 24 hour -K

SPECIAL INSTRUCTIONS:

SG/JRM

20176 7/3

Katie Schultz

From: Alex Johnson <Alex.Johnson@pbsusa.com>
Sent: Tuesday, April 21, 2020 12:59 PM
To: Katie Schultz; Frankie Baker; Ryan Brown
Cc: Mark Donahue
Subject: RE: Jobs needing chains as of 4/21/20-11:20AM

Sorry, three day after client review.

Alex Johnson | Administrative Assistant | PBS Portland | Cell 503-703-0412

From: Alex Johnson
Sent: Tuesday, April 21, 2020 12:26 PM
To: Katie Schultz <kschultz@labcorpdx.net>; Frankie Baker <FBaker@labcorpdx.net>; Ryan Brown <RBrown@labcorpdx.net>
Cc: Mark Donahue <MDonahue@labcorpdx.net>
Subject: RE: Jobs needing chains as of 4/21/20-11:20AM

Dangnabbit 23816.292 should have been 24 hour TAT, can you change that? Thanks!

Alex Johnson | Administrative Assistant | PBS Portland | Cell 503-703-0412

From: Alex Johnson
Sent: Tuesday, April 21, 2020 12:24 PM
To: Katie Schultz <kschultz@labcorpdx.net>; Frankie Baker <FBaker@labcorpdx.net>; Ryan Brown <RBrown@labcorpdx.net>
Cc: Mark Donahue <MDonahue@labcorpdx.net>
Subject: RE: Jobs needing chains as of 4/21/20-11:20AM

This should bring us up to parity?

Alex Johnson | Administrative Assistant | PBS Portland | Cell 503-703-0412

From: Katie Schultz <kschultz@labcorpdx.net>
Sent: Tuesday, April 21, 2020 11:22 AM
To: Alex Johnson <Alex.Johnson@pbsusa.com>
Cc: Mark Donahue <MDonahue@labcorpdx.net>
Subject: Jobs needing chains as of 4/21/20-11:20AM

25000.126 P21 – 11 Samples- 24 hr
23816.292 P1- 15 Samples-no TAT selected
25794.008 P3- 1 Sample- RUSH
23767.301 P1- 1 Sample- RUSH
25773.002 P5- 2 Samples- 3D

Just letting you know, thanks. 😊

Katie Schultz



PLM - Composite/Gravimetric Point Count - 400 fields Final Report

Job Number: 201543

Client: PBS Engineering and Environmental

**Address: 4412 SW Corbett Avenue
Portland, OR 97239**

Report Number: 201543R01

Report Date: 5/1/2020

Project Name:

Project No.: 23816.292 Phase 0001

PO Number:

Sub Project:

Reference No.:

Enclosed please find results for samples submitted to our laboratory. A list of samples and analyses follows:

Lab/Cor Sample #	Client Sample # and Description	Analysis	Analysis Notes	Date Received:
201543 - S1	23816.292-0002 -	PLM - Composite/Gravimetric Point Count - 400 fields		4/28/2020
201543 - S2	23816.292-0005 -	PLM - Composite/Gravimetric Point Count - 400 fields		4/28/2020
201543 - S3	23816.292-0011 -	PLM - Composite/Gravimetric Point Count - 400 fields		4/28/2020



PLM - Composite/Gravimetric Point Count - 400 fields Final Report

Job Number: 201543

Client: PBS Engineering and Environmental

Report Number: 201543R01

Report Date: 5/1/2020

Project Name:

PLM - The submitted sample(s) were analyzed according to the EPA 600-R-93-116 "Method for the Determination of Asbestos in Bulk Composite/Gravimetric Point Count - 400 fields (PLM). Building Materials". The sample(s) were analyzed with a digital microscope in order to determine homogeneity, the presence of fibers, and make a preliminary estimate of any asbestos fibers present in the sample. The sample(s), and any observed layers, were then homogenized through techniques appropriate to that material and prepared for analysis by polarized light microscopy (PLM).

A representative portion of each layer of the sample was homogenized with a mortar and pestle and placed in a preweighed scintillation vial. The sample was weighed and then ashed in the furnace at 420°C for 4 hours. The sample was allowed to cool to room temperature and then weighed again. It was then sonicated and filtered onto a preweighed 47µm MCE filter and placed into a drying oven until all moisture was removed from the residue and the filter. It was then allowed to cool and weighed again. These measurements were used to calculate the gravimetric reduction ratio, or the GRR.

A random subsample of the residue was then homogenized in a mortar and pestle. Eight slide mounts were prepared using the appropriate refractive index liquid needed to fully characterize any observed fibers. A full point-count of 50 fields of view per preparation was then performed. Any fibers that were observed under the graticule of the eyepiece were recorded and totaled at the end of the count. This total was then multiplied by 0.25% and the GRR in order to obtain the relative weight percent of asbestos for the sample. Any fibers that were observed, but did not fall under the graticule, were recorded as trace (<0.25%). Any observed fibers were reported and their optical characteristics recorded according to the EPA 600-R-93-116 method.

Disclaimer This report, and the data contained therein, cannot be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government. The results found in this report are based only on the submitted sample(s). LabCor has no control over sampling procedures. This report is only valid when signed by an analyst.


NAD indicates no asbestos detected. Asbestos consists of the six following minerals: chrysotile, amosite, crocidolite, anthophyllite, actinolite, and tremolite.

Additional gravimetric, point-count or TEM analysis may be recommended for samples testing at < or = 1% asbestos, or those with material binders that prevent the detection of small diameter fibers.

The following estimate of error for this method by visual estimation of asbestos percent are as follows:

- 1% asbestos: >0-3% error,
- 5% asbestos: 1-9% error,
- 10% asbestos: 5-15% error,
- 20% asbestos: 10-30% error.

Sincerely,


X Digital Signature for Lab Use Only

Ryan Brown
PLM Technical Manager

BULK SAMPLE ASBESTOS ANALYSIS

Client: PBS Engineering and Environmental
4412 SW Corbett Avenue
Portland, OR 97239

Report Number: 201543R01
Report Date: 05/01/2020

Job Number: 201543

P.O. No: n/a

Project Name:

Project Number: 23816.292 Phase 0001

Project Notes:

Client Sample ID: 23816.292-0002	Sample ID: S1	Date Analyzed: 05/01/2020	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Homogeneous		Point Count: 17	Point Count Fields: 400
fine powder, gray	100 % 0.93 % - -		0.93 %
Other Fibers	Fibrous Mineral Glass Cellulose Wool Synthetic Other		Matrix
	- - - - -		99.07 %

Comments: Gravimetric reduction performed on sample. GRR value is 0.218

Client Sample ID: 23816.292-0005	Sample ID: S2	Date Analyzed: 05/01/2020	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Homogeneous		Point Count: 3	Point Count Fields: 400
fine powder, gray	100 % 0.15 % - -		0.15 %
Other Fibers	Fibrous Mineral Glass Cellulose Wool Synthetic Other		Matrix
	- - - - -		99.85 %

Comments: Gravimetric reduction performed on sample. GRR value is 0.203

Client Sample ID: 23816.292-0011	Sample ID: S3	Date Analyzed: 05/01/2020	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Homogeneous		Point Count: 0	Point Count Fields: 400
fine powder, gray	100 % Trace - -		< 0.25 %
Other Fibers	Fibrous Mineral Glass Cellulose Wool Synthetic Other		Matrix
	- - - - -		100 %

Comments: Gravimetric reduction performed on sample. GRR value is 0.16



Asbestos and Environmental Analysis

Client: PBS Engineering and Environmental
4412 SW Corbett Avenue
Portland, OR 97239

Report Number: 201543R01
Report Date: 05/01/2020

Job Number: 201543

P.O. No: n/a

Project Name:


Project Number: 23816.292 Phase 0001

Project Notes:

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Testing method is per 40 CFR 763 Subpart E, Appendix E, PLM. This report and the data contained therein cannot be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

- "NAD" is No Asbestos Detected.
- Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite.
- Material binders, such as those found in vinyl floor tiles, may prevent the detection of small diameter asbestos fibers. A gravimetric preparation and point-count is recommended for such samples.
- Quantitative analysis by PLM point count or TEM may be recommended for samples testing at < or = to 1% asbestos.
- The following estimate of error for this method by visual estimation of asbestos percent are as follows:
1% asbestos: >0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error.
- This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only
for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature
Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only
for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature
Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only
for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature
Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only
for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature
X 
Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only
for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature
Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only
for Lab Use Only Digital Signature for Lab Use Only Digital Signature for Lab Use Only Digital Signature

Ryan Brown
PLM Technical Manager

