



November 14, 2017

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demo, 1235 Delta Street Sacramento, CA; 17178
CEI LAB CODE: A17-16938

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on November 13, 2017. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any questions, please feel free to call our office at 919-481-1413.

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demo, 1235 Delta Street Sacramento, CA;
17178

CEI LAB CODE: A17-16938

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 11/14/17

TOTAL SAMPLES ANALYZED: 4

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo, 1235 Delta Street
Sacramento, CA; 17178

CEI LAB CODE: A17-16938

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1235-CFT	Layer 1	A2544501A	Gray	Ceramic Floor Tile	None Detected
	Layer 2	A2544501A	Gray	Grout	None Detected
	Layer 3	A2544501A	Brown	Mortar	None Detected
		A2544501B	Beige	Glue	None Detected
1235-CWT	Layer 1	A2544502A	White	Ceramic Wall Tile	None Detected
	Layer 2	A2544502A	White	Grout	None Detected
	Layer 3	A2544502A	Gray	Mortar	None Detected
		A2544502B	Brown	Glue	None Detected
1235-VCJ		A2544503	Black	Vibration Joint Cloth	None Detected
1235-Foil		A2544504	Silver	Foil	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A17-16938
Date Received: 11-13-17
Date Analyzed: 11-14-17
Date Reported: 11-14-17

Project: Twin Rivers Demo, 1235 Delta Street Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
1235-CFT Layer 1 A2544501A	Ceramic Floor Tile	Homogeneous			60%	Binder	None Detected
		Gray			40%	Silicates	
		Non-fibrous Bound					
Layer 2 A2544501A	Grout	Homogeneous	<1%	Cellulose	60%	Binder	None Detected
		Gray			40%	Silicates	
		Fibrous Bound					
Layer 3 A2544501A	Mortar	Homogeneous	<1%	Cellulose	60%	Binder	None Detected
		Brown			40%	Silicates	
		Fibrous Bound					
A2544501B	Glue	Homogeneous	2%	Cellulose	60%	Binder	None Detected
		Beige			38%	Calc Carb	
		Fibrous Bound					
1235-CWT Layer 1 A2544502A	Ceramic Wall Tile	Homogeneous			60%	Binder	None Detected
		White			40%	Silicates	
		Non-fibrous Bound					
Layer 2 A2544502A	Grout	Homogeneous	<1%	Cellulose	60%	Binder	None Detected
		White			40%	Silicates	
		Fibrous Bound					
Layer 3 A2544502A	Mortar	Homogeneous	<1%	Cellulose	60%	Binder	None Detected
		Gray			40%	Silicates	
		Fibrous Bound					



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A17-16938
Date Received: 11-13-17
Date Analyzed: 11-14-17
Date Reported: 11-14-17

Project: Twin Rivers Demo, 1235 Delta Street Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %	
			Fibrous	Non-Fibrous			
A2544502B	Glue	Homogeneous Brown Fibrous Bound	2%	Cellulose	60% 38%	Binder Calc Carb	None Detected
1235-VCJ A2544503	Vibration Joint Cloth	Heterogeneous Black Fibrous Bound	15%	Synthetic Fiber	85%	Binder	None Detected
1235-Foil A2544504	Foil	Homogeneous Silver Non-fibrous Bound			100%	Metal Foil	None Detected



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

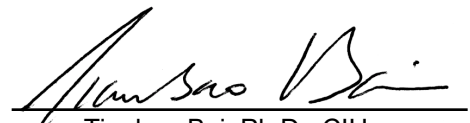
Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST:


Shilpa Ladekar

APPROVED BY:


Tianbao Bai, Ph.D., CIH
Laboratory Director





Turn Around Time:

Send results via: TrevorMarion@Essetek.com, Nlahiri@essetek.com,

Tbarazoto@essetek.com, Tmiller@essetek.com, Jwarren@essetek.com

Essei Technology Services, Inc.

351 California Street, Suite 615

San Francisco, CA 94104

Phone: 415-938-7002

JLHAR

④ A17-16938
A 2544501
A 2544504

Chain of Custody Form
Asbestos/Lead/Mold Bulk Sampling

Project No: 17178	Date: 4/9/17	Client Name: SHRA
Laboratory Submitted To: CEI		
Relinquished By: <i>J. Warren</i>	Date: 11/10/13	Project Name: Twin Rivers Demo
Print Name: <i>J. Warren</i>		
Relinquished to: <i>Via FedEx</i>	Date: 4/10/17	Project Location: 1235 Delta Street
Print Name:		Sacramento, CA

Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
	1235 - CFT	Brown mortar bed and gray grout with beige glue	Bathroom Floor		
	- CWT	Associated with 2'x2' gray ceramic tile			
	- VCS	gray mortarbed with brown glue and white grout associated with 4" x 4" white ceramic wall-tile	Bathroom wall (North)		
	- VCJ	Black Vibration joint chaff	Exterior closet Geothermal Pump		
	- Foil	Silver Foil	Exterior closet Geothermal Pump		
/					

Sampled by: *[Signature]*

Date: 4/10/17

AA

Comments:

11 13 17 8:46



January 9, 2018

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demolition, 1234 Delta Street Sacramento, CA 95811;
17178
CEI LAB CODE: A18-0267

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on January 8, 2018. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT

By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demolition, 1234 Delta Street Sacramento,
CA 95811; 17178

CEI LAB CODE: A18-0267

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 01/09/18

TOTAL SAMPLES ANALYZED: 4

SAMPLES >1% ASBESTOS: 1

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demolition, 1234 Delta Street **CEI LAB CODE:** A18-0267
Sacramento, CA 95811; 17178

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1234-DW/JC-1		A2586255	Gray, Off-white	Drywall/Joint Compound	Chrysotile <1%
1234-DW/JC-2		A2586256	Gray, Off-white	Drywall/Joint Compound	None Detected
1234-FRP-1		A2586257	Tan	Glue	None Detected
1234-FRP-2	Layer 1	A2586258	Tan	Glue	None Detected
	Layer 2	A2586258	White	Mud	Chrysotile 3%



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A18-0267
Date Received: 01-08-18
Date Analyzed: 01-09-18
Date Reported: 01-09-18

Project: Twin Rivers Demolition, 1234 Delta Street Sacramento, CA 95811; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
1234-DW/JC -1 A2586255	Drywall/Joint Compound	Heterogeneous	10%	Cellulose	80%	Gypsum	<1% Chrysotile
		Gray,Off-white			5%	Calc Carb	
		Fibrous			5%	Paint	
		Bound					
Lab Notes: 2% Chrysotile in joint compound and <1% in overall sample.							
1234-DW/JC -2 A2586256	Drywall/Joint Compound	Heterogeneous	10%	Cellulose	80%	Gypsum	None Detected
		Gray,Off-white			5%	Calc Carb	
		Fibrous			5%	Paint	
		Bound					
1234-FRP-1 A2586257	Glue	Heterogeneous			100%	Mastic	None Detected
		Tan					
		Non-fibrous					
		Bound					
1234-FRP-2 Layer 1 A2586258	Glue	Heterogeneous			100%	Mastic	None Detected
		Tan					
		Non-fibrous					
		Bound					
Layer 2 A2586258	Mud	Heterogeneous			85%	Calc Carb	3% Chrysotile
		White			12%	Silicates	
		Fibrous					
		Bound					



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

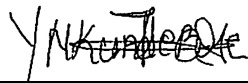
REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

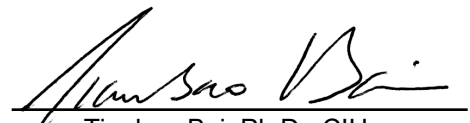
Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST:


Yvette Nkunde-Bose

APPROVED BY:


Tianbao Bai, Ph.D., CIH
Laboratory Director





Turn Around Time:

Send results via: TrevorMarion@Esseltek.com, Nlahiri@esseltek.com,
Tbarazoto@esseltek.com, Tmiller@esseltek.com, Jwarren@esseltek.com

Essel Technology Services, Inc.
 351 California Street, Suite 615
 San Francisco, CA 94104
 Phone: 415-938-7002

④ AS-0267
 A2586255
 A2586258

Chain of Custody Form -24HR PLM Asbestos Bulk Sampling

Project No: 17178		Date Sampled: 01/04/18		Client Name: SHRA (Sacramento Housing and Redevelopment Agency)	
Laboratory Submitted To: CEI					
Relinquished By:		Date: 01/05/18		Project Name: Twin Rivers Demolition	
Print Name: Jaime Warren					
Relinquished to: Via Fedex			Date:	Project Location: 1234 Delta Street Sacramento, CA 95811	
Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
	1234-DW/JC-1	Drywall/Joint compound Composite	Kitchen West Wall (Behind FRP)		
	1234-DW/JC-2		Bathroom East Wall (Behind FRP)		
	1234-FRP-1	Beige Glue Associated with Fiber Reinforced Wall Panels-(FRP)	Kitchen West Wall		
	1234-FRP-2		Bathroom East Wall		

Sampled by:

Date: 1/5/18

Comments: _____

CEI LABS Accept Samples
 1/8/18 9:10



January 10, 2018

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demolition, 1234 Delta Street Sacramento, CA 95811;
17178
CEI LAB CODE: A18-0267.1

Dear Customer:

Enclosed are asbestos analysis results for PLM bulk samples received at our laboratory on January 9, 2018. The samples were analyzed for asbestos using polarized light microscopy (PLM) point count per the EPA 600 Method.

Sample results containing > 1% asbestos are considered asbestos-containing materials (ACMs) per the EPA regulatory requirements. The detection limit for the EPA 600 method is 0.25% for 400 point counts, or 0.1% for 1,000 point counts.

Thank you for your business and we look forward to continuing good relations. If you have any questions, please feel free to call our office at 919-481-1413.

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demolition, 1234 Delta Street Sacramento,
CA 95811; 17178

CEI LAB CODE: A18-0267.1

TEST METHOD: PLM Point Count
EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 01/10/18

TEL: 866-481-1412

www.ceilabs.com



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CEI Lab Code: A18-0267.1
Date Received: 01-09-18
Date Analyzed: 01-10-18
Date Reported: 01-10-18

Project: Twin Rivers Demolition, 1234 Delta Street Sacramento, CA 95811; 17178

ASBESTOS POINT COUNT PLM, EPA 600 METHOD

Client ID	Lab ID	Material Description	POINTS		ASBESTOS	
			Total	Asbestos	%	
1234-DW/JC -1	A2586255	Joint Compound	1000	4	0.40%	Chrysotile
	A2586255	Drywall/Joint Compound (Composite Result from Point Count)			0.02%	Chrysotile

Lab Notes: Joint compound is 5% of the sample.



LEGEND: None

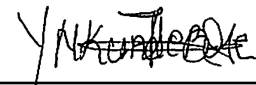
METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: 0.25% by 400 points or 0.1% by 1,000 points

REGULATORY LIMIT: >1% by weight

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. Estimated measurement of uncertainty is available on request. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST: _____


Yvette Nkunde-Bose

APPROVED BY: _____


Tianbao Bai, Ph.D., CIH
Laboratory Director



CEI Labs

From: Jaime Warren <jwarren@essetek.com>
Sent: Tuesday, January 9, 2018 7:59 PM
To: Cassidy Harris; CEI Labs
Cc: nlahiri@essetek.com; trevormarion@essetek.com; tbarazoto@essetek.com; tmiller@essetek.com
Subject: Re: Laboratory Report for Twin Rivers Demolition, 1234 Delta Street Sacramento, CA 95811; 17178 (A18-0267)

Could we get the sample #1234-DW/JC-1 that came back at < 1% 1200 PLM point counted on a 24hr turnaround time? Thank You!

Best Regards,

Jaime Warren
Project Engineer
Essel Environmental
Cell: (415)619-2735

On Tue, Jan 9, 2018 at 9:13 AM, Cassidy Harris <kassidy@ceilabs.com> wrote:

Attached is the laboratory report for your recently submitted samples. Please print out a copy for your records.

We appreciate your business,

CEI Labs, Inc.

(866) 481-1412

1000 PC OK
-KDH

The contents contained in this email are confidential and legally protected. If you happen to receive this email in error, please call our office and delete immediately.



Kassidy Harris - Reception

Y NB

730 SE Maynard Rd.

Cary, NC 27511

Kassidy@ceilabs.com

(919) 481-1413



November 10, 2017

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demolition; 1229 Delta Street Sacramento, CA 95811;
17178
CEI LAB CODE: A17-15915

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on November 9, 2017. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT

By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demolition; 1229 Delta Street Sacramento,
CA 95811; 17178

CEI LAB CODE: A17-15915

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 11/10/17

TOTAL SAMPLES ANALYZED: 11

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demolition; 1229 Delta Street **CEI LAB CODE:** A17-15915
Sacramento, CA 95811; 17178

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1229-FRP-1		A2541236	Yellow	Mastic	None Detected
1229-FRP-2		A2541237	Yellow	Mastic	None Detected
1229-WP-1		A2541238	White	Drywall	None Detected
1229-WP-2		A2541239	White	Drywall	None Detected
1229-Text-1		A2541240	Off-white	Texture	None Detected
1229-Text-2		A2541241	Off-white	Texture	None Detected
1229-Text-3		A2541242	Off-white	Texture	None Detected
1229-INS-1		A2541243	Gray	Fibrous Insulation	None Detected
1229-INS-2		A2541244	Gray	Fibrous Insulation	None Detected
1229-VP-1		A2541245	Black	Vapor Barrier	None Detected
1229-VP-2		A2541246	Black	Vapor Barrier	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A17-15915
Date Received: 11-09-17
Date Analyzed: 11-10-17
Date Reported: 11-10-17

Project: Twin Rivers Demolition; 1229 Delta Street Sacramento, CA 95811; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
1229-FRP-1 A2541236	Mastic	Heterogeneous Yellow Fibrous Bound	2%	Cellulose	98%	Mastic	None Detected
1229-FRP-2 A2541237	Mastic	Heterogeneous Yellow Fibrous Bound	2%	Cellulose	98%	Mastic	None Detected
1229-WP-1 A2541238	Drywall	Heterogeneous White Fibrous Loosely Bound	10%	Cellulose	80% 10%	Gypsum Binder	None Detected
1229-WP-2 A2541239	Drywall	Heterogeneous White Fibrous Loosely Bound	10%	Cellulose	80% 10%	Gypsum Binder	None Detected
1229-Text-1 A2541240	Texture	Heterogeneous Off-white Fibrous Loosely Bound	10%	Cellulose	80% 10%	Gypsum Binder	None Detected
1229-Text-2 A2541241	Texture	Heterogeneous Off-white Fibrous Loosely Bound	10%	Cellulose	80% 10%	Gypsum Binder	None Detected
1229-Text-3 A2541242	Texture	Heterogeneous Off-white Fibrous Loosely Bound	10%	Cellulose	80% 10%	Gypsum Binder	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A17-15915
Date Received: 11-09-17
Date Analyzed: 11-10-17
Date Reported: 11-10-17

Project: Twin Rivers Demolition; 1229 Delta Street Sacramento, CA 95811; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
1229-INS-1 A2541243	Fibrous Insulation	Heterogeneous Gray Fibrous Loose	70%	Cellulose	30%	Binder	None Detected
1229-INS-2 A2541244	Fibrous Insulation	Heterogeneous Gray Fibrous Loose	70%	Cellulose	30%	Binder	None Detected
1229-VP-1 A2541245	Vapor Barrier	Heterogeneous Black Fibrous Bound	60%	Cellulose	40%	Tar	None Detected
1229-VP-2 A2541246	Vapor Barrier	Heterogeneous Black Fibrous Bound	60%	Cellulose	40%	Tar	None Detected



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST: Sarah Talley
Sarah Talley

APPROVED BY: Tianbao Bai
Tianbao Bai, Ph.D., CIH
Laboratory Director





Turn Around Time: 24 hr ^{CD, 1/9}

Send results via: TrevorMarion@Esseltek.com, Nlahiri@esseltek.com,
Tbarazoto@esseltek.com, Tmiller@esseltek.com, Jwarren@esseltek.com

EsseL Technology Services, Inc.
 351 California Street, Suite 615
 San Francisco, CA 94104
 Phone: 415-938-7002

(11) A17-15-915
 A2541236
 A2541246

Chain of Custody Form
 Asbestos bulk Sampling

Project No: 17178		Date Sampled: 11/6/2017		Client Name: SHRA (Sacramento Housing and Redevelopment Agency)	
Laboratory Submitted To: CEI					
Relinquished By: via FedEx		Date: 11/7/2017		Project Name: Twin Rivers Demolition	
Print Name: Jaime Warren					
Relinquished to:		Date: 11/9/17 9:10		Project Location: 1229 Delta Street Sacramento, CA 95811	
Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
	1229-FRP-1 1229-FRP-2	Yellow mastic associated with beige fiber reinforced wall panel (FRP)	Kitchen south wall behind stove Bathroom east wall shower enclosure		Kitchen south wall and bathroom shower enclosure 150 SF
	1229-WP-1 1229-WP-2	White wall drywall/plaster	Kitchen south wall Kitchen south wall		Kitchen south wall- 90 SF
	1229-Text-1 1229-Text-2 1229-Text-3	Off-white hard texture associated with white wall drywall/plaster	Kitchen south wall Kitchen south wall Kitchen south wall		Kitchen south wall- 90 SF
	1229-INS-1 1229-INS-2	Gray fibrous insulation	Kitchen behind west interior wall Bedroom #2 behind east interior wall		Throughout
	1229-VP-1 1229-VP-2	Black vapor barrier	Kitchen behind grey fibrous insulation on west wall Bedroom # behind grey fibrous insulation east wall		Throughout

Sampled by:

Date: 11/7/17

Comments: _____

Re: Twin Rivers Demolition

Nik Lahiri <NLahiri@esseltek.com>

Thu 11/9/2017 9:48 AM

To: Courtney Dabill <courtney@ceilabs.com>;

Cc: tbarazoto@esseltek.com <tbarazoto@esseltek.com>; tmiller@esseltek.com <tmiller@esseltek.com>; trevormarion@esseltek.com <trevormarion@esseltek.com>;

24 hrs pls.

On Thu, Nov 9, 2017, 6:43 AM Courtney Dabill <courtney@ceilabs.com> wrote:

Good Morning,

We received the Twin Rivers Demolition project, #17178, and just needed to know a turnaround time.

If you could get back to me when you get a chance.

Thanks,

Courtney Dabill

Login Laboratory Manager

CEI Labs, Inc.

730 SE Maynard Rd

Cary, NC 27511

(919)481-1413



January 9, 2018

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demolition, 1230 Delta Street Sacramento, CA 95811;
17178
CEI LAB CODE: A18-0270

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on January 8, 2018. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT

By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demolition, 1230 Delta Street Sacramento,
CA 95811; 17178

CEI LAB CODE: A18-0270

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 01/09/18

TOTAL SAMPLES ANALYZED: 4

SAMPLES >1% ASBESTOS: 1

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demolition, 1230 Delta Street **CEI LAB CODE:** A18-0270
Sacramento, CA 95811; 17178

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1230-DW/JC-1		A2586267	Gray,White	Drywall/Joint Compound	Chrysotile <1%
1230-DW/JC-2		A2586268	Gray,White	Drywall/Joint Compound	None Detected
1230-FRP-1	Layer 1	A2586269	Beige	Glue	None Detected
	Layer 2	A2586269	White	Mud	Chrysotile 2%
1230-FRP-2	Layer 1	A2586270	Beige	Glue	None Detected
	Layer 2	A2586270	White	Mud	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A18-0270
Date Received: 01-08-18
Date Analyzed: 01-09-18
Date Reported: 01-09-18

Project: Twin Rivers Demolition, 1230 Delta Street Sacramento, CA 95811; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
1230-DW/JC -1 A2586267	Drywall/Joint Compound	Heterogeneous	10%	Cellulose	50%	Gypsum	<1% Chrysotile
		Gray,White			35%	Calc Carb	
		Fibrous			5%	Binder	
Lab Notes: 2% Chrysotile in joint compound; <1% chrysotile in overall sample							
1230-DW/JC -2 A2586268	Drywall/Joint Compound	Heterogeneous	10%	Cellulose	50%	Gypsum	None Detected
		Gray,White			35%	Calc Carb	
		Fibrous			5%	Binder	
1230-FRP-1 Layer 1 A2586269	Glue	Heterogeneous	2%	Cellulose	98%	Mastic	None Detected
		Beige					
		Fibrous Bound					
Layer 2 A2586269	Mud	Heterogeneous			70%	Calc Carb	2% Chrysotile
		White			28%	Binder	
		Fibrous Bound					
1230-FRP-2 Layer 1 A2586270	Glue	Heterogeneous	2%	Cellulose	98%	Mastic	None Detected
		Beige					
		Fibrous Bound					
Layer 2 A2586270	Mud	Heterogeneous	2%	Cellulose	70%	Calc Carb	None Detected
		White			28%	Binder	
		Fibrous Bound					



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
 Non-Trem = Non-Asbestiform Tremolite
 Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST: *Sarah Talley*
Sarah Talley

APPROVED BY: *Tianbao Bai*
Tianbao Bai, Ph.D., CIH
Laboratory Director





Turn Around Time:

Send results via: TrevorMarion@Esseltek.com, Nlahiri@esseltek.com,

Tbarazoto@esseltek.com, Tmiller@esseltek.com, Jwarren@esseltek.com

Essel Technology Services, Inc.
 351 California Street, Suite 615
 San Francisco, CA 94104
 Phone: 415-938-7002

④ A18-0270
 A2586267
 A2586270

Chain of Custody Form -24HR PLM Asbestos Bulk Sampling

Project No: 17178		Date Sampled: 01/04/18		Client Name: SHRA (Sacramento Housing and Redevelopment Agency)	
Laboratory Submitted To: CEI					
Relinquished By:		Date: 01/05/18		Project Name: Twin Rivers Demolition	
Print Name: Jaime Warren					
Relinquished to: Via Fedex		Date:		Project Location: 1230 Delta Street Sacramento, CA 95811	
Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
	1230-DW/JC-1	Drywall/Joint compound Composite	Kitchen West Wall (Behind FRP)		
	1230-DW/JC-2		Bathroom East Wall (Behind FRP)		
	1230-FRP-1	Beige Glue Associated with Fiber Reinforced Wall Panels-(FRP)	Kitchen West Wall		
	1230-FRP-2		Bathroom East Wall		

Sampled by:

Date: 1/5/18

Comments: _____

CEI LABS Accept Samples
 1/8/18 9:10



January 11, 2018

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demolition, 1230 Delta Street Sacramento, CA 95811;
17178
CEI LAB CODE: A18-0270.1

Dear Customer:

Enclosed are asbestos analysis results for PLM bulk samples received at our laboratory on January 10, 2018. The samples were analyzed for asbestos using polarized light microscopy (PLM) point count per the EPA 600 Method.

Sample results containing > 1% asbestos are considered asbestos-containing materials (ACMs) per the EPA regulatory requirements. The detection limit for the EPA 600 method is 0.25% for 400 point counts, or 0.1% for 1,000 point counts.

Thank you for your business and we look forward to continuing good relations. If you have any questions, please feel free to call our office at 919-481-1413.

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demolition, 1230 Delta Street Sacramento,
CA 95811; 17178

CEI LAB CODE: A18-0270.1

TEST METHOD: PLM Point Count
EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 01/11/18

TEL: 866-481-1412

www.ceilabs.com



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CEI Lab Code: A18-0270.1
Date Received: 01-10-18
Date Analyzed: 01-11-18
Date Reported: 01-11-18

Project: Twin Rivers Demolition, 1230 Delta Street Sacramento, CA 95811; 17178

ASBESTOS POINT COUNT PLM, EPA 600 METHOD

Client ID	Lab ID	Material Description	POINTS		ASBESTOS	
			Total	Asbestos	%	
1230-DW/JC -1	A2586267	Joint Compound	1000	18	1.8%	Chrysotile
	A2586267	Drywall/Joint Compound (Composite Result from Point Count)			0.09%	Chrysotile

Lab Notes: Joint compound is 5% of overall sample: $0.018 * 5 = 0.09\%$



LEGEND: None

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: 0.25% by 400 points or 0.1% by 1,000 points

REGULATORY LIMIT: >1% by weight

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. Estimated measurement of uncertainty is available on request. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST:

Sarah Talley

Sarah Talley

APPROVED BY:

Tianbao Bai

Tianbao Bai, Ph.D., CIH
Laboratory Director



CEI Labs

From: Jaime Warren <jwarren@essetek.com>
Sent: Tuesday, January 9, 2018 7:54 PM
To: CEI Labs
Cc: nlahiri@essetek.com; trevormarion@essetek.com; tbarazoto@essetek.com; tmiller@essetek.com
Subject: Re: Laboratory Report for Twin Rivers Demolition, 1230 Delta Street Sacramento, CA 95811; 17178 (A18-0270)

Could we get the sample #1230-DW/JC-1 that came back at < 1% 1200 PLM point counted on a 24hr turnaround time? Thank You!

Best Regards,

Jaime Warren
Project Engineer
Essel Environmental
Cell: (415)619-2735

On Tue, Jan 9, 2018 at 8:53 AM, CEI Labs <asbestos@ceilabs.com> wrote:

Attached is the laboratory report for your recently submitted samples. Please print out a copy for your records.

We appreciate your business,

CEI Labs, Inc.
(866) 481-1412

The contents contained in this email are confidential and legally protected. If you happen to receive this email in error, please call our office and delete immediately.

1000 PC OK
-KDH

ST



November 13, 2017

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demo, 1222 Delta Street SW Sacramento, CA; 17178
CEI LAB CODE: A17-16939

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on November 13, 2017. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any questions, please feel free to call our office at 919-481-1413.

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demo, 1222 Delta Street SW Sacramento,
CA; 17178

CEI LAB CODE: A17-16939

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 11/13/17

TOTAL SAMPLES ANALYZED: 6

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo, 1222 Delta Street SW **CEI LAB CODE:** A17-16939
Sacramento, CA; 17178

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1222-DW/JCA-1		A2544505	White,Beige	Gypsum Board/Joint Compound	Chrysotile <1%
1222-DW/JCA-2		A2544506	White,Beige	Gypsum Board/Joint Compound	Chrysotile <1%
1222-DW/JCB-1		A2544507	White,Beige	Gypsum Board/Joint Compound	Chrysotile <1%
1222-DW/JCB-2		A2544508	White,Beige	Gypsum Board/Joint Compound	Chrysotile <1%
1222-FRP-1		A2544509	Beige	Glue	None Detected
1222-FRP-2		A2544510	Beige	Glue	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A17-16939
Date Received: 11-13-17
Date Analyzed: 11-13-17
Date Reported: 11-13-17

Project: Twin Rivers Demo, 1222 Delta Street SW Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
1222- DW/JCA-1 A2544505	Gypsum Board/Joint Compound	Heterogeneous	20%	Cellulose	75%	Gypsum	<1% Chrysotile
		White,Beige			5%	Calc Carb	
		Fibrous			<1%	Paint	
		Bound					
Lab Notes: 2% chrysotile in joint compound; <1% chrysotile overall							
1222- DW/JCA-2 A2544506	Gypsum Board/Joint Compound	Heterogeneous	20%	Cellulose	75%	Gypsum	<1% Chrysotile
		White,Beige			5%	Calc Carb	
		Fibrous			<1%	Paint	
		Bound					
Lab Notes: 2% chrysotile in joint compound; <1% chrysotile overall							
1222- DW/JCB-1 A2544507	Gypsum Board/Joint Compound	Heterogeneous	20%	Cellulose	75%	Gypsum	<1% Chrysotile
		White,Beige			5%	Calc Carb	
		Fibrous			<1%	Paint	
		Bound					
Lab Notes: 2% chrysotile in joint compound; <1% chrysotile overall							
1222- DW/JCB-2 A2544508	Gypsum Board/Joint Compound	Heterogeneous	20%	Cellulose	75%	Gypsum	<1% Chrysotile
		White,Beige			5%	Calc Carb	
		Fibrous			<1%	Paint	
		Bound					
Lab Notes: 2% chrysotile in joint compound; <1% chrysotile overall							
1222-FRP-1 A2544509	Glue	Homogeneous			100%	Mastic	None Detected
		Beige					
		Non-fibrous					
		Bound					
1222-FRP-2 A2544510	Glue	Homogeneous			100%	Mastic	None Detected
		Beige					
		Non-fibrous					
		Bound					



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

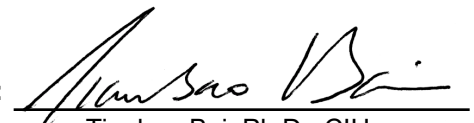
Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST:


Megan Fisher

APPROVED BY:


Tianbao Bai, Ph.D., CIH
Laboratory Director





Turn Around Time:

Send results via: TrevorMarion@Esseltek.com, Nlahiri@esseltek.com,

Tbarazoto@esseltek.com, Tmiller@esseltek.com, Jwarren@esseltek.com

EsseL Technology Services, Inc.

351 California Street, Suite 615

San Francisco, CA 94104

Phone: 415-938-7002

⑥ A17. 16939
A2544505
A2544510

24hr.

Chain of Custody Form
Asbestos/Lead/Mold Bulk Sampling

Project No: 17178	Date: 11/9/17	Client Name: SHRA
Laboratory Submitted To: CEI LABS Inc.		
Relinquished By: Jamie Warren	Date: 11/10/17	Project Name: Twin Rivers Demo
Print Name:		
Relinquished to: CEI LABS Inc FEDEX	Date: 11/10/17	Project Location: 1222 Delta Street
Print Name:	→ 11/13/17 8:40	SAN FRANCISCO SACRAMENTO, CA

Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
	1222-DW/CA-1	Beige gypsum Board with associated joint compound composite	1222 Delta Kitchen ^{North} South Wall		
	↓	↓			
	↓-2		1222 Delta Kitchen N. Wall		
	↓	↓			
	B-1	White Gypsum Board with associated joint compound composite	Hallway Behind Heater		
	↓	↓			
	↓-2		Hallway Behind Heater		
	↓	↓			
	1222-FRP-1	Beige glue associated with Fiber Reinforced Panels	Behind shower enclosure		
	↓	↓			
	↓-2		Kitchen N. wall (upper)		

Sampled by:

[Signature]

Date:

11/10/17

Comments:



January 11, 2018

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demo Survey, 1211 Isabel Street Sacramento, CA;
17178
CEI LAB CODE: A18-0512

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on January 10, 2018. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demo Survey, 1211 Isabel Street
Sacramento, CA; 17178

CEI LAB CODE: A18-0512

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 01/11/18

TOTAL SAMPLES ANALYZED: 2

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo Survey, 1211 Isabel Street Sacramento, CA; 17178

CEI LAB CODE: A18-0512

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1211-CFT	Layer 1	A2590281A	Gray,White	Ceramic Floor Tile	None Detected
	Layer 2	A2590281A	White	Mortar	None Detected
	Layer 1	A2590281B	Beige	Glue	None Detected
	Layer 2	A2590281B	Black	Glue	None Detected
1211-CWT	Layer 1	A2590282A	Off-white	Ceramic Floor Tile	None Detected
	Layer 2	A2590282A	Gray	Mortar	None Detected
		A2590282B	Black	Glue	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A18-0512
Date Received: 01-10-18
Date Analyzed: 01-11-18
Date Reported: 01-11-18

Project: Twin Rivers Demo Survey, 1211 Isabel Street Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
1211-CFT Layer 1 A2590281A	Ceramic Floor Tile	Heterogeneous	85%	Binder	None Detected
		Gray,White Non-fibrous Tightly Bound	15%	Silicates	
Layer 2 A2590281A	Mortar	Heterogeneous	35%	Binder	None Detected
		White Non-fibrous Bound	65%	Silicates	
Layer 1 A2590281B	Glue	Homogeneous Beige Non-fibrous Bound	100%	Mastic	None Detected
Layer 2 A2590281B	Glue	Homogeneous Black Non-fibrous Bound	100%	Mastic	None Detected
1211-CWT Layer 1 A2590282A	Ceramic Floor Tile	Heterogeneous	85%	Binder	None Detected
		Off-white Non-fibrous Bound	15%	Silicates	
Layer 2 A2590282A	Mortar	Heterogeneous	35%	Binder	None Detected
		Gray Non-fibrous Bound	65%	Silicates	
A2590282B	Glue	Homogeneous Black Non-fibrous Bound	100%	Mastic	None Detected

Lab Notes: No beige glue present.



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation


REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

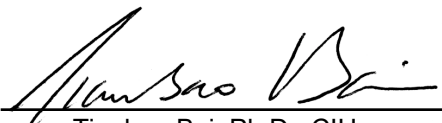
Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST:


Taylor B. Metcalf

APPROVED BY:


Tianbao Bai, Ph.D., CIH
Laboratory Director





Turn Around Time:

Send results via: TrevorMarion@Esseltek.com, Nlahiri@esseltek.com,
Tbarazoto@esseltek.com, Tmiller@esseltek.com, Jwarren@esseltek.com

Essel Technology Services, Inc.
 351 California Street, Suite 615
 San Francisco, CA 94104
 Phone: 415-938-7002

② A18-0512
 A2590281
 A2590282

24hr

Chain of Custody Form
 Asbestos/Lead/Mold Bulk Sampling

Project No: 17179		Date: 11/8/18	Client Name: SHRA		
Laboratory Submitted To: CEI			Project Name: Twin Rivers Demo Survey		
Relinquished By: Jamie Warren		Date:	Project Location: 1211 Isabel Street		
Print Name: <u>Jamie Warren</u>		Date:	SACRAMENTO, CA		
Relinquished to:		Date:			
Print Name:					
Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
	1211 - CFT	2x2' light grey ceramic floor tile with associated white mortar and beige glue	Bathroom floor @ entrance		
	1211 - CWT	4x4" off white ceramic wall tile with associated white mortar and beige glue and gray mortar bed	Bathroom wall 5.		

Sampled by: Jamie Warren

Date: 11/9/18

CEI LABS Accept Samples
 C- 11/10/18 9:20



November 14, 2017

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demo, 1221 Delta Sacramento, CA; 17178
CEI LAB CODE: A17-16941

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on November 13, 2017. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any questions, please feel free to call our office at 919-481-1413.

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demo, 1221 Delta Sacramento, CA; 17178

CEI LAB CODE: A17-16941

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 11/14/17

TOTAL SAMPLES ANALYZED: 4

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo, 1221 Delta
Sacramento, CA; 17178

CEI LAB CODE: A17-16941

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1221-DW-1		A2544515	White	Drywall	None Detected
1221-DW-2		A2544516	White	Drywall	None Detected
1221-FRP-1	Layer 1	A2544516	White,Brown	Fiber Reinforced Panels	None Detected
	Layer 2	A2544516	Yellow	Glue	None Detected
1221-FRP-2	Layer 1	A2544517	White,Brown	Fiber Reinforced Panels	None Detected
	Layer 2	A2544517	Yellow	Glue	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A17-16941
Date Received: 11-13-17
Date Analyzed: 11-14-17
Date Reported: 11-14-17

Project: Twin Rivers Demo, 1221 Delta Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
1221-DW-1 A2544515	Drywall	Heterogeneous	10%	Cellulose	80%	Gypsum	None Detected
		White	5%	Fiberglass	5%	Silicates	
		Fibrous Bound					
1221-DW-2 A2544516	Drywall	Heterogeneous	10%	Cellulose	80%	Gypsum	None Detected
		White	5%	Fiberglass	5%	Silicates	
		Fibrous Bound					
1221-FRP-1 Layer 1 A2544516	Fiber Reinforced Panels	Heterogeneous	60%	Cellulose	40%	Binder	None Detected
		White,Brown					
		Fibrous Tightly Bound					
Layer 2 A2544516	Glue	Homogeneous			100%	Glue	None Detected
		Yellow Non-fibrous Bound					
1221-FRP-2 Layer 1 A2544517	Fiber Reinforced Panels	Heterogeneous	60%	Cellulose	40%	Binder	None Detected
		White,Brown					
		Fibrous Tightly Bound					
Layer 2 A2544517	Glue	Homogeneous			100%	Glue	None Detected
		Yellow Non-fibrous Bound					



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
 Non-Trem = Non-Asbestiform Tremolite
 Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation


REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST: 
Taylor B. Metcalf

APPROVED BY: 
Tianbao Bai, Ph.D., CIH
Laboratory Director





January 9, 2018

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demolition, 1217 Delta Street Sacramento, CA 95811;
17178
CEI LAB CODE: A18-0269

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on January 8, 2018. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demolition, 1217 Delta Street Sacramento,
CA 95811; 17178

CEI LAB CODE: A18-0269

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 01/09/18

TOTAL SAMPLES ANALYZED: 4

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demolition, 1217 Delta Street **CEI LAB CODE:** A18-0269
Sacramento, CA 95811; 17178

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1217-DW/JC-1		A2586263	White	Drywall	None Detected
1217-DW/JC-2		A2586264	White	Drywall/Joint Compound	None Detected
1217-FRP-1		A2586265	Beige	Glue	None Detected
1217-FRP-2		A2586266	Beige	Glue	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A18-0269
Date Received: 01-08-18
Date Analyzed: 01-09-18
Date Reported: 01-09-18

Project: Twin Rivers Demolition, 1217 Delta Street Sacramento, CA 95811; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
1217-DW/JC -1 A2586263	Drywall	Heterogeneous White Fibrous Bound	10%	Cellulose	90%	Gypsum	None Detected
Lab Notes: No joint compound present.							
1217-DW/JC -2 A2586264	Drywall/Joint Compound	Heterogeneous White Fibrous Bound	10%	Cellulose	10%	Calc Carb Gypsum	None Detected
1217-FRP-1 A2586265	Glue	Homogeneous Beige Non-fibrous Bound			100%	Mastic	None Detected
1217-FRP-2 A2586266	Glue	Homogeneous Beige Non-fibrous Bound			100%	Mastic	None Detected



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST: _____


Greg Ruff

APPROVED BY: _____


Tianbao Bai, Ph.D., CIH
Laboratory Director





Turn Around Time:

Send results via: TrevorMarion@Esseltek.com, Nlahiri@esseltek.com,
Tbarazoto@esseltek.com, Tmiller@esseltek.com, Jwarren@esseltek.com

Essel Technology Services, Inc.
 351 California Street, Suite 615
 San Francisco, CA 94104
 Phone: 415-938-7002

④ A18-0269
 A2586263
 A2586266

Chain of Custody Form -24HR PLM Asbestos Bulk Sampling

Project No: 17178		Date Sampled: 01/04/18		Client Name: SHRA (Sacramento Housing and Redevelopment Agency)	
Laboratory Submitted To: CEI					
Relinquished By:		Date: 01/05/18		Project Name: Twin Rivers Demolition	
Print Name: Jaime Warren					
Relinquished to: Via Fedex			Date:	Project Location: 1217 Delta Street Sacramento, CA 95811	
Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
	1217-DW/JC-1	Drywall/Joint compound Composite	Kitchen East Wall (Behind FRP)		
	1217-DW/JC-2		Bathroom West Wall (Behind FRP)		
	1217-FRP-1	Beige Glue Associated with Fiber Reinforced Wall Panels-(FRP)	Kitchen East Wall		
	1217-FRP-2		Bathroom West Wall		

Sampled by: Date: 1/5/18

Comments: _____

CEI LABS Accept Samples
 1/5/18 9:10



January 11, 2018

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demo Survey, 462 Dos Rios Sacramento, CA; 17178
CEI LAB CODE: A18-0516

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on January 10, 2018. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any questions, please feel free to call our office at 919-481-1413.

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demo Survey, 462 Dos Rios Sacramento,
CA; 17178

CEI LAB CODE: A18-0516

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 01/11/18

TOTAL SAMPLES ANALYZED: 6

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo Survey, 462 Dos Rios Sacramento, CA; 17178 **CEI LAB CODE:** A18-0516

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
462-FP-1		A2590295	Gray	Fibrous Panel	None Detected
462-FP-2		A2590296	Gray	Fibrous Panel	None Detected
462-CWT-1	Layer 1	A2590297	White	Ceramic Wall Tile	None Detected
	Layer 2	A2590297	Gray	Grout	None Detected
	Layer 3	A2590297	Yellow	Glue	None Detected
462-CWT-2	Layer 1	A2590298	White	Ceramic Wall Tile	None Detected
	Layer 2	A2590298	Gray	Grout	None Detected
	Layer 3	A2590298	Yellow	Glue	None Detected
462-CWT-3		A2590299	White,Gray	Ceramic Wall Tile Bedding	None Detected
462-CWT-4		A2590300	White,Gray	Ceramic Wall Tile Bedding	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A18-0516
Date Received: 01-10-18
Date Analyzed: 01-11-18
Date Reported: 01-11-18

Project: Twin Rivers Demo Survey, 462 Dos Rios Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %	
			Fibrous	Non-Fibrous			
462-FP-1 A2590295	Fibrous Panel	Heterogeneous Gray Fibrous Loosely Bound	97%	Cellulose	3%	Paint	None Detected
462-FP-2 A2590296	Fibrous Panel	Heterogeneous Gray Fibrous Loosely Bound	97%	Cellulose	3%	Paint	None Detected
462-CWT-1 Layer 1 A2590297	Ceramic Wall Tile	Heterogeneous White Non-fibrous Tightly Bound			100%	Binder	None Detected
Layer 2 A2590297	Grout	Heterogeneous Gray Non-fibrous Bound			100%	Binder	None Detected
Layer 3 A2590297	Glue	Heterogeneous Yellow Non-fibrous Bound			100%	Mastic	None Detected
462-CWT-2 Layer 1 A2590298	Ceramic Wall Tile	Heterogeneous White Non-fibrous Tightly Bound			100%	Binder	None Detected
Layer 2 A2590298	Grout	Heterogeneous Gray Non-fibrous Bound			100%	Binder	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A18-0516
Date Received: 01-10-18
Date Analyzed: 01-11-18
Date Reported: 01-11-18

Project: Twin Rivers Demo Survey, 462 Dos Rios Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
Layer 3 A2590298	Glue	Heterogeneous Yellow Non-fibrous Bound	100%	Mastic	None Detected
462-CWT-3 A2590299	Ceramic Wall Tile Bedding	Heterogeneous White, Gray Non-fibrous Bound	80% 15% 5%	Silicates Binder Paint	None Detected
462-CWT-4 A2590300	Ceramic Wall Tile Bedding	Heterogeneous White, Gray Non-fibrous Bound	80% 15% 5%	Silicates Binder Paint	None Detected



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST:

Saithya Paikal

APPROVED BY:

Tianbao Bai, Ph.D., CIH
Laboratory Director





Turn Around Time: 24hr

Send results via: TrevorMarion@Esseltek.com, Nlahiri@esseltek.com,
Tbarazoto@esseltek.com, Tmiller@esseltek.com, Jwarren@esseltek.com

Essel Technology Services, Inc.
 351 California Street, Suite 615
 San Francisco, CA 94104
 Phone: 415-938-7002

⑥ A8-0516
 A2590295
 A2590300

Chain of Custody Form
Asbestos/Lead/Mold Bulk Sampling

Project No: 17178	Date: 1/6/18	Client Name: SITRA
Laboratory Submitted To: CEI		
Relinquished By: <i>Jarvis</i>	Date: 1/6/18	Project Name: Twin Rivers Demo survey
Print Name: Trevor Marion		
Relinquished to:	Date:	Project Location: 462 Dos Rios
Print Name:		Sacramento, CA

Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
	462-FP-1	Grey fibrous Parcel	Eave at front door		
	↓ -2	↓	↓		
	462-CWT-1	4x4 Ceramic wall tile grout and glue	Bathroom-shower wall		
	↓ -2	↓	↓		
	-3	4x4 Ceramic wall tile bedding	Bathroom-shower wall		
	↓ -4	↓	↓		

Sampled by: Trevor Marion

Date: 1/6/18

Comments: _____

CEI LABS Accept Samples
 CS 1/6/18 9:20



July 28, 2017

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demo Survey; 442 Dos Rios Blvd Sacramento, CA;
17178
CEI LAB CODE: A17-10575

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on July 26, 2017. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demo Survey; 442 Dos Rios Blvd
Sacramento, CA; 17178

CEI LAB CODE: A17-10575

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 07/28/17

TOTAL SAMPLES ANALYZED: 10

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo Survey; 442 Dos Rios Blvd Sacramento, CA; 17178 **CEI LAB CODE:** A17-10575

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
442-SF-1	Layer 1	A2457633	Tan	Sheet Flooring	None Detected
	Layer 2	A2457633	Black, Yellow	Mastic	None Detected
442-SF-2	Layer 1	A2457634	Tan	Sheet Flooring	None Detected
	Layer 2	A2457634	Black, Yellow	Mastic	None Detected
442-SF-3	Layer 1	A2457635	Tan	Sheet Flooring	None Detected
	Layer 2	A2457635	Black, Yellow	Mastic	None Detected
442-VB-1		A2457636	Black	Vapor Barrier	None Detected
442-VB-2		A2457637	Black	Vapor Barrier	None Detected
442-Tile-1	Layer 1	A2457638	Gray, White	Ceramic Tile	None Detected
	Layer 2	A2457638	Gray	Grout	None Detected
442-Tile-2	Layer 1	A2457639	Gray, White	Ceramic Tile	None Detected
	Layer 2	A2457639	Gray	Grout	None Detected
442-Erc-1		A2457640	Gray	Panel	None Detected
442-Erc-2		A2457641	Gray	Panel	None Detected
442-Erc-3		A2457642	Gray	Panel	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A17-10575
Date Received: 07-26-17
Date Analyzed: 07-27-17
Date Reported: 07-28-17

Project: Twin Rivers Demo Survey; 442 Dos Rios Blvd Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
442-SF-1 Layer 1 A2457633	Sheet Flooring	Heterogeneous Tan Fibrous Bound	25%	Cellulose	10%	Binder	None Detected
			15%	Synthetic Fiber	50%	Vinyl	
Layer 2 A2457633	Mastic	Heterogeneous Black, Yellow Non-fibrous Bound			65%	Mastic	None Detected
					35%	Tar	
442-SF-2 Layer 1 A2457634	Sheet Flooring	Heterogeneous Tan Fibrous Bound	25%	Cellulose	10%	Binder	None Detected
			15%	Synthetic Fiber	50%	Vinyl	
Layer 2 A2457634	Mastic	Heterogeneous Black, Yellow Non-fibrous Bound			65%	Mastic	None Detected
					35%	Tar	
442-SF-3 Layer 1 A2457635	Sheet Flooring	Heterogeneous Tan Fibrous Bound	25%	Cellulose	10%	Binder	None Detected
			15%	Synthetic Fiber	50%	Vinyl	
Layer 2 A2457635	Mastic	Heterogeneous Black, Yellow Non-fibrous Bound			65%	Mastic	None Detected
					35%	Tar	
442-VB-1 A2457636	Vapor Barrier	Heterogeneous Black Fibrous Bound	65%	Cellulose	35%	Tar	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A17-10575
Date Received: 07-26-17
Date Analyzed: 07-27-17
Date Reported: 07-28-17

Project: Twin Rivers Demo Survey; 442 Dos Rios Blvd Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
442-VB-2 A2457637	Vapor Barrier	Heterogeneous Black Fibrous Bound	65%	Cellulose	35%	Tar	None Detected
442-Tile-1 Layer 1 A2457638	Ceramic Tile	Heterogeneous Gray,White Non-fibrous Bound	65%		35%	Binder Silicates	None Detected
Layer 2 A2457638	Grout	Heterogeneous Gray Non-fibrous Bound	65%		35%	Binder Silicates	None Detected
442-Tile-2 Layer 1 A2457639	Ceramic Tile	Heterogeneous Gray,White Non-fibrous Bound	65%		35%	Binder Silicates	None Detected
Layer 2 A2457639	Grout	Heterogeneous Gray Non-fibrous Bound	65%		35%	Binder Silicates	None Detected
442-Erc-1 A2457640	Panel	Heterogeneous Gray Fibrous Bound	25%	Cellulose	25%	Binder Calc Carb Silicates	None Detected
442-Erc-2 A2457641	Panel	Heterogeneous Gray Fibrous Bound	25%	Cellulose	25%	Binder Calc Carb Silicates	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CEI Lab Code: A17-10575
Date Received: 07-26-17
Date Analyzed: 07-27-17
Date Reported: 07-28-17

Project: Twin Rivers Demo Survey; 442 Dos Rios Blvd Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
442-Erc-3 A2457642	Panel	Heterogeneous	25%	Cellulose	25%	Binder	None Detected
		Gray			35%	Calc Carb	
		Fibrous			15%	Silicates	
		Bound					



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
 Non-Trem = Non-Asbestiform Tremolite
 Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST: _____


Megan Rumble

APPROVED BY: _____


Tianbao Bai, Ph.D., CIH
Laboratory Director





Turn Around Time: 72hr

Send results via: TrevorMarion@Esseltek.com, Nlahiri@esseltek.com,

tBarazoto@esseltek.com, Tmiller@esseltek.com

Essel Technology Services, Inc.

351 California Street, Suite 615

San Francisco, CA 94104

Phone: 415-938-7002

⑩ A17-10-575
A2457633-
A17457642

Chain of Custody Form
Asbestos/Lead/Mold Bulk Sampling

Project No: 17178	Date: 7/23/17	Client Name: SHRA
Laboratory Submitted To: CEF Labs		
Relinquished By: <i>Trevor Marion</i>	Date: 7/23/17 7/25/17	Project Name: Twin Rivers Demo Survey
Print Name: Trevor Marion		
Relinquished to: A	Date: 7/26/17 9:00	Project Location: 442 Dos Rios Blvd Sacramento, CA
Print Name:		

Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
	442-SF-1	Brown terrazo pat SF w/ grey backing + black mastic	Bathroom - floor		
	↓ -2	↓	↓		
	↓ -3	↓	↓		
	442-VB-1	Black Vapor barrier	Interior - on ^{ext} wall - kitchen		
	↓ -2	↓	↓ - bedroom		
	442-Tile-1	white 4x4 w/ grey spots Ceramic tile + grey grout	Bathroom - Shower wall		
	↓ -2	↓	↓		
	442-Evc-1	Grey fibrous panel	Exterior - Evc - NE		
	↓ -2	↓	↓ - N		
	↓ -3	↓	↓ - NW		

Sampled by: Trevor Marion

Date: 7/23/17

Comments:

Sampled on 7/20/17



November 13, 2017

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demo Survey; 340 Dos Rios Sacramento, CA; 17178
CEI LAB CODE: A17-15998

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on November 10, 2017. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any questions, please feel free to call our office at 919-481-1413.

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demo Survey; 340 Dos Rios Sacramento,
CA; 17178

CEI LAB CODE: A17-15998

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 11/13/17

TOTAL SAMPLES ANALYZED: 4

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo Survey; 340 Dos Rios Sacramento, CA; 17178 **CEI LAB CODE:** A17-15998

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
340-Eave-1		A2542384	Gray	Ceiling Panel	None Detected
340-Eave-2		A2542385	Gray	Ceiling Panel	None Detected
340-CT-1	Layer 1	A2542386	White	Ceramic Wall Tile	None Detected
	Layer 2	A2542386	Gray	Bedding	None Detected
340-CT-2	Layer 1	A2542387	White	Ceramic Wall Tile	None Detected
	Layer 2	A2542387	Gray	Bedding	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A17-15998
Date Received: 11-10-17
Date Analyzed: 11-13-17
Date Reported: 11-13-17

Project: Twin Rivers Demo Survey; 340 Dos Rios Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %	
			Fibrous	Non-Fibrous			
340-Eave-1 A2542384	Ceiling Panel	Heterogeneous Gray Fibrous Bound	80%	Cellulose	20%	Binder	None Detected
340-Eave-2 A2542385	Ceiling Panel	Heterogeneous Gray Fibrous Bound	80%	Cellulose	15% 5%	Binder Paint	None Detected
340-CT-1 Layer 1 A2542386	Ceramic Wall Tile	Heterogeneous White Non-fibrous Tightly Bound			20% 80%	Vinyl Silicates	None Detected
Layer 2 A2542386	Bedding	Heterogeneous Gray Non-fibrous Tightly Bound			90% 10%	Silicates Binder	None Detected
340-CT-2 Layer 1 A2542387	Ceramic Wall Tile	Heterogeneous White Non-fibrous Tightly Bound			20% 80%	Vinyl Silicates	None Detected
Layer 2 A2542387	Bedding	Heterogeneous Gray Non-fibrous Tightly Bound			90% 10%	Silicates Binder	None Detected



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST: Adriana de la Nuez
Adriana de la Nuez

APPROVED BY: Tianbao Bai
Tianbao Bai, Ph.D., CIH
Laboratory Director





Turn Around Time: 24 hr

Send results via: TrevorMarion@Esseltek.com, Nlahiri@esseltek.com,
Tbarazoto@esseltek.com, Tmiller@esseltek.com, Jwarren@esseltek.com

Essel Technology Services, Inc.
 351 California Street, Suite 615
 San Francisco, CA 94104
 Phone: 415-938-7002

(4) A17-15 998
 A2542384
 A2542387

Chain of Custody Form
 Asbestos/Lead/Mold Bulk Sampling

Project No: 17178	Date: 11/9/17	Client Name: STRA
Laboratory Submitted To: CEI		
Relinquished By: Jen M Trevor Marion	Date: 11/9/17	Project Name: Twin Rivers Demo Survey
Relinquished to:	Date: 11/16/17 8:56	Project Location: 340 Dos Rios Sacramento, CA
Print Name:		

Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
	340-Eave-1	Grey fibrous ceiling Panel	340- Above front door		
	340-Eave - 2	↓	340- Above front door		
	340-CT-1	offwhite 4x4 ceramic wall tile w/ bedding	Bathroom - shower wall		
	340-CT-2	↓	Bathroom- shower wall		

Sampled by: Trevor Marion

Date: 11/9/17

Comments: _____

March 30, 2018

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demo Survey, 320 Dos Rios St. Sacramento, CA;
17178
CEI LAB CODE: B18-1453.1

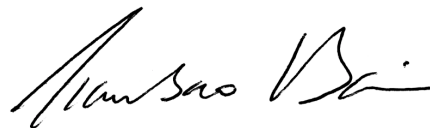
Dear Customer:

Enclosed are asbestos analysis results for PLM bulk samples received at our laboratory on March 29, 2018. The samples were analyzed for asbestos using polarized light microscopy (PLM) point count per the EPA 600 Method.

Sample results containing > 1% asbestos are considered asbestos-containing materials (ACMs) per the EPA regulatory requirements. The detection limit for the EPA 600 method is 0.25% for 400 point counts, or 0.1% for 1,000 point counts.

Thank you for your business and we look forward to continuing good relations. If you have any questions, please feel free to call our office at 919-481-1413.

Kind Regards,



Tianbao Bai, Ph.D., CIH
Laboratory Director

ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demo Survey, 320 Dos Rios St.
Sacramento, CA; 17178

LAB CODE: B18-1453.1

TEST METHOD: PLM Point Count
EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 03/30/18

TEL: 866-481-1412

www.ceilabs.com



CEI

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

Lab Code: B18-1453.1
Date Received: 03-29-18
Date Analyzed: 03-29-18
Date Reported: 03-30-18

Project: Twin Rivers Demo Survey, 320 Dos Rios St. Sacramento, CA; 17178

ASBESTOS POINT COUNT PLM, EPA 600 METHOD

Client ID	Lab ID	Material Description	POINTS		ASBESTOS	
			Total	Asbestos	%	
DW/JC-1	B275744	Joint Compound	1000	15	1.5%	Chrysotile
	B275744	Drywall/Joint Compound (Composite Result from Point Count)			0.08%	Chrysotile
Lab Notes: Joint compound is 5% of the overall sample.						
DW/JC-2	B275745	Joint Compound	1000	15	1.5%	Chrysotile
	B275745	Drywall/Joint Compound (Composite Result from Point Count)			0.08%	Chrysotile
Lab Notes: Joint compound is 5% of the overall sample.						
S-1	B275761	Stucco Skim	1000	2	0.20%	Chrysotile
S-2	B275762	Stucco Skim	1000	6	0.60%	Chrysotile
S-3	B275763	Stucco Skim	1000	4	0.40%	Chrysotile
S-4	B275764	Stucco Skim	1000	7	0.70%	Chrysotile
S-5	B275765	Stucco Skim	1000	7	0.70%	Chrysotile

LEGEND: None


METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: 0.25% by 400 points or 0.1% by 1,000 points

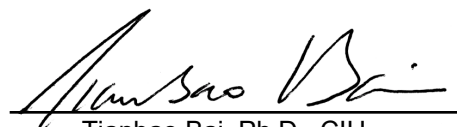
REGULATORY LIMIT: >1% by weight

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by Eurofins CEI. Eurofins CEI makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. Estimated measurement of uncertainty is available on request. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST:


Gary A. Swanson

APPROVED BY:


Tianbao Bai, Ph.D., CIH
Laboratory Director

CEI Labs

From: Tyler Barazoto <tbarazoto@esseltek.com>
Sent: Wednesday, March 28, 2018 5:35 PM
To: CEI Labs
Cc: nlahiri@esseltek.com; trevormarion@esseltek.com; tmiller@esseltek.com;
jwarren@esseltek.com
Subject: Re: Laboratory Report for Twin Rivers Demo Survey, 320 Dos Rios St. Sacramento, CA;
17178 (B18-1453)

Could we please get a 1000 PLM point count on the samples that are < 1%? On a 24 TAT please.

Thank you,
Tyler Barazoto

On Wed, Mar 28, 2018 at 2:00 PM, CEI Labs <asbestos@ceilabs.com> wrote:

Attached is the laboratory report for your recently submitted samples. Please print out a copy for your records.

We appreciate your business,

CEI Labs, Inc.
[\(866\) 481-1412](tel:(866)481-1412)

The contents contained in this email are confidential and legally protected. If you happen to receive this email in error, please call our office and delete immediately.

--

Tyler Barazoto
Operations & Project Manager
Essel Environmental Consulting
Environmental Health & Safety Engineering
San Francisco, CA
(415) 374-9090 Phone
www.EsselTek.com
TBarazoto@EsselTek.com

March 30, 2018

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demo Survey, 300-302 Dos Rios St. Sacramento, CA;
17178
CEI LAB CODE: B18-1502

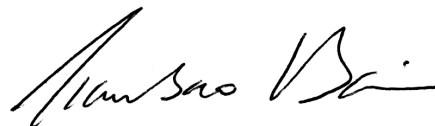
Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on March 29, 2018. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any

Kind Regards,



Tianbao Bai, Ph.D., CIH
Laboratory Director



CEI

ASBESTOS ANALYTICAL REPORT

By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demo Survey, 300-302 Dos Rios St.
Sacramento, CA; 17178

LAB CODE: B18-1502

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 03/30/18

TOTAL SAMPLES ANALYZED: 40

SAMPLES >1% ASBESTOS: 1

TEL: 866-481-1412

www.ceilabs.com

PROJECT: Twin Rivers Demo Survey, 300-302 Dos Rios St. Sacramento, CA; 17178 **LAB CODE:** B18-1502

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
WP-A-1	Layer 1	B276324	White	Plaster Skim Coat	None Detected
	Layer 2	B276324	Gray	Plaster Base Coat	None Detected
WP-A-2	Layer 1	B276325	White	Plaster Skim Coat	None Detected
	Layer 2	B276325	Gray	Plaster Base Coat	None Detected
WP-A-3	Layer 1	B276326	White	Plaster Skim Coat	None Detected
	Layer 2	B276326	Gray	Plaster Base Coat	None Detected
WP-A-4	Layer 1	B276327	White	Plaster Skim Coat	None Detected
	Layer 2	B276327	Gray	Plaster Base Coat	None Detected
WP-A-5	Layer 1	B276328	Off-white	Texture	Chrysotile 5%
	Layer 2	B276328	White	Plaster Skim Coat	None Detected
	Layer 3	B276328	Gray	Plaster Base Coat	None Detected
WP-B-1	Layer 1	B276329	White	Plaster Skim Coat	None Detected
	Layer 2	B276329	Gray	Plaster Base Coat	None Detected
WP-B-2	Layer 1	B276330	White	Plaster Skim Coat	None Detected
	Layer 2	B276330	Gray	Plaster Base Coat	None Detected
WP-B-3	Layer 1	B276331	White	Plaster Skim Coat	None Detected
	Layer 2	B276331	Gray	Plaster Base Coat	None Detected
WP-B-4	Layer 1	B276332	White	Plaster Skim Coat	None Detected
	Layer 2	B276332	Gray	Plaster Base Coat	None Detected
WP-B-5	Layer 1	B276333A	White	Plaster Skim Coat	None Detected
	Layer 2	B276333A	Gray	Plaster Base Coat	None Detected
		B276333B	White, Tan	Drywall	None Detected
DW/JC-1		B276334	White, Tan	Drywall/Joint Compound	Chrysotile <1%
DW/JC-2		B276335	White, Tan	Drywall/Joint Compound	None Detected
FT-A-1		B276336A	Beige	Floor Tile	None Detected
		B276336B	Black, Yellow	Mastic	None Detected
FT-A-2		B276337A	Beige	Floor Tile	None Detected
		B276337B	Black, Yellow	Mastic	None Detected
FT-A-3		B276338A	Beige	Floor Tile	None Detected
		B276338B	Black, Yellow	Mastic	None Detected
FT-B-1		B276339A	Tan	Floor Tile	None Detected



CEI

Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo Survey, 300-302 Dos Rios St. Sacramento, CA; 17178 **LAB CODE:** B18-1502

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
		B276339B	Black, Yellow	Mastic	None Detected
FT-B-2		B276340A	Tan	Floor Tile	None Detected
		B276340B	Black, Yellow	Mastic	None Detected
FT-B-3		B276341A	Beige	Floor Tile	None Detected
		B276341B	Black, Yellow	Mastic	None Detected
SF-1	Layer 1	B276342	Tan	Sheet Flooring	None Detected
	Layer 2	B276342	Black, Tan	Mastic	None Detected
SF-2	Layer 1	B276343	Tan	Sheet Flooring	None Detected
	Layer 2	B276343	Black, Tan	Mastic	None Detected
SF-3	Layer 1	B276344	Tan	Sheet Flooring	None Detected
	Layer 2	B276344	Black, Tan	Mastic	None Detected
BC-1		B276345A	Black	Covebase	None Detected
		B276345B	Tan	Glue	None Detected
BC-2		B276346A	Black	Covebase	None Detected
		B276346B	Tan	Glue	None Detected
BC-3		B276347A	Black	Covebase	None Detected
		B276347B	Tan	Glue	None Detected
MB-1		B276348	Black	Moisture Barrier	None Detected
MB-2		B276349	Black	Moisture Barrier	None Detected
INS-A-1		B276350	Brown	Insulation	None Detected
INS-A-2		B276351	Brown	Insulation	None Detected
INS-B-1		B276352	Gray	Insulation	None Detected
INS-B-2		B276353	Gray	Insulation	None Detected
CT-1	Layer 1	B276354A	White	Ceramic Tile	None Detected
	Layer 2	B276354A	Gray	Bedding	None Detected
	Layer 3	B276354A	White	Grout	None Detected
		B276354B	Yellow	Caulking	None Detected
CT-2	Layer 1	B276355	White	Ceramic Tile	None Detected
	Layer 2	B276355	Gray	Bedding	None Detected
	Layer 3	B276355	White	Grout	None Detected
ROOF-1	Layer 1	B276356A	Black, Gray	Roofing	None Detected



CEI

Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo Survey, 300-302 Dos Rios St. Sacramento, CA; 17178 **LAB CODE:** B18-1502

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
	Layer 2	B276356A	Black,Brown	Roofing	None Detected
		B276356B	Brown	Felt Paper	None Detected
ROOF-2	Layer 1	B276357A	Black,Gray	Roofing	None Detected
	Layer 2	B276357A	Black,Brown	Roofing	None Detected
		B276357B	Brown	Felt Paper	None Detected
ROOF-3	Layer 1	B276358A	Black,Gray	Roofing	None Detected
	Layer 2	B276358A	Black,Brown	Roofing	None Detected
		B276358B	Brown	Felt Paper	None Detected
S-1	Layer 1	B276359	Pink	Stucco	Chrysotile <1%
	Layer 2	B276359	Gray	Stucco	None Detected
S-2	Layer 1	B276360	Pink	Stucco	Chrysotile <1%
	Layer 2	B276360	Gray	Stucco	None Detected
S-3	Layer 1	B276361	Pink	Stucco	Chrysotile <1%
	Layer 2	B276361	Gray	Stucco	None Detected
S-4	Layer 1	B276362	Pink	Stucco	Chrysotile <1%
	Layer 2	B276362	Gray	Stucco	None Detected
S-5	Layer 1	B276363	Pink	Stucco	Chrysotile <1%
	Layer 2	B276363	Gray	Stucco	None Detected

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

Lab Code: B18-1502
Date Received: 03-29-18
Date Analyzed: 03-30-18
Date Reported: 03-30-18

Project: Twin Rivers Demo Survey, 300-302 Dos Rios St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
WP-A-1 Layer 1 B276324	Plaster Skim Coat	Homogeneous	40%	Binder	None Detected
		White	60%	Silicates	
Layer 2 B276324	Plaster Base Coat	Non-fibrous	<1%	Paint	None Detected
		Bound			
WP-A-2 Layer 1 B276325	Plaster Skim Coat	Homogeneous	40%	Binder	None Detected
		White	60%	Silicates	
Layer 2 B276325	Plaster Base Coat	Non-fibrous	<1%	Paint	None Detected
		Bound			
WP-A-3 Layer 1 B276326	Plaster Skim Coat	Homogeneous	40%	Binder	None Detected
		White	60%	Silicates	
Layer 2 B276326	Plaster Base Coat	Non-fibrous	<1%	Paint	None Detected
		Bound			
WP-A-4 Layer 1 B276327	Plaster Skim Coat	Homogeneous	40%	Binder	None Detected
		White	60%	Silicates	
Layer 2 B276327	Plaster Base Coat	Non-fibrous	<1%	Paint	None Detected
		Bound			

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

Lab Code: B18-1502
Date Received: 03-29-18
Date Analyzed: 03-30-18
Date Reported: 03-30-18

Project: Twin Rivers Demo Survey, 300-302 Dos Rios St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
Layer 2 B276327	Plaster Base Coat	Homogeneous Gray Non-fibrous Bound	40%	Binder 60% Silicates	None Detected
WP-A-5 Layer 1 B276328	Texture	Homogeneous Off-white Non-fibrous Bound	55%	Binder 35% Calc Carb 5% Paint	5% Chrysotile
Layer 2 B276328	Plaster Skim Coat	Homogeneous White Non-fibrous Bound	40%	Binder 60% Silicates <1% Paint	None Detected
Layer 3 B276328	Plaster Base Coat	Homogeneous Gray Non-fibrous Bound	40%	Binder 60% Silicates	None Detected
WP-B-1 Layer 1 B276329	Plaster Skim Coat	Homogeneous White Non-fibrous Bound	40%	Binder 60% Silicates <1% Paint	None Detected
Layer 2 B276329	Plaster Base Coat	Homogeneous Gray Non-fibrous Bound	40%	Binder 60% Silicates	None Detected
WP-B-2 Layer 1 B276330	Plaster Skim Coat	Homogeneous White Non-fibrous Bound	40%	Binder 60% Silicates <1% Paint	None Detected

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

Lab Code: B18-1502
Date Received: 03-29-18
Date Analyzed: 03-30-18
Date Reported: 03-30-18

Project: Twin Rivers Demo Survey, 300-302 Dos Rios St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
Layer 2 B276330	Plaster Base Coat	Homogeneous Gray Non-fibrous Bound	40%	Binder 60% Silicates	None Detected
WP-B-3 Layer 1 B276331	Plaster Skim Coat	Homogeneous White Non-fibrous Bound	40%	Binder 60% Silicates <1% Paint	None Detected
Layer 2 B276331	Plaster Base Coat	Homogeneous Gray Non-fibrous Bound	40%	Binder 60% Silicates	None Detected
WP-B-4 Layer 1 B276332	Plaster Skim Coat	Homogeneous White Non-fibrous Bound	40%	Binder 60% Silicates <1% Paint	None Detected
Layer 2 B276332	Plaster Base Coat	Homogeneous Gray Non-fibrous Bound	40%	Binder 60% Silicates	None Detected
WP-B-5 Layer 1 B276333A	Plaster Skim Coat	Homogeneous White Non-fibrous Bound	40%	Binder 60% Silicates <1% Paint	None Detected
Layer 2 B276333A	Plaster Base Coat	Homogeneous Gray Non-fibrous Bound	40%	Binder 60% Silicates	None Detected

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

Lab Code: B18-1502
Date Received: 03-29-18
Date Analyzed: 03-30-18
Date Reported: 03-30-18

Project: Twin Rivers Demo Survey, 300-302 Dos Rios St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
B276333B	Drywall	Heterogeneous White, Tan Fibrous Bound	20%	Cellulose	80%	Gypsum	None Detected
DW/JC-1 B276334	Drywall/Joint Compound	Heterogeneous White, Tan Fibrous Bound	20%	Cellulose	75%	Gypsum	<1% Chrysotile
					5%	Calc Carb	
Lab Notes: 2% chrysotile in joint compound; <1% chrysotile overall							
DW/JC-2 B276335	Drywall/Joint Compound	Heterogeneous White, Tan Fibrous Bound	20%	Cellulose	75%	Gypsum	None Detected
					5%	Calc Carb	
FT-A-1 B276336A	Floor Tile	Homogeneous Beige Non-fibrous Bound			100%	Vinyl	None Detected
B276336B	Mastic	Homogeneous Black, Yellow Non-fibrous Bound			50%	Mastic	None Detected
					50%	Tar	
FT-A-2 B276337A	Floor Tile	Homogeneous Beige Non-fibrous Bound			100%	Vinyl	None Detected
B276337B	Mastic	Homogeneous Black, Yellow Non-fibrous Bound			50%	Mastic	None Detected
					50%	Tar	

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

Lab Code: B18-1502
Date Received: 03-29-18
Date Analyzed: 03-30-18
Date Reported: 03-30-18

Project: Twin Rivers Demo Survey, 300-302 Dos Rios St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
FT-A-3 B276338A	Floor Tile	Homogeneous Beige Non-fibrous Bound	100%	Vinyl	None Detected
	B276338B	Mastic	Homogeneous Black, Yellow Non-fibrous Bound	50% 50%	Mastic Tar
FT-B-1 B276339A	Floor Tile	Homogeneous Tan Non-fibrous Bound	100%	Vinyl	None Detected
	B276339B	Mastic	Homogeneous Black, Yellow Non-fibrous Bound	50% 50%	Mastic Tar
FT-B-2 B276340A	Floor Tile	Homogeneous Tan Non-fibrous Bound	100%	Vinyl	None Detected
	B276340B	Mastic	Homogeneous Black, Yellow Non-fibrous Bound	50% 50%	Mastic Tar
FT-B-3 B276341A	Floor Tile	Homogeneous Beige Non-fibrous Bound	100%	Vinyl	None Detected

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

Lab Code: B18-1502
Date Received: 03-29-18
Date Analyzed: 03-30-18
Date Reported: 03-30-18

Project: Twin Rivers Demo Survey, 300-302 Dos Rios St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
B276341B	Mastic	Homogeneous Black, Yellow Non-fibrous Bound	50%	Mastic	50%	Tar	None Detected
SF-1 Layer 1 B276342	Sheet Flooring	Homogeneous Tan Fibrous Bound	20% 10%	Synthetic Fiber Fiberglass	50% 20%	Vinyl Binder	None Detected
Layer 2 B276342	Mastic	Homogeneous Black, Tan Non-fibrous Bound	30% 70%	Mastic Tar			None Detected
SF-2 Layer 1 B276343	Sheet Flooring	Homogeneous Tan Fibrous Bound	20% 10%	Synthetic Fiber Fiberglass	50% 20%	Vinyl Binder	None Detected
Layer 2 B276343	Mastic	Homogeneous Black, Tan Non-fibrous Bound	30% 70%	Mastic Tar			None Detected
SF-3 Layer 1 B276344	Sheet Flooring	Homogeneous Tan Fibrous Bound	20% 10%	Synthetic Fiber Fiberglass	50% 20%	Vinyl Binder	None Detected
Layer 2 B276344	Mastic	Homogeneous Black, Tan Non-fibrous Bound	30% 70%	Mastic Tar			None Detected

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

Lab Code: B18-1502
Date Received: 03-29-18
Date Analyzed: 03-30-18
Date Reported: 03-30-18

Project: Twin Rivers Demo Survey, 300-302 Dos Rios St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %		
			Fibrous	Non-Fibrous			
BC-1 B276345A	Covebase	Homogeneous	100%	Vinyl	None Detected		
		Black Non-fibrous Bound					
B276345B	Glue	Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected		
BC-2 B276346A	Covebase	Homogeneous	100%	Vinyl	None Detected		
		Black Non-fibrous Bound					
B276346B	Glue	Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected		
BC-3 B276347A	Covebase	Homogeneous	100%	Vinyl	None Detected		
		Black Non-fibrous Bound					
B276347B	Glue	Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected		
MB-1 B276348	Moisture Barrier	Homogeneous Black Fibrous Bound	70%	Cellulose	30%	Tar	None Detected

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

Lab Code: B18-1502
Date Received: 03-29-18
Date Analyzed: 03-30-18
Date Reported: 03-30-18

Project: Twin Rivers Demo Survey, 300-302 Dos Rios St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %
			Fibrous	Non-Fibrous		
MB-2 B276349	Moisture Barrier	Homogeneous Black Fibrous Bound	70%	Cellulose	30% Tar	None Detected
INS-A-1 B276350	Insulation	Homogeneous Brown Fibrous Loosely Bound	100%	Cellulose		None Detected
INS-A-2 B276351	Insulation	Homogeneous Brown Fibrous Loosely Bound	100%	Cellulose		None Detected
INS-B-1 B276352	Insulation	Homogeneous Gray Fibrous Loosely Bound	100%	Cellulose		None Detected
INS-B-2 B276353	Insulation	Homogeneous Gray Fibrous Loosely Bound	100%	Cellulose		None Detected
CT-1 Layer 1 B276354A	Ceramic Tile	Homogeneous White Non-fibrous Tightly Bound			30% Binder 70% Silicates	None Detected
Layer 2 B276354A	Bedding	Homogeneous Gray Non-fibrous Bound			40% Binder 60% Silicates	None Detected

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

Lab Code: B18-1502
Date Received: 03-29-18
Date Analyzed: 03-30-18
Date Reported: 03-30-18

Project: Twin Rivers Demo Survey, 300-302 Dos Rios St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
Layer 3 B276354A	Grout	Homogeneous	40%	Binder	None Detected
		White Non-fibrous Bound	60%	Silicates	
B276354B	Caulking	Homogeneous Yellow Non-fibrous Bound	100%	Mastic	None Detected
CT-2 Layer 1 B276355	Ceramic Tile	Homogeneous White Non-fibrous Tightly Bound	30% 70%	Binder Silicates	None Detected
Layer 2 B276355	Bedding	Homogeneous	40%	Binder	None Detected
		Gray Non-fibrous Bound	60%	Silicates	
Layer 3 B276355	Grout	Homogeneous	40%	Binder	None Detected
		White Non-fibrous Bound	60%	Silicates	
ROOF-1 Layer 1 B276356A	Roofing	Homogeneous	60%	Fiberglass	None Detected
		Black, Gray Non-fibrous Bound	35% 5%	Tar Gravel	
Layer 2 B276356A	Roofing	Homogeneous	60%	Fiberglass	None Detected
		Black, Brown Non-fibrous Bound	35% 5%	Tar Gravel	

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

Lab Code: B18-1502
Date Received: 03-29-18
Date Analyzed: 03-30-18
Date Reported: 03-30-18

Project: Twin Rivers Demo Survey, 300-302 Dos Rios St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
B276356B	Felt Paper	Homogeneous Brown Fibrous Bound	70%	Cellulose	30%	Tar	None Detected
ROOF-2 Layer 1 B276357A	Roofing	Homogeneous Black,Gray Non-fibrous Bound	60%	Fiberglass	35%	Tar 5% Gravel	None Detected
Layer 2 B276357A	Roofing	Homogeneous Black,Brown Non-fibrous Bound	60%	Fiberglass	35%	Tar 5% Gravel	None Detected
B276357B	Felt Paper	Homogeneous Brown Fibrous Bound	70%	Cellulose	30%	Tar	None Detected
ROOF-3 Layer 1 B276358A	Roofing	Homogeneous Black,Gray Non-fibrous Bound	60%	Fiberglass	35%	Tar 5% Gravel	None Detected
Layer 2 B276358A	Roofing	Homogeneous Black,Brown Non-fibrous Bound	60%	Fiberglass	35%	Tar 5% Gravel	None Detected
B276358B	Felt Paper	Homogeneous Brown Fibrous Bound	70%	Cellulose	30%	Tar	None Detected

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

Lab Code: B18-1502
Date Received: 03-29-18
Date Analyzed: 03-30-18
Date Reported: 03-30-18

Project: Twin Rivers Demo Survey, 300-302 Dos Rios St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
S-1 Layer 1 B276359	Stucco	Homogeneous	35%	Binder	<1% Chrysotile
		Pink	60%	Silicates	
		Non-fibrous	5%	Paint	
		Bound			
Layer 2 B276359	Stucco	Homogeneous	40%	Binder	None Detected
		Gray	60%	Silicates	
		Non-fibrous			
		Bound			
S-2 Layer 1 B276360	Stucco	Homogeneous	35%	Binder	<1% Chrysotile
		Pink	60%	Silicates	
		Non-fibrous	5%	Paint	
		Bound			
Layer 2 B276360	Stucco	Homogeneous	40%	Binder	None Detected
		Gray	60%	Silicates	
		Non-fibrous			
		Bound			
S-3 Layer 1 B276361	Stucco	Homogeneous	35%	Binder	<1% Chrysotile
		Pink	60%	Silicates	
		Non-fibrous	5%	Paint	
		Bound			
Layer 2 B276361	Stucco	Homogeneous	40%	Binder	None Detected
		Gray	60%	Silicates	
		Non-fibrous			
		Bound			
S-4 Layer 1 B276362	Stucco	Homogeneous	35%	Binder	<1% Chrysotile
		Pink	60%	Silicates	
		Non-fibrous	5%	Paint	
		Bound			



CEI

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

Lab Code: B18-1502
Date Received: 03-29-18
Date Analyzed: 03-30-18
Date Reported: 03-30-18

Project: Twin Rivers Demo Survey, 300-302 Dos Rios St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
Layer 2 B276362	Stucco	Homogeneous Gray Non-fibrous Bound	40%	Binder 60% Silicates	None Detected
S-5 Layer 1 B276363	Stucco	Homogeneous Pink Non-fibrous Bound	35%	Binder 60% Silicates 5% Paint	<1% Chrysotile
Layer 2 B276363	Stucco	Homogeneous Gray Non-fibrous Bound	40%	Binder 60% Silicates	None Detected

LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

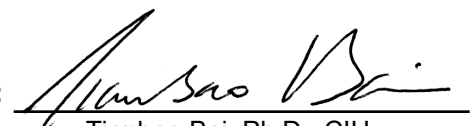
Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by Eurofins CEI. Eurofins CEI makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST:


Megan Fisher

APPROVED BY:


Tianbao Bai, Ph.D., CIH
Laboratory Director



Turn Around Time: 24hr

Essei Technology Services, Inc.
 351 California Street, Suite 615
 San Francisco, CA 94104
 Phone: 415-938-7002

Send results via: TrevorMarion@Esseltek.com, Nlahiri@esseltek.com,

Tbarazoto@esseltek.com, Tmiller@esseltek.com, Jwarren@esseltek.com

(40) B/B-1502
 B276324-363

Chain of Custody Form
 Asbestos/Lead/Mold Bulk Sampling

Project No: 17178	Date: 3/28/18	Client Name: SHRA
Laboratory Submitted To: CEI		
Relinquished By: Trevor Marion	Date: 3/28/18	Project Name: Twin Rivers Demo survey
Print Name: Trevor Marion		
Relinquished to: [Signature]	Date: 3/29/18 9:20	Project Location: 300-302 Dos Rios st. Sacramento, CA
Print Name:		

Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
	WP-A-1	Grey wall plaster w/berg skim	Unit 300 - LRm wall - S		
	- 2	↓	Unit 700 - Bath - Wall - S		
	- 3		Unit 302 - LRm - Wall - N		
	- 4		Unit 302 - Bath - Wall - N		
	↓ - 5		Unit 302 - kitchen - wall - S		
	WP-B-1		Grey Ceiling Plaster w/berg skim	Unit 300 - Bath Ceiling +	
	- 2	↓	Unit 300 - kitchen Ceiling		
	- 3		Unit 302 - kitchen Ceiling		
	- 4		Unit 302 - Bath Ceiling		
	↓ - 5		Unit 302 - Bedr Ceiling		

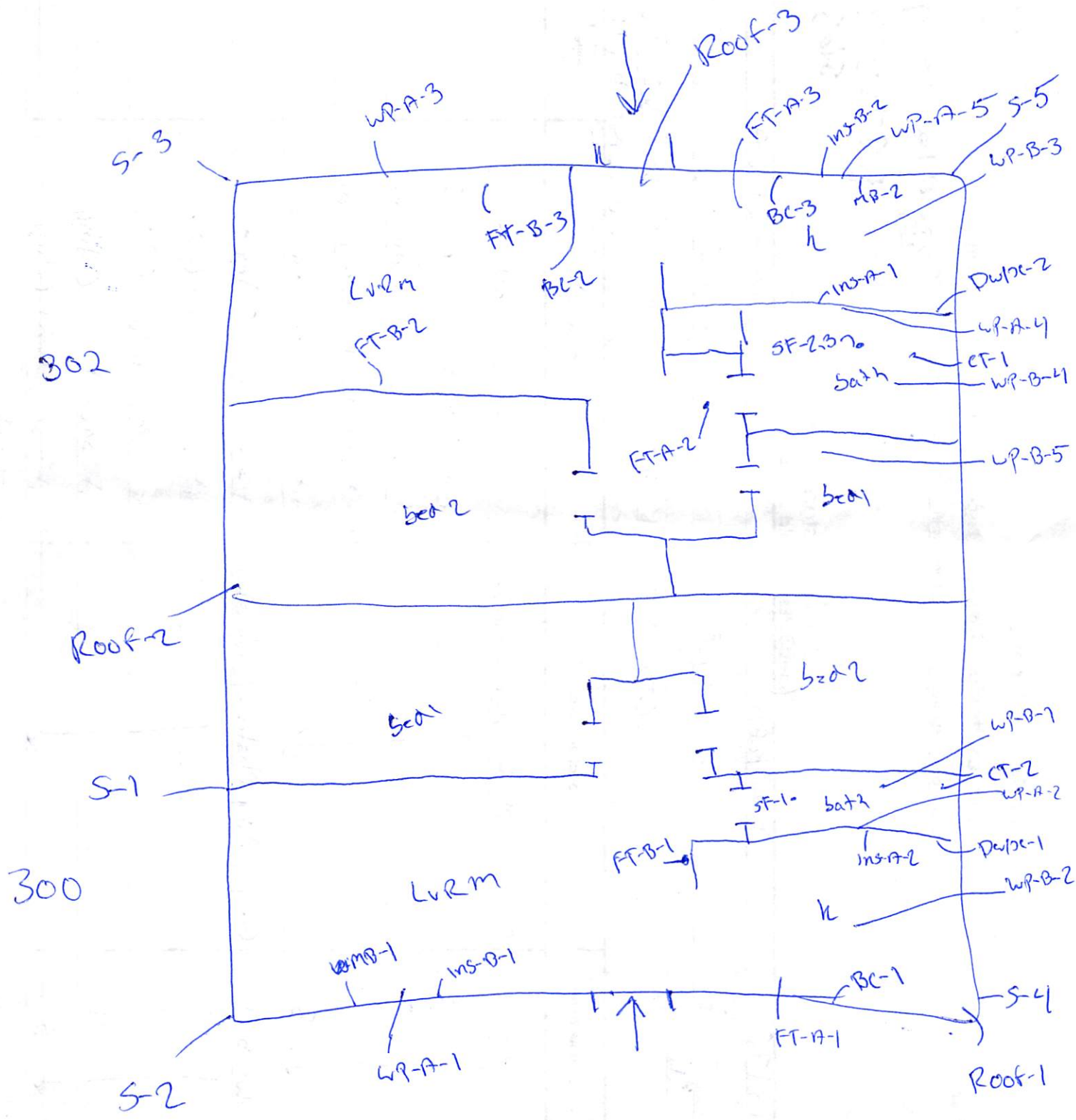
Sampled by: Trevor Marion

Date: 3/28/18

AR 3-29-18 9:20

Comments: _____

300 + 302 Dos Rios
3/27/18 + 3/28/18



B19-1502

Homogeneous Material Group	Sample Number	Material description	Sample Location
	DW100-1	Composite Drywall + joint compound	Unit 300 - kitchen - S
	DW100-2	↓	Unit 302 - kitchen - N
	FT-A-1	Beige 12x12 FT w/ black mastic	Unit 300 - kitchen
	↓ -2	↓	Unit 302 - hallway
	↓ -3	↓	Unit 302 - kitchen
	FT-B-1	Tan 12x12 FT w/ black mastic	Unit 300 - LVRm
	↓ -2	↓	Unit 302 - LVRm
	↓ -3	↓	Unit 302 - LVRm
	SF-1	Beige sheet flooring w/ grey back and black mastic	Unit 300 - Bath
	↓ -2	↓	Unit 302 - Bath
	↓ -3	↓	Unit 302 - bath
	BC-1	Black 4" basecoat w/ tan glue	Unit 300 - kitchen
	↓ -2	↓	Unit 302 - LVRm
	↓ -3	↓	Unit 302 - hallway
	MB-1	Black moisture barriers	Unit 300 - LVRm wall
	MB-2	↓	Unit 302 - kitchen wall
	INS-A-1	Brown wall insulation	Unit 300 - kitchen - interior wall
	INS-A-2	↓	Unit 302 - kitchen - interior wall
	INS-B-1	Grey wall insulation	Unit 300 - LVRm - Perimeter wall
	INS-B-2	↓	Unit 302 - kitchen - Perimeter wall
	CT-1	white ceramic tile w/ bedding w/ grout	Unit 302 - bath
	CT-2	↓	Unit 300 - bath

Relinquished by:

Name: Trevor Marion

Signature:

TJM

Date: 3/28/18

Time:

fedex

Received By:

Name: _____

Signature: _____

Date: _____

Time: _____

B13 - 1502

Homogeneous Material Group	Sample Number	Material description	Sample Location
	Roof-1	Shingle Roof w/ felt	Unit 300 SE corner
	↓ -2		Unit 302 - SW corner
	↓ -3		Unit 302 over entrance
	S-1	↓ Pink Painted exterior Stucco	Unit 300 - W side
	S-2		Unit 300 - SW corner
	S-3		Unit 302 - NW corner
	S-4		Unit 200 - SE corner
	S-5	↓	Unit 302 - NE corner

Relinquished by: Name: Trevor Marwin Signature: Jm Date: 3/22/18 Time: FedEx
Received By: Name: _____ Signature: _____ Date: _____ Time: _____

March 28, 2018

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demo Survey, 320 Dos Rios St. Sacramento, CA;
17178
CEI LAB CODE: B18-1453

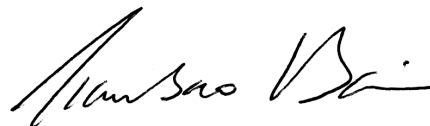
Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on March 28, 2018. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any

Kind Regards,



Tianbao Bai, Ph.D., CIH
Laboratory Director



CEI

ASBESTOS ANALYTICAL REPORT

By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demo Survey, 320 Dos Rios St.
Sacramento, CA; 17178

LAB CODE: B18-1453

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 03/28/18

TOTAL SAMPLES ANALYZED: 41

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



CEI

Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo Survey, 320 Dos Rios St. Sacramento, CA; 17178 **LAB CODE:** B18-1453

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
WP-A-1	Layer 1	B275725	White	Wall Plaster Skim	None Detected
	Layer 2	B275725	Gray	Wall Plaster	None Detected
WP-A-2	Layer 1	B275726	White	Wall Plaster Skim	None Detected
	Layer 2	B275726	Gray	Wall Plaster	None Detected
WP-A-3	Layer 1	B275727	White	Wall Plaster Skim	None Detected
	Layer 2	B275727	Gray	Wall Plaster	None Detected
WP-A-4	Layer 1	B275728	White	Wall Plaster Skim	None Detected
	Layer 2	B275728	Gray	Wall Plaster	None Detected
WP-A-5	Layer 1	B275729	White	Wall Plaster Skim	None Detected
	Layer 2	B275729	Gray	Wall Plaster	None Detected
WP-B-1	Layer 1	B275730	White	Ceiling Plaster Skim	None Detected
	Layer 2	B275730	Gray	Ceiling Plaster	None Detected
WP-B-2	Layer 1	B275731	White	Ceiling Plaster Skim	None Detected
	Layer 2	B275731	Gray	Ceiling Plaster	None Detected
WP-B-3	Layer 1	B275732	White	Ceiling Plaster Skim	None Detected
	Layer 2	B275732	Gray	Ceiling Plaster	None Detected
MB-1		B275733	Black	Moisture Barrier	None Detected
MB-2		B275734	Black	Moisture Barrier	None Detected
FT-1-1		B275735A	Beige	Floor Tile	None Detected
		B275735B	Black	Mastic	None Detected
FT-1-2		B275736A	Tan	Floor Tile	None Detected
		B275736B	Black	Mastic	None Detected
FT-1-3		B275737A	Tan	Floor Tile	None Detected
		B275737B	Black	Mastic	None Detected
FT-2-1		B275738A	Beige	Floor Tile	None Detected
		B275738B	Black	Mastic	None Detected
FT-2-2		B275739A	Beige	Floor Tile	None Detected
		B275739B	Black	Mastic	None Detected
FT-2-3		B275740A	Beige	Floor Tile	None Detected
		B275740B	Black	Mastic	None Detected
FT-3-1		B275741A	Light Tan	Floor Tile	None Detected



CEI

Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo Survey, 320 Dos Rios St. Sacramento, CA; 17178 **LAB CODE:** B18-1453

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
		B275741B	Black	Mastic	None Detected
FT-3-2		B275742A	Light Tan	Floor Tile	None Detected
		B275742B	Black	Mastic	None Detected
FT-3-3		B275743A	Light Tan	Floor Tile	None Detected
		B275743B	Black	Mastic	None Detected
DW/JC-1		B275744	Brown,White	Drywall/Joint Compound	Chrysotile <1%
DW/JC-2		B275745	Brown,White	Drywall/Joint Compound	Chrysotile <1%
DW/JC-3		B275746	Brown,White	Drywall/Joint Compound	None Detected
CT-1	Layer 1	B275747	White	Ceramic Tile	None Detected
	Layer 2	B275747	Gray	Bedding	None Detected
CT-2	Layer 1	B275748	White	Ceramic Tile	None Detected
	Layer 2	B275748	Gray	Bedding	None Detected
CT-3	Layer 1	B275749	White	Ceramic Tile	None Detected
	Layer 2	B275749	Gray,White	Bedding	None Detected
GROUT-1		B275750	White	Grout	None Detected
GROUT-2		B275751	White	Grout	None Detected
GROUT-3		B275752	White	Grout	None Detected
FRP-1	Layer 1	B275753	White	Frp	None Detected
	Layer 2	B275753	Tan	Glue	None Detected
FRP-2	Layer 1	B275754	White	Frp	None Detected
	Layer 2	B275754	Tan	Glue	None Detected
BC-1		B275755A	Black	Base Cove	None Detected
		B275755B	Tan	Mastic	None Detected
BC-2		B275756A	Black	Base Cove	None Detected
		B275756B	White	Mastic	None Detected
BC-3		B275757A	Black	Base Cove	None Detected
		B275757B	White	Mastic	None Detected
Roof-1	Layer 1	B275758A	Black	Shingled Roof	None Detected
	Layer 2	B275758A	Brown,Black	Shingled Roof	None Detected
		B275758B	Black	Felt Paper	None Detected
Roof-2	Layer 1	B275759A	Black	Shingled Roof	None Detected



CEI

Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo Survey, 320 Dos Rios St. Sacramento, CA; 17178 **LAB CODE:** B18-1453

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
	Layer 2	B275759A	Brown,Black	Shingled Roof	None Detected
		B275759B	Black	Felt Paper	None Detected
Roof-3	Layer 1	B275760A	Black	Shingled Roof	None Detected
	Layer 2	B275760A	Brown,Black	Shingled Roof	None Detected
		B275760B	Black	Felt Paper	None Detected
S-1	Layer 1	B275761	Pink	Stucco Skim	Chrysotile <1%
	Layer 2	B275761	Gray	Stucco Base	None Detected
S-2	Layer 1	B275762	Pink	Stucco Skim	Chrysotile <1%
	Layer 2	B275762	Gray	Stucco Base	None Detected
S-3	Layer 1	B275763	Pink	Stucco Skim	Chrysotile <1%
	Layer 2	B275763	Gray	Stucco Base	None Detected
S-4	Layer 1	B275764	Pink	Stucco Skim	Chrysotile <1%
	Layer 2	B275764	Gray	Stucco Base	None Detected
S-5	Layer 1	B275765	Pink	Stucco Skim	Chrysotile <1%
	Layer 2	B275765	Gray	Stucco Base	None Detected

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

Lab Code: B18-1453
Date Received: 03-28-18
Date Analyzed: 03-28-18
Date Reported: 03-28-18

Project: Twin Rivers Demo Survey, 320 Dos Rios St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %	
			Fibrous	Non-Fibrous		
WP-A-1 Layer 1 B275725	Wall Plaster Skim	Heterogeneous	10%	Paint	None Detected	
		White	50%	Silicates		
		Non-fibrous	40%	Binder		
		Bound				
Layer 2 B275725	Wall Plaster	Heterogeneous	<1%	Cellulose	65%	None Detected
		Gray			35%	
		Fibrous				Binder
		Bound				
WP-A-2 Layer 1 B275726	Wall Plaster Skim	Heterogeneous	10%	Paint	None Detected	
		White	50%	Silicates		
		Non-fibrous	40%	Binder		
		Bound				
Layer 2 B275726	Wall Plaster	Heterogeneous	<1%	Cellulose	65%	None Detected
		Gray			35%	
		Fibrous				Binder
		Bound				
WP-A-3 Layer 1 B275727	Wall Plaster Skim	Heterogeneous	10%	Paint	None Detected	
		White	50%	Silicates		
		Non-fibrous	40%	Binder		
		Bound				
Layer 2 B275727	Wall Plaster	Heterogeneous	<1%	Cellulose	65%	None Detected
		Gray			35%	
		Fibrous				Binder
		Bound				
WP-A-4 Layer 1 B275728	Wall Plaster Skim	Heterogeneous	10%	Paint	None Detected	
		White	50%	Silicates		
		Non-fibrous	40%	Binder		
		Bound				

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

Lab Code: B18-1453
Date Received: 03-28-18
Date Analyzed: 03-28-18
Date Reported: 03-28-18

Project: Twin Rivers Demo Survey, 320 Dos Rios St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
Layer 2 B275728	Wall Plaster	Heterogeneous Gray Fibrous Bound	<1%	Cellulose	65%	Silicates	None Detected
					35%	Binder	
WP-A-5 Layer 1 B275729	Wall Plaster Skim	Heterogeneous White Non-fibrous Bound			10%	Paint	None Detected
					50%	Silicates	
					40%	Binder	
Layer 2 B275729	Wall Plaster	Heterogeneous Gray Fibrous Bound	<1%	Cellulose	65%	Silicates	None Detected
					35%	Binder	
WP-B-1 Layer 1 B275730	Ceiling Plaster Skim	Heterogeneous White Non-fibrous Bound			10%	Paint	None Detected
					50%	Silicates	
					40%	Binder	
Layer 2 B275730	Ceiling Plaster	Heterogeneous Gray Fibrous Bound	<1%	Cellulose	65%	Silicates	None Detected
					35%	Binder	
WP-B-2 Layer 1 B275731	Ceiling Plaster Skim	Heterogeneous White Non-fibrous Bound			10%	Paint	None Detected
					50%	Silicates	
					40%	Binder	
Layer 2 B275731	Ceiling Plaster	Heterogeneous Gray Fibrous Bound	<1%	Cellulose	65%	Silicates	None Detected
					35%	Binder	

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

Lab Code: B18-1453
Date Received: 03-28-18
Date Analyzed: 03-28-18
Date Reported: 03-28-18

Project: Twin Rivers Demo Survey, 320 Dos Rios St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
WP-B-3 Layer 1 B275732	Ceiling Plaster Skim	Heterogeneous			10%	Paint	None Detected
		White			50%	Silicates	
		Non-fibrous			40%	Binder	
		Bound					
Layer 2 B275732	Ceiling Plaster	Heterogeneous	<1%	Cellulose	65%	Silicates	None Detected
		Gray			35%	Binder	
		Fibrous					
		Bound					
MB-1 B275733	Moisture Barrier	Heterogeneous	75%	Cellulose	20%	Tar	None Detected
		Black	5%	Synthetic Fiber			
		Fibrous					
		Bound					
MB-2 B275734	Moisture Barrier	Heterogeneous	75%	Cellulose	20%	Tar	None Detected
		Black	5%	Synthetic Fiber			
		Fibrous					
		Bound					
FT-1-1 B275735A	Floor Tile	Homogeneous			35%	Calc Carb	None Detected
		Beige			65%	Vinyl	
		Non-fibrous					
		Tightly Bound					
B275735B	Mastic	Homogeneous	2%	Cellulose	98%	Mastic	None Detected
		Black					
		Fibrous					
		Bound					
FT-1-2 B275736A	Floor Tile	Homogeneous			35%	Calc Carb	None Detected
		Tan			65%	Vinyl	
		Non-fibrous					
		Tightly Bound					

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

Lab Code: B18-1453
Date Received: 03-28-18
Date Analyzed: 03-28-18
Date Reported: 03-28-18

Project: Twin Rivers Demo Survey, 320 Dos Rios St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
B275736B	Mastic	Homogeneous Black Fibrous Bound	2%	Cellulose	98%	Mastic	None Detected
FT-1-3 B275737A	Floor Tile	Homogeneous Tan Non-fibrous Tightly Bound			35% 65%	Calc Carb Vinyl	None Detected
B275737B	Mastic	Homogeneous Black Fibrous Bound	2%	Cellulose	98%	Mastic	None Detected
FT-2-1 B275738A	Floor Tile	Homogeneous Beige Non-fibrous Tightly Bound			35% 65%	Calc Carb Vinyl	None Detected
B275738B	Mastic	Homogeneous Black Fibrous Bound	2%	Cellulose	98%	Mastic	None Detected
FT-2-2 B275739A	Floor Tile	Homogeneous Beige Non-fibrous Tightly Bound			35% 65%	Calc Carb Vinyl	None Detected
B275739B	Mastic	Homogeneous Black Fibrous Bound	2%	Cellulose	98%	Mastic	None Detected

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

Lab Code: B18-1453
Date Received: 03-28-18
Date Analyzed: 03-28-18
Date Reported: 03-28-18

Project: Twin Rivers Demo Survey, 320 Dos Rios St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %	
			Fibrous	Non-Fibrous			
FT-2-3 B275740A	Floor Tile	Homogeneous		35%	Calc Carb	None Detected	
		Beige Non-fibrous Tightly Bound		65%	Vinyl		
B275740B	Mastic	Homogeneous Black Fibrous Bound	2%	Cellulose	98%	Mastic	None Detected
FT-3-1 B275741A	Floor Tile	Homogeneous		35%	Calc Carb	None Detected	
		Light Tan Non-fibrous Tightly Bound		65%	Vinyl		
B275741B	Mastic	Homogeneous Black Fibrous Bound	2% 3%	Cellulose Synthetic Fiber	95%	Mastic	None Detected
FT-3-2 B275742A	Floor Tile	Homogeneous		35%	Calc Carb	None Detected	
		Light Tan Non-fibrous Tightly Bound		65%	Vinyl		
B275742B	Mastic	Homogeneous Black Fibrous Bound	2% 3%	Cellulose Synthetic Fiber	95%	Mastic	None Detected
FT-3-3 B275743A	Floor Tile	Homogeneous		35%	Calc Carb	None Detected	
		Light Tan Non-fibrous Tightly Bound		65%	Vinyl		

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

Lab Code: B18-1453
Date Received: 03-28-18
Date Analyzed: 03-28-18
Date Reported: 03-28-18

Project: Twin Rivers Demo Survey, 320 Dos Rios St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %	
			Fibrous	Non-Fibrous			
B275743B	Mastic	Homogeneous Black Fibrous Bound	2% 3%	Cellulose Synthetic Fiber	95%	Mastic	None Detected
DW/JC-1 B275744	Drywall/Joint Compound	Heterogeneous Brown,White Fibrous Bound	20%	Cellulose	10% 67% 3%	Silicates Gypsum Paint	<1% Chrysotile
Lab Notes: 2% Chrysotile found only in joint compound. Overall sample <1% Chrysotile.							
DW/JC-2 B275745	Drywall/Joint Compound	Heterogeneous Brown,White Fibrous Bound	20%	Cellulose	10% 67% 3%	Silicates Gypsum Paint	<1% Chrysotile
Lab Notes: 2% Chrysotile found only in joint compound. Overall sample <1% Chrysotile.							
DW/JC-3 B275746	Drywall/Joint Compound	Heterogeneous Brown,White Fibrous Bound	20%	Cellulose	10% 70%	Silicates Gypsum	None Detected
CT-1 Layer 1 B275747	Ceramic Tile	Homogeneous White Non-fibrous Bound			20% 80%	Silicates Binder	None Detected
Layer 2 B275747	Bedding	Homogeneous Gray Non-fibrous Bound			70% 30%	Silicates Binder	None Detected
CT-2 Layer 1 B275748	Ceramic Tile	Homogeneous White Non-fibrous Bound			20% 80%	Silicates Binder	None Detected

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

Lab Code: B18-1453
Date Received: 03-28-18
Date Analyzed: 03-28-18
Date Reported: 03-28-18

Project: Twin Rivers Demo Survey, 320 Dos Rios St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
Layer 2 B275748	Bedding	Homogeneous Gray Non-fibrous Bound	70%	Silicates Binder	None Detected
CT-3 Layer 1 B275749	Ceramic Tile	Homogeneous White Non-fibrous Bound	20% 80%	Silicates Binder	None Detected
Layer 2 B275749	Bedding	Heterogeneous Gray,White Non-fibrous Bound	50% 50%	Silicates Binder	None Detected
GROUT-1 B275750	Grout	Homogeneous White Non-fibrous Bound	65% 30% 5%	Calc Carb Binder Paint	None Detected
GROUT-2 B275751	Grout	Homogeneous White Non-fibrous Bound	65% 30% 5%	Calc Carb Binder Paint	None Detected
GROUT-3 B275752	Grout	Homogeneous White Non-fibrous Bound	65% 30% 5%	Calc Carb Binder Paint	None Detected
FRP-1 Layer 1 B275753	Frp	Homogeneous White Non-fibrous Bound	95% 5%	Vinyl Silicates	None Detected

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

Lab Code: B18-1453
Date Received: 03-28-18
Date Analyzed: 03-28-18
Date Reported: 03-28-18

Project: Twin Rivers Demo Survey, 320 Dos Rios St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
Layer 2 B275753	Glue	Homogeneous	10%	Silicates	None Detected
		Tan	35%	Calc Carb	
		Non-fibrous	55%	Binder	
		Bound			
FRP-2 Layer 1 B275754	Frp	Homogeneous	95%	Vinyl	None Detected
		White	5%	Silicates	
		Non-fibrous			
		Bound			
Layer 2 B275754	Glue	Homogeneous	10%	Silicates	None Detected
		Tan	35%	Calc Carb	
		Non-fibrous	55%	Binder	
		Bound			
BC-1 B275755A	Base Cove	Homogeneous	5%	Silicates	None Detected
		Black	95%	Vinyl	
		Fibrous			
		Bound			
B275755B	Mastic	Homogeneous	2%	Cellulose	None Detected
		Tan	98%	Mastic	
		Fibrous			
		Bound			
BC-2 B275756A	Base Cove	Homogeneous	15%	Calc Carb	None Detected
		Black	85%	Vinyl	
		Fibrous			
		Bound			
B275756B	Mastic	Homogeneous	25%	Calc Carb	None Detected
		White	75%	Mastic	
		Non-fibrous			
		Bound			

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

Lab Code: B18-1453
Date Received: 03-28-18
Date Analyzed: 03-28-18
Date Reported: 03-28-18

Project: Twin Rivers Demo Survey, 320 Dos Rios St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
BC-3 B275757A	Base Cove	Homogeneous	15%	Fibrous	Calc Carb	None Detected	
		Black	85%	Fibrous	Vinyl		
		Bound					
B275757B	Mastic	Homogeneous	25%	Fibrous	Calc Carb	None Detected	
		White	75%	Fibrous	Mastic		
		Bound					
Roof-1 Layer 1 B275758A	Shingled Roof	Homogeneous	20%	Fiberglass	20%	Gravel	None Detected
		Black			50%	Tar	
		Fibrous			10%	Silicates	
		Bound					
Layer 2 B275758A	Shingled Roof	Homogeneous	20%	Fiberglass	20%	Gravel	None Detected
		Brown,Black			50%	Tar	
		Fibrous			10%	Silicates	
		Bound					
B275758B	Felt Paper	Homogeneous	85%	Cellulose	15%	Tar	None Detected
		Black					
		Bound					
Roof-2 Layer 1 B275759A	Shingled Roof	Homogeneous	20%	Fiberglass	20%	Gravel	None Detected
		Black			50%	Tar	
		Fibrous			10%	Silicates	
		Bound					
Layer 2 B275759A	Shingled Roof	Homogeneous	20%	Fiberglass	20%	Gravel	None Detected
		Brown,Black			50%	Tar	
		Fibrous			10%	Silicates	
		Bound					

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

Lab Code: B18-1453
Date Received: 03-28-18
Date Analyzed: 03-28-18
Date Reported: 03-28-18

Project: Twin Rivers Demo Survey, 320 Dos Rios St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
B275759B	Felt Paper	Homogeneous Black Fibrous Bound	85%	Cellulose	15%	Tar	None Detected
Roof-3 Layer 1 B275760A	Shingled Roof	Homogeneous Black Fibrous Bound	20%	Fiberglass	20%	Gravel 50% Tar 10% Silicates	None Detected
Layer 2 B275760A	Shingled Roof	Homogeneous Brown,Black Fibrous Bound	20%	Fiberglass	20%	Gravel 50% Tar 10% Silicates	None Detected
B275760B	Felt Paper	Homogeneous Black Fibrous Bound	85%	Cellulose	15%	Tar	None Detected
S-1 Layer 1 B275761	Stucco Skim	Heterogeneous Pink Fibrous Bound			10%	Paint 30% Silicates 60% Calc Carb	<1% Chrysotile
Layer 2 B275761	Stucco Base	Homogeneous Gray Non-fibrous Bound			65%	Silicates 35% Binder	None Detected
S-2 Layer 1 B275762	Stucco Skim	Heterogeneous Pink Fibrous Bound			10%	Paint 30% Silicates 60% Calc Carb	<1% Chrysotile

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

Lab Code: B18-1453
Date Received: 03-28-18
Date Analyzed: 03-28-18
Date Reported: 03-28-18

Project: Twin Rivers Demo Survey, 320 Dos Rios St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
Layer 2 B275762	Stucco Base	Homogeneous Gray Non-fibrous Bound	65%	Silicates Binder	None Detected
S-3 Layer 1 B275763	Stucco Skim	Heterogeneous Pink Fibrous Bound	10% 30% 60%	Paint Silicates Calc Carb	<1% Chrysotile
Layer 2 B275763	Stucco Base	Homogeneous Gray Non-fibrous Bound	65% 35%	Silicates Binder	None Detected
S-4 Layer 1 B275764	Stucco Skim	Heterogeneous Pink Fibrous Bound	10% 30% 60%	Paint Silicates Calc Carb	<1% Chrysotile
Layer 2 B275764	Stucco Base	Homogeneous Gray Non-fibrous Bound	65% 35%	Silicates Binder	None Detected
S-5 Layer 1 B275765	Stucco Skim	Heterogeneous Pink Fibrous Bound	10% 30% 60%	Paint Silicates Calc Carb	<1% Chrysotile
Layer 2 B275765	Stucco Base	Homogeneous Gray Non-fibrous Bound	65% 35%	Silicates Binder	None Detected

LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation


REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

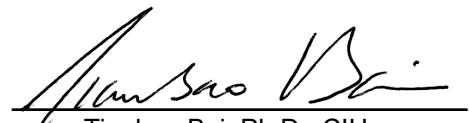
Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by Eurofins CEI. Eurofins CEI makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST:


Gary A. Swanson

APPROVED BY:


Tianbao Bai, Ph.D., CIH
Laboratory Director



Turn Around Time: Saturday

Send results via: TrevorMarion@Esseltek.com, Nlahiri@esseltek.com,
Tbarazoto@esseltek.com, Tmiller@esseltek.com, Jwarren@esseltek.com

Essel Technology Services, Inc.
 351 California Street, Suite 615
 San Francisco, CA 94104
 Phone: 415-938-7002

(41) B19-1453
 B215725-765
 8 hr TAT
 3/28

Chain of Custody Form
 Asbestos/Lead/Mold Bulk Sampling

Project No: <u>17178</u>	Date: <u>3/27/18</u>	Client Name: <u>SITRA</u>
Laboratory Submitted To: <u>CEI</u>		
Relinquished By: <u>Jam</u>	Date: <u>3/27/18</u>	Project Name: <u>Twin Rivers Demo Survey</u>
Print Name: <u>Trevor Marion</u>		
Relinquished to:	Date:	Project Location: <u>320 Dos Rios St. Sacramento, CA</u>
Print Name:		

Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
	WP-A-1	Wall Plaster w/ skim coat	Lvrm - N wall		
	↓ 2	↓	kitchen - NE corner		
	↓ 3		kitchen - S wall		
	↓ 4		Bed 2 - N wall		
	↓ 5		Bed 1 - E wall		
	WP-B-1		Ceiling Plaster w/ skim coat	Bed 1 Bed 1 - Ceiling	
	↓ -2	↓	kitchen - Ceiling		
	↓ -3		Hallway - Ceiling		
	MB-1	Black Moisture barrier	kitchen - south wall on wood		
	MB-2	↓	↓		

Sampled by: Trevor Marion

Date: 3/27/18

AR 3-28-18 9:30

Comments: _____

CA 10:44

B18-1483

Homogeneous Material Group	Sample Number	Material description	Sample Location
	FT-1-1	Tan 12x12 w/ black + yellow mastic	Living Room
	↓ 2	↓	↓
	↓ 3		
	FT-2-1	Beige 12x12 w/ black + yellow mastic	Bed 1
	↓ -2	↓	Bed 2
	↓ -3		Kitchen
	FT-3-1	Light tan 12x12 w/ black mastic	Bathroom
	↓ -2	↓	↓
	↓ -3		
	Dw/Jc-1	Composit Drywall + Joint Compound	Kitchen - NE wall
	↓ -2	↓	↓
	↓ -3		
	CT-1	White Ceramic tile + grey bedding	Bath - N wall
	↓ -2	↓	↓
	↓ -3		
	Grout-1	Ceramic tile grout	Bath - N wall
	↓ -2	↓	↓
	↓ -3		
	FRP-1	White FRP w/ tan glue	Bath - N wall - on CT
	FRP-2	↓	↓

Relinquished by:

Name: Tower M Signature: Jmc Date: 3/27/18 Time: Fedex

Received By:

Name: _____ Signature: _____ Date: _____ Time: _____

B/B-1453

Homogeneous Material Group	Sample Number	Material description	Sample Location
	BC-1	Black 4" base core w/ tan mastic	Bed 1 - E wall
	↓ -2		Bath - W wall
	↓ -3		kitchen - S wall
	Roof-1	Shingled Roof core w/ felt	above bedroom #1
	↓ -2		sw corner
	↓ -3		above bed #2
	S-1	Exterior Grey stucco painted green	East side
	↓ 2		SE corner
	↓ 3		West side
	↓ 4		Sw corner
	↓ 5		East side

Relinquished by: Name: Trevor M Signature: [Signature] Date: 3/27/12 Time: fedex
 Received By: Name: _____ Signature: _____ Date: _____ Time: _____

3/28/2018

Mail - courtney@ceilabs.com

Re: TAT

BB-1453

Trevor Marion <trevormarion@esseltek.com>

Wed 3/28/2018 10:44 AM

To: Courtney Dabill <courtney@ceilabs.com>;

Cc: nlahiri@esseltek.com <nlahiri@esseltek.com>; tbarazoto@esseltek.com <tbarazoto@esseltek.com>; tmiller@esseltek.com <tmiller@esseltek.com>; jwarren@esseltek.com <jwarren@esseltek.com>;

Same day, please.

Sent from my iPhone

On Mar 28, 2018, at 7:27 AM, Courtney Dabill <courtney@ceilabs.com> wrote:

Good Morning,

We received the Twin Rivers Demo Survey, 320 Dos Rios St. Sacramento, CA project this morning and just needed to know what turnaround time you would like. If you could get back to me when you get the chance.

Thanks,

Courtney Dabill

Laboratory Manager, Sample Receiving

Eurofins CEI

730 SE Maynard Road

Cary, NC 27511

Office: 919-481-1413

courtney@ceilabs.com

www.eurofinsus.com/cei



November 10, 2017

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demo Sampling, 562 Eliza St. Sacramento, CA;
17178
CEI LAB CODE: A17-15995

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on November 10, 2017. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demo Sampling, 562 Eliza St. Sacramento,
CA; 17178

CEI LAB CODE: A17-15995

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 11/10/17

TOTAL SAMPLES ANALYZED: 6

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo Sampling, 562 Eliza St. **CEI LAB CODE:** A17-15995
 Sacramento, CA; 17178

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
562-Eave-1		A2542368	Gray	Ceiling Board	None Detected
562-Eave-2		A2542369	Gray	Ceiling Board	None Detected
562-CT-A-1	Layer 1	A2542370	White	Ceramic Floor Tile	None Detected
	Layer 2	A2542370	Gray,Black	Bedding	None Detected
562-CT-A-2	Layer 1	A2542371	White	Ceramic Floor Tile	None Detected
	Layer 2	A2542371	Gray,Black	Bedding	None Detected
562-CT-B-1	Layer 1	A2542372	White	Ceramic Wall Tile	None Detected
	Layer 2	A2542372	Gray	Bedding	None Detected
	Layer 3	A2542372	Black	Moisture Barrier	None Detected
562-CT-B-2	Layer 1	A2542373	White	Ceramic Wall Tile	None Detected
	Layer 2	A2542373	Gray	Bedding	None Detected
	Layer 3	A2542373	Black	Moisture Barrier	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A17-15995
Date Received: 11-10-17
Date Analyzed: 11-10-17
Date Reported: 11-10-17

Project: Twin Rivers Demo Sampling, 562 Eliza St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %
			Fibrous	Non-Fibrous		
562-Eave-1 A2542368	Ceiling Board	Heterogeneous	80%	Cellulose	10%	None Detected
		Gray			10%	
		Fibrous Bound				
562-Eave-2 A2542369	Ceiling Board	Heterogeneous	80%	Cellulose	10%	None Detected
		Gray			10%	
		Fibrous Bound				
562-CT-A-1 Layer 1 A2542370	Ceramic Floor Tile	Heterogeneous			90%	None Detected
		White			10%	
		Non-fibrous Tightly Bound				
Layer 2 A2542370	Bedding	Heterogeneous			90%	None Detected
		Gray,Black			10%	
		Non-fibrous Bound				
562-CT-A-2 Layer 1 A2542371	Ceramic Floor Tile	Heterogeneous			90%	None Detected
		White			10%	
		Non-fibrous Tightly Bound				
Layer 2 A2542371	Bedding	Heterogeneous			90%	None Detected
		Gray,Black			10%	
		Non-fibrous Bound				
562-CT-B-1 Layer 1 A2542372	Ceramic Wall Tile	Heterogeneous			90%	None Detected
		White			10%	
		Non-fibrous Tightly Bound				



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A17-15995
Date Received: 11-10-17
Date Analyzed: 11-10-17
Date Reported: 11-10-17

Project: Twin Rivers Demo Sampling, 562 Eliza St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %
			Fibrous		Non-Fibrous	
Layer 2 A2542372	Bedding	Heterogeneous	90%	Silicates	None Detected	
		Gray	10%	Binder		
		Non-fibrous				
		Bound				
Layer 3 A2542372	Moisture Barrier	Heterogeneous	70%	Cellulose	None Detected	
		Black	30%	Tar		
		Fibrous				
		Bound				
562-CT-B-2 Layer 1 A2542373	Ceramic Wall Tile	Heterogeneous	90%	Silicates	None Detected	
		White	10%	Binder		
		Non-fibrous				
		Tightly Bound				
Layer 2 A2542373	Bedding	Heterogeneous	90%	Silicates	None Detected	
		Gray	10%	Binder		
		Non-fibrous				
		Bound				
Layer 3 A2542373	Moisture Barrier	Heterogeneous	70%	Cellulose	None Detected	
		Black	30%	Tar		
		Fibrous				
		Bound				



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST: Adriana de la Nuez
Adriana de la Nuez

APPROVED BY: Tianbao Bai
Tianbao Bai, Ph.D., CIH
Laboratory Director





Turn Around Time: ~~24hrs~~ 24hr

Send results via: TrevorMarion@Esseltek.com, Nlahiri@esseltek.com,
Tbarazoto@esseltek.com, Tmiller@esseltek.com, Jwarren@esseltek.com

Essel Technology Services, Inc.
 351 California Street, Suite 615
 San Francisco, CA 94104
 Phone: 415-938-7002

⑥ A17-15. 995
 A2542368
 A2542373

Chain of Custody Form
 Asbestos/Lead/Mold Bulk Sampling

Project No: 17178	Date: 11/9/17	Client Name: SJRA
Laboratory Submitted To: CEI		
Relinquished By: JM Trevor Marion	Date: 11/9/17	Project Name: Twin Rivers Demo Sampling
Relinquished to:	Date: 11/6/17 8:50	Project Location: 562 Eliza St Sacramento, CA
Print Name:		

Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
	562-Eave-1	Grey fibrous ceiling board	Exterior Eave-S-East		
	562-Eave-2		- West		
	562-CT-A-1	White 1x1 Ceramic floor tile w/ associated white/grey/black bedding	Bathroom floor-at shower		
	562-CT-A-2	wh.	Bathroom floor-at shower		
	562-CT-B-1	White 4x4 Ceramic wall tile w/ associated grey bed and black moisture barrier	Shower wall-N		
	562-CT-B-2		shower wall-N		

Sampled by: Trevor Marion

Date: 11/9/17

Comments: _____



January 11, 2018

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demo Survey, 561 Eliza Sacramento, CA; 17178
CEI LAB CODE: A18-0513

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on January 10, 2018. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any questions, please feel free to call our office at 919-481-1413.

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT

By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demo Survey, 561 Eliza Sacramento, CA;
17178

CEI LAB CODE: A18-0513

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 01/11/18

TOTAL SAMPLES ANALYZED: 4

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo Survey, 561 Eliza
Sacramento, CA; 17178

CEI LAB CODE: A18-0513

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
561-CFT-1	Layer 1	A2590283A	Light Gray	Ceramic Tile	None Detected
	Layer 2	A2590283A	White	Mortar	None Detected
	Layer 3	A2590283A	White	Mortar Bed	None Detected
		A2590283B	Beige	Glue	None Detected
561-CWT-1	Layer 1	A2590284A	White	Ceramic Tile	None Detected
	Layer 2	A2590284A	White	Mortar	None Detected
	Layer 3	A2590284A	White	Mortar Bed	None Detected
		A2590284B	Beige	Glue	None Detected
561-VJC-1		A2590285	Black	Vibration Joint Cloth	None Detected
561-VJC-2		A2590286	Black	Vibration Joint Cloth	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A18-0513
Date Received: 01-10-18
Date Analyzed: 01-11-18
Date Reported: 01-11-18

Project: Twin Rivers Demo Survey, 561 Eliza Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
561-CFT-1 Layer 1 A2590283A	Ceramic Tile	Homogeneous	100%	Binder	None Detected
		Light Gray			
		Non-fibrous Tightly Bound			
Layer 2 A2590283A	Mortar	Homogeneous	70%	Silicates	None Detected
		White	30%	Binder	
		Non-fibrous Bound			
Layer 3 A2590283A	Mortar Bed	Homogeneous	70%	Silicates	None Detected
		White	30%	Binder	
		Non-fibrous Bound			
A2590283B	Glue	Homogeneous Beige Non-fibrous Bound	95% 5%	Mastic Silicates	None Detected
561-CWT-1 Layer 1 A2590284A	Ceramic Tile	Homogeneous	100%	Binder	None Detected
		White			
		Non-fibrous Tightly Bound			
Layer 2 A2590284A	Mortar	Homogeneous	70%	Silicates	None Detected
		White	30%	Binder	
		Non-fibrous Bound			
Layer 3 A2590284A	Mortar Bed	Homogeneous	70%	Silicates	None Detected
		White	30%	Binder	
		Non-fibrous Bound			



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CEI Lab Code: A18-0513
Date Received: 01-10-18
Date Analyzed: 01-11-18
Date Reported: 01-11-18

Project: Twin Rivers Demo Survey, 561 Eliza Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
A2590284B	Glue	Homogeneous Beige Non-fibrous Bound	95% 5%	Mastic Silicates	None Detected
561-VJC-1 A2590285	Vibration Joint Cloth	Homogeneous Black Fibrous Tightly Bound	20%	Synthetic Fiber 80% Binder	None Detected
561-VJC-2 A2590286	Vibration Joint Cloth	Homogeneous Black Fibrous Tightly Bound	20%	Synthetic Fiber 80% Binder	None Detected



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation


REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

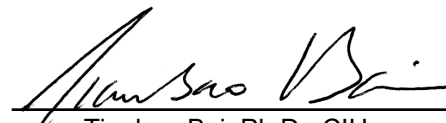
Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST:


Candace Burrus

APPROVED BY:


Tianbao Bai, Ph.D., CIH
Laboratory Director





Turn Around Time:

Send results via: TrevorMarion@Esseltek.com, Nlahiri@esseltek.com,

Tbarazoto@esseltek.com, Tmiller@esseltek.com, Jwarren@esseltek.com

EsseL Technology Services, Inc.
351 California Street, Suite 615
San Francisco, CA 94104
Phone: 415-938-7002

24HR

④ A8-0 ~~000~~ 513
A0590283
A0590286

Chain of Custody Form
Asbestos/Lead/Mold Bulk Sampling

Project No: 17170	Date: 11/8/18	Client Name: SHRA
Laboratory Submitted To: CEI		
Relinquished By: Jamie Warren	Date: 11/8/18	Project Name: Twin Rivers Demo Survey
Print Name:		
Relinquished to:	Date:	Project Location: 561 Eliza Sacramento, CA
Print Name:		

Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
561	CFT-1	2x2 light grey ceramic floor tile with white mortar base glue and white mortar bed	Bathroom Floor @ Entrance		
✓	CWT-1	4" x 4" white ceramic wall tile with white mortar and white mortar bed and base glue	Bathroom Wall South		
561	VJC-1	Black Vibetex Joint cloth	Livingroom Closet on Geothermal system		
↓	↓ -2		Livingroom Closet on Geothermal system		

Sampled by:

Date: 11/8/18

CEI LABS Accept Samples
A0590283 G-20



November 14, 2017

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: 521 Eliza Street Sacramento, CA; 17178
CEI LAB CODE: A17-16942

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on November 13, 2017. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any questions, please feel free to call our office at 919-481-1413.

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: 521 Eliza Street Sacramento, CA; 17178

CEI LAB CODE: A17-16942

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 11/14/17

TOTAL SAMPLES ANALYZED: 4

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: 521 Eliza Street Sacramento, CA; 17178 **CEI LAB CODE:** A17-16942

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
521-FRP-1		A2544519	Brown	Glue	None Detected
521-FRP-2		A2544520	Brown	Glue	None Detected
521-VJC		A2544521	Gray	Vibration Joint Cloth	None Detected
521-FOIL		A2544522	Gray	Foil	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A17-16942
Date Received: 11-13-17
Date Analyzed: 11-13-17
Date Reported: 11-14-17

Project: 521 Eliza Street Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %
			Fibrous	Non-Fibrous		
521-FRP-1 A2544519	Glue	Homogeneous Brown Non-fibrous Bound		100%	Mastic	None Detected
521-FRP-2 A2544520	Glue	Homogeneous Brown Non-fibrous Bound		100%	Mastic	None Detected
521-VJC A2544521	Vibration Joint Cloth	Homogeneous Gray Fibrous Bound	50%	Synthetic Fiber	50% Binder	None Detected
521-FOIL A2544522	Foil	Homogeneous Gray Non-fibrous Bound		50%	Mastic Metal Foil	None Detected



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

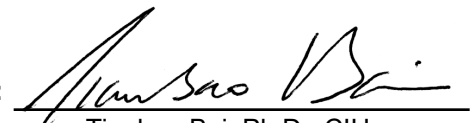
Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST:


Megan Fisher

APPROVED BY:


Tianbao Bai, Ph.D., CIH
Laboratory Director





Turn Around Time:

Send results via: TrevorMarion@Esseltek.com, Nlahiri@esseltek.com,

Tbarazoto@esseltek.com, Tmiller@esseltek.com, Jwarren@esseltek.com

Essel Technology Services, Inc.
 351 California Street, Suite 615
 San Francisco, CA 94104
 Phone: 415-938-7002

④ 17-16942
 A2544519
 A2544522

Zuhr

Chain of Custody Form
 Asbestos/Lead/Mold Bulk Sampling

Project No: ~~17170~~ 17170 Date: 11/10/17 Client Name: SHRA
 Laboratory Submitted To: CEI LABS, Inc
 Relinquished By: Joane Warren Date: 11/10/17 Project Name:
 Print Name:
 Relinquished to: FedEx Date: 11/10/17 Project Location: 521 Eliza Street
 Print Name: 11/13/17 8:40 Sacramento, CA

Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
	521 - FRP - 1	Brown glue associated with Fiber reinforced panels	Bathroom shower enclosure		
	↓ - 2	↓	Kitchen wall behind sink		
	↓ - Vic	Vibration joint cloth	closet hallway Geothermal Pump		
	↓ - Foil	brag Foil	closet hallway Geothermal Pump		

Sampled by:

[Signature]

Date:

11/10/17

Comments:



November 13, 2017

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demo, 421 Eliza St. Sacramento, CA; 17178
CEI LAB CODE: A17-16940

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on November 13, 2017. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any questions, please feel free to call our office at 919-481-1413.

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT

By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demo, 421 Eliza St. Sacramento, CA;
17178

CEI LAB CODE: A17-16940

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 11/13/17

TOTAL SAMPLES ANALYZED: 4

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo, 421 Eliza St.
Sacramento, CA; 17178

CEI LAB CODE: A17-16940

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
421-FRP-1		A2544511	Brown	Glue	None Detected
421-FRP-2		A2544512	Brown	Glue	None Detected
421-VJC-1		A2544513	White	Vibration Cloth	None Detected
421-VJC-2		A2544514	White	Vibration Cloth	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A17-16940
Date Received: 11-13-17
Date Analyzed: 11-13-17
Date Reported: 11-13-17

Project: Twin Rivers Demo, 421 Eliza St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %	
			Fibrous	Non-Fibrous			
421-FRP-1 A2544511	Glue	Homogeneous Brown Non-fibrous Bound	100%	Mastic		None Detected	
421-FRP-2 A2544512	Glue	Homogeneous Brown Non-fibrous Bound	100%	Mastic		None Detected	
421-VJC-1 A2544513	Vibration Cloth	Homogeneous White Fibrous Bound	50%	Fiberglass	50%	Binder	None Detected
421-VJC-2 A2544514	Vibration Cloth	Homogeneous White Fibrous Bound	50%	Fiberglass	50%	Binder	None Detected



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

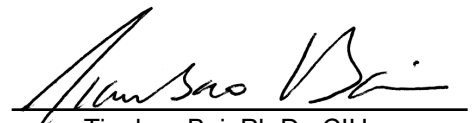
Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST:


Megan Fisher

APPROVED BY:


Tianbao Bai, Ph.D., CIH
Laboratory Director





Turn Around Time:

Send results via: TrevorMarion@Esseltek.com, Nlahiri@esseltek.com,

Tbarazoto@esseltek.com, Tmiller@esseltek.com, Jwarren@esseltek.com

Essel Technology Services, Inc.

351 California Street, Suite 615

San Francisco, CA 94104

Phone: 415-938-7002

24 hr.

(4) A17-16940
A2544511
A2544514

Chain of Custody Form
Asbestos/Lead/Mold Bulk Sampling

Project No: 17178	Date: 11/9/17	Client Name: SHRA
Laboratory Submitted To: CET LABS INC		
Relinquished By: Jamie Warren	Date: 11/10/17	Project Name: Twin Rivers Demo
Print Name:		
Relinquished to: FedEx	Date: 11/12/17	Project Location: 421 Eliza St.
Print Name:	CT 11/13/17 8:40	Sacramento

Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
	421-FRP-1	Brown glue associated with Fiber reinforced Panels	Bath 1 shower enclosure		
	↓ -2	↓	↓		
	N5C-1	White Vibration cloth	Geathermed tank Hallway closet		
	↓ -2	↓	↓		
/					

Sampled by:

Date: 11/10/17

Comments: _____



January 9, 2018

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demolition, 1240 Isabel Street Sacramento, CA
95811; 17178
CEI LAB CODE: A18-0266

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on January 8, 2018. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT

By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demolition, 1240 Isabel Street Sacramento,
CA 95811; 17178

CEI LAB CODE: A18-0266

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 01/09/18

TOTAL SAMPLES ANALYZED: 2

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demolition, 1240 Isabel Street **CEI LAB CODE:** A18-0266
Sacramento, CA 95811; 17178

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1240-FRP-1		A2586253	Tan	Glue	None Detected
1240-FRP-2		A2586254	Gray	Panels-(frp)	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CEI Lab Code: A18-0266
Date Received: 01-08-18
Date Analyzed: 01-09-18
Date Reported: 01-09-18

Project: Twin Rivers Demolition, 1240 Isabel Street Sacramento, CA 95811; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
1240-FRP-1 A2586253	Glue	Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected
1240-FRP-2 A2586254	Panels-(frp)	Heterogeneous Gray Non-fibrous Bound	100%	Binder	None Detected



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

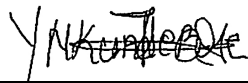
REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

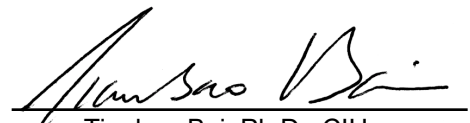
Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST:


Yvette Nkunde-Bose

APPROVED BY:


Tianbao Bai, Ph.D., CIH
Laboratory Director





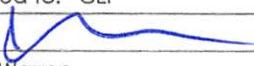
Turn Around Time:

Send results via: TrevorMarion@Esseltek.com, Nlahiri@esseltek.com,
Tbarazoto@esseltek.com, Tmiller@esseltek.com, Jwarren@esseltek.com


Essei Technology Services, Inc
 351 California Street, Suite 615
 San Francisco, CA 94104
 Phone: 415-938-7002

② A18-0266
 A 2586253
 A 2586254

Chain of Custody Form -24HR PLM Asbestos Bulk Sampling

Project No: 17178		Date Sampled: 01/04/18		Client Name: SHRA (Sacramento Housing and Redevelopment Agency)	
Laboratory Submitted To: CEI					
Relinquished By: 		Date: 01/05/18		Project Name: Twin Rivers Demolition	
Print Name: Jaime Warren					
Relinquished to: Via Fedex		Date:		Project Location: 1240 Isabel Street Sacramento, CA 95811	
Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
	1240-FRP-1	Beige Glue Associated with Fiber Reinforced Wall Panels-(FRP)	Kitchen West Wall		
	1240-FRP-2		Bathroom East Wall		

Sampled by:  Date: _____
 Comments: _____

 Accept Samples
 01/18/18 9:10



July 28, 2017

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demo Survey; 1237 Isabel Street Sacramento, CA;
17178
CEI LAB CODE: A17-10576

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on July 26, 2017. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT

By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demo Survey; 1237 Isabel Street
Sacramento, CA; 17178

CEI LAB CODE: A17-10576

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 07/28/17

TOTAL SAMPLES ANALYZED: 18

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo Survey; 1237 Isabel Street Sacramento, CA; 17178

CEI LAB CODE: A17-10576

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1237-SF-1		A2457643	Brown, Terrazo Patterned	Sheet Flooring	None Detected
1237-SF-2		A2457644	Brown, Terrazo Patterned	Sheet Flooring	None Detected
1237-SF-3		A2457645	Brown, Terrazo Patterned	Sheet Flooring	None Detected
1237-DW/JC-1		A2457646	Cream/White	Drywall/Joint Compound	Chrysotile <1%
1237-DW/JC-2		A2457647	Cream/White	Drywall/Joint Compound	Chrysotile <1%
1237-Caulk-1		A2457648	White/Beige	Pipe Caulking	None Detected
1237-Caulk-2		A2457649	White/Beige	Pipe Caulking	None Detected
1237-Enc-1		A2457650	White	Shower Enclosure Material	None Detected
1237-Enc-2		A2457651	White	Shower Enclosure Material	None Detected
1237-Enc-3		A2457652	White	Shower Enclosure Material	None Detected
1237-Adh-1		A2457653	Tan	Adhesive	None Detected
1237-Adh-2		A2457654	Tan	Adhesive	None Detected
1237-Tile-1	Layer 1	A2457655	White	Ceramic Tile	None Detected
	Layer 2	A2457655	Gray	Grout	None Detected
1237-Tile-2	Layer 1	A2457656	White	Ceramic Tile	None Detected
	Layer 2	A2457656	Gray	Grout	None Detected
1237-Tile-3	Layer 1	A2457657	White	Ceramic Tile	None Detected
	Layer 2	A2457657	Gray	Grout	None Detected
1237-Evc-1		A2457658	Gray	Fibrous Wallboard	None Detected
1237-Evc-2		A2457659	Gray	Fibrous Wallboard	None Detected
1237-Evc-3		A2457660	Gray	Fibrous Wallboard	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A17-10576
Date Received: 07-26-17
Date Analyzed: 07-27-17
Date Reported: 07-28-17

Project: Twin Rivers Demo Survey; 1237 Isabel Street Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
1237-SF-1 A2457643	Sheet Flooring	Heterogeneous	10%	Cellulose	50%	Vinyl	None Detected
		Brown,Terrazo	10%	Synthetic Fiber	23%	Binder	
		Patterned	5%	Fiberglass	2%	Mastic	
		Fibrous Bound					
1237-SF-2 A2457644	Sheet Flooring	Heterogeneous	10%	Cellulose	50%	Vinyl	None Detected
		Brown,Terrazo	10%	Synthetic Fiber	23%	Binder	
		Patterned	5%	Fiberglass	2%	Mastic	
		Fibrous Bound					
1237-SF-3 A2457645	Sheet Flooring	Heterogeneous	10%	Cellulose	50%	Vinyl	None Detected
		Brown,Terrazo	10%	Synthetic Fiber	23%	Binder	
		Patterned	5%	Fiberglass	2%	Mastic	
		Fibrous Bound					
1237-DW/JC-1 A2457646	Drywall/Joint Compound	Heterogeneous	15%	Cellulose	5%	Paint	<1% Chrysotile
		Cream/White			15%	Calc Carb	
		Fibrous			65%	Gypsum	
		Bound					
Lab Notes: Chrysotile found present only in Joint Compound; 2%. Chrysotile <1% of overall sample.							
1237-DW/JC-2 A2457647	Drywall/Joint Compound	Heterogeneous	15%	Cellulose	5%	Paint	<1% Chrysotile
		Cream/White			15%	Calc Carb	
		Fibrous			65%	Gypsum	
		Bound					
Lab Notes: Chrysotile found present only in Joint Compound; 2%. Chrysotile <1% of overall sample.							
1237-Caulk-1 A2457648	Pipe Caulking	Heterogeneous	2%	Cellulose	98%	Caulk	None Detected
		White/Beige					
		Fibrous					
		Bound					



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A17-10576
Date Received: 07-26-17
Date Analyzed: 07-27-17
Date Reported: 07-28-17

Project: Twin Rivers Demo Survey; 1237 Isabel Street Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
1237-Caulk-2 A2457649	Pipe Caulking	Heterogeneous White/Beige Fibrous Bound	2%	Cellulose	98%	Caulk	None Detected
1237-Enc-1 A2457650	Shower Enclosure Material	Homogeneous White Fibrous Bound	2%	Cellulose	98%	Binder	None Detected
1237-Enc-2 A2457651	Shower Enclosure Material	Homogeneous White Fibrous Bound	2%	Cellulose	98%	Binder	None Detected
1237-Enc-3 A2457652	Shower Enclosure Material	Homogeneous White Fibrous Bound	2%	Cellulose	98%	Binder	None Detected
1237-Adh-1 A2457653	Adhesive	Homogeneous Tan Fibrous Bound	2%	Cellulose	60% 38%	Binder Calc Carb	None Detected
1237-Adh-2 A2457654	Adhesive	Homogeneous Tan Fibrous Bound	2%	Cellulose	60% 38%	Binder Calc Carb	None Detected
1237-Tile-1 Layer 1 A2457655	Ceramic Tile	Homogeneous White Non-fibrous Bound			60% 40%	Binder Silicates	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A17-10576
Date Received: 07-26-17
Date Analyzed: 07-27-17
Date Reported: 07-28-17

Project: Twin Rivers Demo Survey; 1237 Isabel Street Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
Layer 2 A2457655	Grout	Homogeneous Gray Fibrous Bound	2%	Cellulose	60%	Binder Silicates	None Detected
1237-Tile-2 Layer 1 A2457656	Ceramic Tile	Homogeneous White Non-fibrous Bound			60%	Binder Silicates	None Detected
Layer 2 A2457656	Grout	Homogeneous Gray Fibrous Bound	2%	Cellulose	60%	Binder Silicates	None Detected
1237-Tile-3 Layer 1 A2457657	Ceramic Tile	Homogeneous White Non-fibrous Bound			60%	Binder Silicates	None Detected
Layer 2 A2457657	Grout	Homogeneous Gray Fibrous Bound	2%	Cellulose	60%	Binder Silicates	None Detected
1237-Evc-1 A2457658	Fibrous Wallboard	Heterogeneous Gray Fibrous Bound	60%	Cellulose	5%	Paint Binder	None Detected
1237-Evc-2 A2457659	Fibrous Wallboard	Heterogeneous Gray Fibrous Bound	60%	Cellulose	5%	Paint Binder	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CEI Lab Code: A17-10576
Date Received: 07-26-17
Date Analyzed: 07-27-17
Date Reported: 07-28-17

Project: Twin Rivers Demo Survey; 1237 Isabel Street Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
1237-Evc-3 A2457660	Fibrous Wallboard	Heterogeneous	60%	Cellulose	5%	Paint	None Detected
		Gray			35%	Binder	
		Fibrous					
		Bound					



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

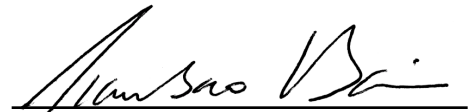
Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST:


Shilpa Ladekar

APPROVED BY:


Tianbao Bai, Ph.D., CIH
Laboratory Director





Turn Around Time: 72 hrs

Send results via: TrevorMarion@Esseltek.com , Nlahiri@esseltek.com,

tBarazoto@esseltek.com, Tmiller@esseltek.com

EsseL Technology Services, Inc.

351 California Street, Suite 615

San Francisco, CA 94104

Phone: 415-938-7002

(18) A77-10.576
A7457643-
A7457660

Chain of Custody Form
Asbestos/Lead/Mold Bulk Sampling

Project No: 17178	Date: 7/23/17	Client Name: SHRA
Laboratory Submitted To: CEF Labs		
Relinquished By: <i>[Signature]</i>	Date: 7/23/17 7/25/17	Project Name: Twin Rivers Demo Survey
Print Name: Trevor Marion		
Relinquished to: A	Date: 7/26/17 9:00	Project Location: 1237 Isabel street Sacramento, CA
Print Name:		

Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
	1237-SF-1	Brown terrazo patterned sheet flooring w/ grey backing & black mastic	Bathroom - floor		
	↓ -2	↓	↓		
	↓ -3	↓	↓		
	1237-DW/PC-1	Composite drywall + joint compound	kitchen - East wall		
	↓ -2	↓	↓		
	1237-caulk-1	white/bridge Pipe Caulking	kitchen - East wall under sink		
	↓ -2	↓	↓		
	1237-Enc-1	white shower enclosure material	Bathroom - Enclosure over tub + shower		
	↓ -2	↓	↓		
	↓ -3	↓	↓		

Sampled by: Trevor Marion

Date: 7/23/17

Comments:

sampled on: 7/20/17

Homogeneous Material Group	Sample Number	Material description	Sample Location
	1237-Adh-1	Tan Adh Adhesive - shower enclosure	Bathroom - on wall behind enclosure
	↓ -2	↓	↓
	1237-tile -1	4x4 white ceramic tile w/ grey grout	Bathroom - on wall behind enclosure
	↓ -2	↓	↓
	↓ -3		
	1237-EVC-1	Grey fibrous wall board	Exterior Eve - west west
	↓ -2	↓	↓ - Northwest
	↓ -3		↓ - Southwest

Relinquished by: Name: Trevor Maxion Signature: *Trevor Maxion* Date: 7/23/17 Time: _____

Received By: Name: _____ Signature: _____ Date: _____ Time: _____



July 28, 2017

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demo Survey; 1233 Isabel Street Sacramento, CA;
17178
CEI LAB CODE: A17-10574

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on July 26, 2017. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demo Survey; 1233 Isabel Street
Sacramento, CA; 17178

CEI LAB CODE: A17-10574

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 07/28/17

TOTAL SAMPLES ANALYZED: 9

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo Survey; 1233 Isabel Street Sacramento, CA; 17178

CEI LAB CODE: A17-10574

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1233-Eve-1		A2457624	Gray	Fibrous Panel	None Detected
1233-Eve-2		A2457625	Gray	Fibrous Panel	None Detected
1233-Eve-3		A2457626	Gray	Fibrous Panel	None Detected
1233-tile-A-1	Layer 1	A2457627A	White	Ceramic Tile	None Detected
	Layer 2	A2457627A	Gray	Grout	None Detected
		A2457627B	White	Mastic	None Detected
1233-tile-A-2	Layer 1	A2457628A	White	Ceramic Tile	None Detected
	Layer 2	A2457628A	Gray	Grout	None Detected
		A2457628B	White	Mastic	None Detected
1233-tile-B-1	Layer 1	A2457629A	Gray	Ceramic Tile	None Detected
	Layer 2	A2457629A	Gray	Grout	None Detected
		A2457629B	Yellow	Mastic	None Detected
1233-tile-B-2	Layer 1	A2457630A	Gray	Ceramic Tile	None Detected
	Layer 2	A2457630A	Gray	Grout	None Detected
		A2457630B	Yellow	Mastic	None Detected
1233-VB-1		A2457631	Black	Vapor Barrier	None Detected
1233-VB-2		A2457632	Black	Vapor Barrier	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A17-10574
Date Received: 07-26-17
Date Analyzed: 07-28-17
Date Reported: 07-28-17

Project: Twin Rivers Demo Survey; 1233 Isabel Street Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
1233-Eve-1 A2457624	Fibrous Panel	Heterogeneous	35%	Cellulose	5%	Paint	None Detected
		Gray			45%	Binder	
		Fibrous			15%	Silicates	
		Bound					
1233-Eve-2 A2457625	Fibrous Panel	Heterogeneous	35%	Cellulose	5%	Paint	None Detected
		Gray			45%	Binder	
		Fibrous			15%	Silicates	
		Bound					
1233-Eve-3 A2457626	Fibrous Panel	Heterogeneous	35%	Cellulose	5%	Paint	None Detected
		Gray			45%	Binder	
		Fibrous			15%	Silicates	
		Bound					
1233-tile-A-1 Layer 1 A2457627A	Ceramic Tile	Heterogeneous			90%	Binder	None Detected
		White			10%	Silicates	
		Non-fibrous Tightly Bound					
Layer 2 A2457627A	Grout	Heterogeneous			40%	Binder	None Detected
		Gray			60%	Silicates	
		Non-fibrous Bound					
A2457627B	Mastic	Heterogeneous			100%	Mastic	None Detected
1233-tile-A-2 Layer 1 A2457628A	Ceramic Tile	Heterogeneous			90%	Binder	None Detected
		White			10%	Silicates	
		Non-fibrous					
		Tightly Bound					



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A17-10574
Date Received: 07-26-17
Date Analyzed: 07-28-17
Date Reported: 07-28-17

Project: Twin Rivers Demo Survey; 1233 Isabel Street Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
Layer 2 A2457628A	Grout	Heterogeneous Gray Non-fibrous Bound	40%	Binder 60% Silicates	None Detected
A2457628B	Mastic	Heterogeneous White Non-fibrous Bound	100%	Mastic	None Detected
1233-tile-B-1 Layer 1 A2457629A	Ceramic Tile	Heterogeneous Gray Non-fibrous Tightly Bound	75% 25%	Binder Silicates	None Detected
Layer 2 A2457629A	Grout	Heterogeneous Gray Non-fibrous Bound	40% 60%	Binder Silicates	None Detected
A2457629B	Mastic	Heterogeneous Yellow Non-fibrous Bound	100%	Mastic	None Detected
1233-tile-B-2 Layer 1 A2457630A	Ceramic Tile	Heterogeneous Gray Non-fibrous Tightly Bound	75% 25%	Binder Silicates	None Detected
Layer 2 A2457630A	Grout	Heterogeneous Gray Non-fibrous Bound	40% 60%	Binder Silicates	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A17-10574
Date Received: 07-26-17
Date Analyzed: 07-28-17
Date Reported: 07-28-17

Project: Twin Rivers Demo Survey; 1233 Isabel Street Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
A2457630B	Mastic	Heterogeneous Yellow Non-fibrous Bound	100%	Mastic	None Detected
1233-VB-1 A2457631	Vapor Barrier	Heterogeneous Black Fibrous Bound	30%	Fiberglass 65% Tar 5% Silicates	None Detected
1233-VB-2 A2457632	Vapor Barrier	Heterogeneous Black Fibrous Bound	30%	Fiberglass 65% Tar 5% Silicates	None Detected



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

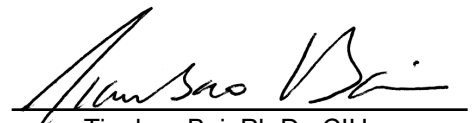
Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST: _____


Greg Ruff

APPROVED BY: _____


Tianbao Bai, Ph.D., CIH
Laboratory Director





Turn Around Time: 72 hrs

Send results via: TrevorMarion@Esseltek.com, Nlahiri@esseltek.com,

Barazoto@esseltek.com, Tmiller@esseltek.com

Essel Technology Services, Inc.

351 California Street, Suite 615

San Francisco, CA 94104

Phone: 415-938-7002

9 A7.10.574
A7457627.
A7457632

Chain of Custody Form
Asbestos/Lead/Mold Bulk Sampling

Project No: 17178	Date: 7/23/17	Client Name: SARA
Laboratory Submitted To: CEI labs		
Relinquished By: <i>J. Miller</i>	Date: 7/23/17 7/25/17	Project Name: Twin Rivers Demo Survey
Print Name: Trevor Marion		
Relinquished to: A	Date: 7/26/17 9:00	Project Location: 1233 Isabel street Sacramento, CA
Print Name:		

Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
	1233-Evc-1	Grey fibrous Panel	Exterior - West above front door		
	↓ -2	↓	Exterior - NW corner		
	↓ -3	↓	Exterior - SW corner		
	1233-tile-A-	White 4x4 ceramic tile w/ grey grout	Bathroom - wall		
	↓ -2	↓	↓		
	1233-tile-B-1	Grey 2x2 ceramic tile w/ grey grout	Bathroom - floor		
	↓ -2	↓	Bathroom - floor		
	1233-VB-1	Black vapor barrier	Bathroom - behind 4x4 tiles		
	1233-VB-2	↓	↓		

Sampled by: Trevor Marion

Date: 7/23/17

Comments:

Sampled: 7/20/17



November 10, 2017

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demo Survey; 1234 Isabel St. Sacramento, CA;
17178
CEI LAB CODE: A17-15997

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on November 10, 2017. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demo Survey; 1234 Isabel St. Sacramento,
CA; 17178

CEI LAB CODE: A17-15997

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 11/10/17

TOTAL SAMPLES ANALYZED: 6

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo Survey; 1234 Isabel St. **CEI LAB CODE:** A17-15997
 Sacramento, CA; 17178

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1234-Eave-1		A2542378	Gray	Ceiling Panel	None Detected
1234-Eave-2		A2542379	Gray	Ceiling Panel	None Detected
1234-FRP-A-1	Layer 1	A2542380	White,Brown	Fiber Panel	None Detected
	Layer 2	A2542380	Tan	Glue	None Detected
1234-FRP-A-2	Layer 1	A2542381	White,Brown	Fiber Panel	None Detected
	Layer 2	A2542381	Tan	Glue	None Detected
1234-FRP-B-1	Layer 1	A2542382	White,Brown	Fiber Panel	None Detected
	Layer 2	A2542382	Clear	Glue	None Detected
1234-FRP-B-2	Layer 1	A2542383	White,Brown	Fiber Panel	None Detected
	Layer 2	A2542383	Clear	Glue	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A17-15997
Date Received: 11-10-17
Date Analyzed: 11-10-17
Date Reported: 11-10-17

Project: Twin Rivers Demo Survey; 1234 Isabel St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
1234-Eave-1 A2542378	Ceiling Panel	Heterogeneous	80%	Cellulose	10%	Binder	None Detected
		Gray			10%	Paint	
		Fibrous Bound					
1234-Eave-2 A2542379	Ceiling Panel	Heterogeneous	80%	Cellulose	10%	Binder	None Detected
		Gray			10%	Paint	
		Fibrous Bound					
1234-FRP-A-1 Layer 1 A2542380	Fiber Panel	Heterogeneous	70%	Cellulose	10%	Paint	None Detected
		White,Brown			20%	Binder	
		Non-fibrous Bound					
Layer 2 A2542380	Glue	Homogeneous			100%	Mastic	None Detected
		Tan Non-fibrous Bound					
1234-FRP-A-2 Layer 1 A2542381	Fiber Panel	Heterogeneous	70%	Cellulose	10%	Paint	None Detected
		White,Brown			20%	Binder	
		Non-fibrous Bound					
Layer 2 A2542381	Glue	Homogeneous			100%	Mastic	None Detected
		Tan Non-fibrous Bound					
1234-FRP-B-1 Layer 1 A2542382	Fiber Panel	Heterogeneous	70%	Cellulose	10%	Paint	None Detected
		White,Brown			20%	Binder	
		Non-fibrous Bound					



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A17-15997
Date Received: 11-10-17
Date Analyzed: 11-10-17
Date Reported: 11-10-17

Project: Twin Rivers Demo Survey; 1234 Isabel St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
Layer 2 A2542382	Glue	Homogeneous Clear Non-fibrous Bound	100%	Mastic	None Detected
1234-FRP-B-2 Layer 1 A2542383	Fiber Panel	Heterogeneous White,Brown Non-fibrous Bound	70%	Cellulose 10% Paint 20% Binder	None Detected
Layer 2 A2542383	Glue	Homogeneous Clear Non-fibrous Bound	100%	Mastic	None Detected



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST: Adriana de la Nuez
Adriana de la Nuez

APPROVED BY: Tianbao Bai
Tianbao Bai, Ph.D., CIH
Laboratory Director





Turn Around Time: 24hrs

Send results via: TrevorMarion@Esseltek.com, Nlahiri@esseltek.com,
Tbarazoto@esseltek.com, Tmiller@esseltek.com, Jwarren@esseltek.com

Essel Technology Services, Inc.
 351 California Street, Suite 615
 San Francisco, CA 94104
 Phone: 415-938-7002

⑥ A17-15.997
 A2542378
 A2542383

Chain of Custody Form
 Asbestos/Lead/Mold Bulk Sampling

Project No: 17178	Date: 11/9/17	Client Name: SHRA
Laboratory Submitted To: LED		
Relinquished By: JM	Date: 11/9/17	Project Name: Twin Rivers Demo
Print Name: Trevor Marion		Surrey
Relinquished to:	Date: 11/10/17 8:50	Project Location: 1234 Isabel St
Print Name:		Sacramento, CA

Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
	1234-Eave-1	Grey fibrous ceiling panel	Above front door		
	-2	↓	Above front door		
	1234-FRP-A-1	White Painted brown fiber panel w/ tan glue	Bathroom-shower enclosure		
	f -2	↓	↓		
	FRP-B-1	White Painted brown fiber panel w/ clear glue	Kitchen above sink		
	↓ -2	↓	↓		

Sampled by: Trevor Marion

Date: 11/9/17

Comments: _____



November 10, 2017

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demo Survey; 1227 Isabel St. Sacramento, CA;
17178
CEI LAB CODE: A17-15996

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on November 10, 2017. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demo Survey; 1227 Isabel St. Sacramento,
CA; 17178

CEI LAB CODE: A17-15996

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 11/10/17

TOTAL SAMPLES ANALYZED: 4

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo Survey; 1227 Isabel St. **CEI LAB CODE:** A17-15996
Sacramento, CA; 17178

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1227-Eave-1		A2542374	Gray	Ceiling Panel	None Detected
1227-Eave-2		A2542375	Gray	Ceiling Panel	None Detected
1227-CT-1		A2542376	Off-white	Ceramic Tile With Associated Bedding	None Detected
1227-CT-2		A2542377	Off-white	Ceramic Tile With Associated Bedding	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A17-15996
Date Received: 11-10-17
Date Analyzed: 11-10-17
Date Reported: 11-10-17

Project: Twin Rivers Demo Survey; 1227 Isabel St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
1227-Eave-1 A2542374	Ceiling Panel	Heterogeneous	80%	Cellulose	10%	Paint	None Detected
		Gray			10%	Binder	
		Fibrous					
		Bound					
1227-Eave-2 A2542375	Ceiling Panel	Heterogeneous	80%	Cellulose	10%	Paint	None Detected
		Gray			10%	Binder	
		Fibrous					
		Bound					
1227-CT-1 A2542376	Ceramic Tile With Associated Bedding	Heterogeneous			80%	Silicates	None Detected
		Off-white			20%	Binder	
		Non-fibrous					
		Tightly Bound					
1227-CT-2 A2542377	Ceramic Tile With Associated Bedding	Heterogeneous			80%	Silicates	None Detected
		Off-white			20%	Binder	
		Non-fibrous					
		Tightly Bound					



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST: Adriana de la Nuez
Adriana de la Nuez

APPROVED BY: Tianbao Bai
Tianbao Bai, Ph.D., CIH
Laboratory Director





Turn Around Time: 24 hr

Send results via: TrevorMarion@Esseltek.com, Nlahiri@esseltek.com,

Tbarazoto@esseltek.com, Tmiller@esseltek.com, Jwarren@esseltek.com

Essel Technology Services, Inc.

351 California Street, Suite 615

San Francisco, CA 94104

Phone: 415-938-7002

(4) A7.15 996
A2542374
A2542377

Chain of Custody Form
Asbestos/Lead/Mold Bulk Sampling

Project No: 17178	Date: 11/9/17	Client Name: OTRA
Laboratory Submitted To: CEI		
Relinquished By: Zm Trevor Marion	Date: 11/9/17	Project Name: Twin Rivers Demo Survey
Relinquished to: (C)	Date: 11/10/17 8:50	Project Location: 1227 Isabel St Sacramento, CA
Print Name:		

Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
	1227-Eave-1	Grey fibrous Ceiling Panel	Above front entrance		
	1227-Eave-2	↓	↓		
	1227-CT-1	Offwhite 4x4 Ceramic wall tile w/ associated bedding	bathroom-shower wall		
	1227-CT-2		↓		

Sampled by: Trevor Marion

Date: 11/9/17

Comments: _____



January 8, 2018

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demolition; 1226 Isabel Street Sacramento, CA
95811; 17178
CEI LAB CODE: A18-0268

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on January 8, 2018. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT

By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demolition; 1226 Isabel Street Sacramento,
CA 95811; 17178

CEI LAB CODE: A18-0268

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 01/08/18

TOTAL SAMPLES ANALYZED: 4

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demolition; 1226 Isabel Street **CEI LAB CODE:** A18-0268
Sacramento, CA 95811; 17178

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1226-DW/JC-1		A2586259	White	Drywall/ Joint Compound Composite	Chrysotile <1%
1226-DW/JC-2		A2586260	White	Drywall/ Joint Compound Composite	None Detected
1226-FRP-1		A2586261	Yellow	Glue	None Detected
1226-FRP-2		A2586262	Yellow	Glue	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A18-0268
Date Received: 01-08-18
Date Analyzed: 01-08-18
Date Reported: 01-08-18

Project: Twin Rivers Demolition; 1226 Isabel Street Sacramento, CA 95811; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
1226-DW/JC -1 A2586259	Drywall/ Joint	Heterogeneous	20%	Cellulose	40%	Gypsum	<1% Chrysotile
	Compound Composite	White			25%	Silicates	
		Fibrous			15%	Calc Carb	
		Bound					
Lab Notes: Joint Compound has 2% Chrysotile. Chrysotile is <1% of overall sample.							
1226-DW/JC -2 A2586260	Drywall/ Joint	Heterogeneous	20%	Cellulose	40%	Gypsum	None Detected
	Compound Composite	White			25%	Silicates	
		Fibrous			15%	Calc Carb	
		Bound					
1226-FRP-1 A2586261	Glue	Heterogeneous	<1%	Cellulose	100%	Mastic	None Detected
		Yellow					
		Fibrous					
		Bound					
1226-FRP-2 A2586262	Glue	Heterogeneous	<1%	Cellulose	100%	Mastic	None Detected
		Yellow					
		Fibrous					
		Bound					



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST:

Saithya Paikal

APPROVED BY:

Tianbao Bai, Ph.D., CIH
Laboratory Director






Turn Around Time:

Send results via: TrevorMarion@Esseltek.com, Nlahiri@esseltek.com,
Tbarazoto@esseltek.com, Tmiller@esseltek.com, Jwarren@esseltek.com

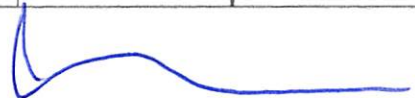
Essel Technology Services, Inc.
 351 California Street, Suite 615
 San Francisco, CA 94104
 Phone: 415-938-7002

④ A18-0268
 A2586259
 A2586262

Chain of Custody Form -24HR PLM Asbestos Bulk Sampling

Project No: 17178		Date Sampled: 01/04/18	Client Name: SHRA (Sacramento Housing and Redevelopment Agency)		
Laboratory Submitted To: CEI					
Relinquished By: 		Date: 01/05/18	Project Name: Twin Rivers Demolition		
Print Name: Jaime Warren					
Relinquished to: Via Fedex		Date:	Project Location: 1226 Isabel Street Sacramento, CA 95811		
Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
	1226-DW/JC-1	Drywall/Joint compound Composite	Kitchen West Wall (Behind FRP)		
	1226-DW/JC-2		Bathroom East Wall (Behind FRP)		
	1226-FRP-1	Beige Glue Associated with Fiber Reinforced Wall Panels-(FRP)	Kitchen West Wall		
	1226-FRP-2		Bathroom East Wall		

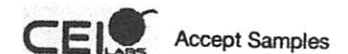
Sampled by:



Date:

1/5/18

Comments:



④ 1/8/18 9:10



January 11, 2018

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demolition; 1226 Isabel Street Sacramento, CA
95811; 17178
CEI LAB CODE: A18-0268.1

Dear Customer:

Enclosed are asbestos analysis results for PLM bulk samples received at our laboratory on January 10, 2018. The samples were analyzed for asbestos using polarized light microscopy (PLM) point count per the EPA 600 Method.

Sample results containing > 1% asbestos are considered asbestos-containing materials (ACMs) per the EPA regulatory requirements. The detection limit for the EPA 600 method is 0.25% for 400 point counts, or 0.1% for 1,000 point counts.

Thank you for your business and we look forward to continuing good relations. If you have any questions, please feel free to call our office at 919-481-1413.

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demolition; 1226 Isabel Street Sacramento,
CA 95811; 17178

CEI LAB CODE: A18-0268.1

TEST METHOD: PLM Point Count
EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 01/11/18

TEL: 866-481-1412

www.ceilabs.com



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CEI Lab Code: A18-0268.1
Date Received: 01-10-18
Date Analyzed: 01-10-18
Date Reported: 01-11-18

Project: Twin Rivers Demolition; 1226 Isabel Street Sacramento, CA 95811; 17178

ASBESTOS POINT COUNT PLM, EPA 600 METHOD

Client ID	Lab ID	Material Description	POINTS		ASBESTOS	
			Total	Asbestos	%	
1226/DW/JC -1	A2586259	Joint Compound	1000	10	1%	Chrysotile
	A2586259	Drywall/Joint Compound (Composite Result from Point Count)	1000		0.1	Chrysotile

Lab Notes: (1*10)/100 (Joint compound is 10% of overall sample.)



LEGEND: None

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: 0.25% by 400 points or 0.1% by 1,000 points

REGULATORY LIMIT: >1% by weight

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. Estimated measurement of uncertainty is available on request. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST: _____

A handwritten signature in black ink, appearing to read "Saithya Painkal", written over a horizontal line.

Saithya Painkal

APPROVED BY: _____

A handwritten signature in black ink, appearing to read "Tianbao Bai", written over a horizontal line.

Tianbao Bai, Ph.D., CIH
Laboratory Director



CEI Labs

From: Tyler Barazoto <tbarazoto@esseltek.com>
Sent: Wednesday, January 10, 2018 1:53 PM
To: CEI Labs
Subject: Re: Laboratory Report for Twin Rivers Demolition; 1226 Isabel Street Sacramento, CA 95811; 17178 (A18-0268)

Lets proceed with the 1000 point count for now. I will discuss with my supervisor about doing 400 over 1000 in the future.

Thanks,
Tyler

On Wed, Jan 10, 2018 at 10:10 AM, CEI Labs <asbestos@ceilabs.com> wrote:

Hi again,

After looking at the samples, we can definitely do a 400 Point Count and that would give you adequate results as opposed to the 1000 PC which is more expensive. We can still go ahead with the 1000 PC if you like, we just wanted you to know your options. Let us know!

-Kassidy

From: Tyler Barazoto [mailto:tbarazoto@esseltek.com]
Sent: Wednesday, January 10, 2018 11:45 AM
To: CEI Labs <asbestos@ceilabs.com>

Subject: Re: Laboratory Report for Twin Rivers Demolition; [1226 Isabel Street Sacramento, CA 95811; 17178 \(A18-0268\)](#)

Yes that is sufficient. 24 hour TAT please.

On Wed, Jan 10, 2018 at 5:48 AM, CEI Labs <asbestos@ceilabs.com> wrote:

Hi there,

We are able to do a 1000 PLM Point Count, is that sufficient? If so, what TAT would you like?

-Kassidy

From: Tyler Barazoto [mailto:tbarazoto@esseltek.com]

Sent: Tuesday, January 9, 2018 7:32 PM

To: CEI Labs <asbestos@ceilabs.com>

Cc: nlahiri@esseltek.com; trevormarion@esseltek.com; tmiller@esseltek.com; jwarren@esseltek.com

Subject: Re: Laboratory Report for Twin Rivers Demolition; [1226 Isabel Street Sacramento, CA 95811](#); 17178 (A18-0268)

Could we get the sample that came back at < 1% 1200 PLM point counted?

Thank you,

Tyler Barazoto

On Mon, Jan 8, 2018 at 1:00 PM, CEI Labs <asbestos@ceilabs.com> wrote:

Attached is the laboratory report for your recently submitted samples. Please print out a copy for your records.

We appreciate your business,

CEI Labs, Inc.
[\(866\) 481-1412](tel:(866)481-1412)

The contents contained in this email are confidential and legally protected. If you happen to receive this email in error, please call our office and delete immediately.

--

Tyler Barazoto
Operations & Project Manager

Essel Environmental Consulting

Environmental Health & Safety Engineering

San Francisco, CA

[\(415\) 374-9090](tel:(415)374-9090) Phone

www.EsselTek.com
TBarazoto@EsselTek.com

--

Tyler Barazoto
Operations & Project Manager

Essel Environmental Consulting

Environmental Health & Safety Engineering

San Francisco, CA

[\(415\) 374-9090](tel:(415)374-9090) Phone

www.EsselTek.com
TBarazoto@EsselTek.com

--

Tyler Barazoto
Operations & Project Manager
Essel Environmental Consulting
Environmental Health & Safety Engineering
San Francisco, CA
(415) 374-9090 Phone
www.EsselTek.com
TBarazoto@EsselTek.com



January 11, 2018

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demo Survey, 1214 Isabel St. Sacramento, CA;
17178
CEI LAB CODE: A18-0518

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on January 10, 2018. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demo Survey, 1214 Isabel St. Sacramento,
CA; 17178

CEI LAB CODE: A18-0518

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 01/11/18

TOTAL SAMPLES ANALYZED: 10

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo Survey, 1214 Isabel St. **CEI LAB CODE:** A18-0518
 Sacramento, CA; 17178

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1214-FP-1		A2590309	White,Tan	Ceiling Panel	None Detected
1214-FP-2		A2590310	White,Tan	Ceiling Panel	None Detected
1214-CWT-A-1	Layer 1	A2590311	White	Ceramic Wall Tile	None Detected
	Layer 2	A2590311	White	Grout	None Detected
	Layer 3	A2590311	Gray	Grout	None Detected
1214-CWT-A-2	Layer 1	A2590312	White	Ceramic Wall Tile	None Detected
	Layer 2	A2590312	White	Grout	None Detected
	Layer 3	A2590312	Gray	Grout	None Detected
	Layer 4	A2590312	Tan	Bedding	None Detected
1214-CWT-A-3	Layer 1	A2590313A	White	Ceramic Tile Grout	None Detected
	Layer 2	A2590313A	Gray	Ceramic Tile Grout	None Detected
	Layer 1	A2590313B	Black	Ceramic Tile Glue	None Detected
	Layer 2	A2590313B	Tan	Ceramic Tile Bedding	None Detected
	Layer 3	A2590313B	White	Mud Compound	None Detected
1214-CWT-A-4		A2590314A	Gray	Ceramic Tile Grout	None Detected
	Layer 1	A2590314B	Black	Ceramic Tile Glue	None Detected
	Layer 2	A2590314B	Tan	Ceramic Tile Bedding	None Detected
	Layer 3	A2590314B	White	Mud Compound	None Detected
1214-CFT-1	Layer 1	A2590315A	White	Ceramic Tile	None Detected
	Layer 2	A2590315A	White	Ceramic Tile Grout	None Detected
	Layer 3	A2590315A	Gray	Ceramic Tile Grout	None Detected
		A2590315B	Black	Ceramic Tile Glue	None Detected
1214-CFT-2	Layer 1	A2590316	White	Ceramic Tile	None Detected
	Layer 2	A2590316	White	Ceramic Tile Grout	None Detected
	Layer 3	A2590316	Gray	Ceramic Tile Grout	None Detected
1214-CWT-B-1	Layer 1	A2590317A	White	Ceramic Tile	None Detected
	Layer 2	A2590317A	White	Ceramic Grout	None Detected
	Layer 1	A2590317B	Red	Ceramic Tile Glue	None Detected
	Layer 2	A2590317B	Tan	Ceramic Tile Bedding	None Detected
1214-CWT-B-2	Layer 1	A2590318A	White	Ceramic Tile	None Detected
	Layer 2	A2590318A	White	Ceramic Grout	None Detected



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo Survey, 1214 Isabel St. **CEI LAB CODE:** A18-0518
Sacramento, CA; 17178

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
	Layer 1	A2590318B	Red	Ceramic Tile Glue	None Detected
	Layer 2	A2590318B	Tan	Ceramic Tile Bedding	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A18-0518
Date Received: 01-10-18
Date Analyzed: 01-11-18
Date Reported: 01-11-18

Project: Twin Rivers Demo Survey, 1214 Isabel St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
1214-FP-1 A2590309	Ceiling Panel	Heterogeneous	35%	Cellulose	45%	Binder	None Detected
		White, Tan			15%	Silicates	
		Fibrous			5%	Paint	
		Loosely Bound					
1214-FP-2 A2590310	Ceiling Panel	Heterogeneous	35%	Cellulose	45%	Binder	None Detected
		White, Tan			15%	Silicates	
		Fibrous			5%	Paint	
		Loosely Bound					
1214-CWT-A-1 Layer 1 A2590311	Ceramic Wall Tile	Heterogeneous			55%	Binder	None Detected
		White			45%	Silicates	
		Non-fibrous Bound					
Layer 2 A2590311	Grout	Heterogeneous			55%	Binder	None Detected
		White			45%	Silicates	
		Non-fibrous Bound					
Layer 3 A2590311	Grout	Heterogeneous			55%	Binder	None Detected
		Gray			45%	Silicates	
		Non-fibrous Bound					
1214-CWT-A-2 Layer 1 A2590312	Ceramic Wall Tile	Heterogeneous			55%	Binder	None Detected
		White			45%	Silicates	
		Non-fibrous Bound					
Layer 2 A2590312	Grout	Heterogeneous			55%	Binder	None Detected
		White			45%	Silicates	
		Non-fibrous Bound					



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A18-0518
Date Received: 01-10-18
Date Analyzed: 01-11-18
Date Reported: 01-11-18

Project: Twin Rivers Demo Survey, 1214 Isabel St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
Layer 3 A2590312	Grout	Heterogeneous Gray Non-fibrous Bound	55%	Binder Silicates	None Detected
Layer 4 A2590312	Bedding	Heterogeneous Tan Fibrous Bound	<1%	Cellulose 65% 35% Silicates	None Detected
1214-CWT-A-3 Layer 1 A2590313A	Ceramic Tile Grout	Heterogeneous White Non-fibrous Bound	55%	Binder Silicates	None Detected
Layer 2 A2590313A	Ceramic Tile Grout	Heterogeneous Gray Non-fibrous Bound	55%	Binder Silicates	None Detected
Layer 1 A2590313B	Ceramic Tile Glue	Heterogeneous Black Non-fibrous Bound	100%	Mastic	None Detected
Layer 2 A2590313B	Ceramic Tile Bedding	Heterogeneous Tan Fibrous Bound	<1%	Cellulose 65% 35% Silicates	None Detected
Layer 3 A2590313B	Mud Compound	Heterogeneous White Non-fibrous Bound	35%	Binder Calc Carb	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A18-0518
Date Received: 01-10-18
Date Analyzed: 01-11-18
Date Reported: 01-11-18

Project: Twin Rivers Demo Survey, 1214 Isabel St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
1214-CWT-A-4 A2590314A	Ceramic Tile Grout	Heterogeneous	55%	Binder	None Detected
		Gray	45%	Silicates	
		Non-fibrous			
		Bound			
Layer 1 A2590314B	Ceramic Tile Glue	Heterogeneous Black Non-fibrous Bound	100%	Mastic	None Detected
Layer 2 A2590314B	Ceramic Tile Bedding	Heterogeneous Tan Fibrous Bound	<1%	Cellulose 65% Binder 35% Silicates	None Detected
Layer 3 A2590314B	Mud Compound	Heterogeneous White Non-fibrous Bound	35%	Binder 65% Calc Carb	None Detected
1214-CFT-1 Layer 1 A2590315A	Ceramic Tile	Heterogeneous	55%	Binder	None Detected
		White	45%	Silicates	
		Non-fibrous Bound			
Layer 2 A2590315A	Ceramic Tile Grout	Heterogeneous White Non-fibrous Bound	55%	Binder 45% Silicates	None Detected
Layer 3 A2590315A	Ceramic Tile Grout	Heterogeneous Gray Non-fibrous Bound	55%	Binder 45% Silicates	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A18-0518
Date Received: 01-10-18
Date Analyzed: 01-11-18
Date Reported: 01-11-18

Project: Twin Rivers Demo Survey, 1214 Isabel St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
A2590315B	Ceramic Tile Glue	Heterogeneous Black Non-fibrous Bound	100%	Mastic	None Detected
1214-CFT-2 Layer 1 A2590316	Ceramic Tile	Heterogeneous White Non-fibrous Bound	55% 45%	Binder Silicates	None Detected
Lab Notes: No glue present.					
Layer 2 A2590316	Ceramic Tile Grout	Heterogeneous White Non-fibrous Bound	55% 45%	Binder Silicates	None Detected
Layer 3 A2590316	Ceramic Tile Grout	Heterogeneous Gray Non-fibrous Bound	55% 45%	Binder Silicates	None Detected
1214-CWT-B-1 Layer 1 A2590317A	Ceramic Tile	Heterogeneous White Non-fibrous Bound	55% 45%	Binder Silicates	None Detected
Layer 2 A2590317A	Ceramic Grout	Heterogeneous White Non-fibrous Bound	55% 45%	Binder Silicates	None Detected
Layer 1 A2590317B	Ceramic Tile Glue	Heterogeneous Red Non-fibrous Bound	100%	Mastic	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A18-0518
Date Received: 01-10-18
Date Analyzed: 01-11-18
Date Reported: 01-11-18

Project: Twin Rivers Demo Survey, 1214 Isabel St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %	
			Fibrous	Non-Fibrous			
Layer 2 A2590317B	Ceramic Tile Bedding	Heterogeneous Tan Fibrous Bound	35%	Cellulose	50% Binder	15% Silicates	None Detected
1214-CWT-B-2 Layer 1 A2590318A	Ceramic Tile	Heterogeneous White Non-fibrous Bound			55% Binder	45% Silicates	None Detected
Layer 2 A2590318A	Ceramic Grout	Heterogeneous White Non-fibrous Bound			55% Binder	45% Silicates	None Detected
Layer 1 A2590318B	Ceramic Tile Glue	Heterogeneous Red Non-fibrous Bound			100% Mastic		None Detected
Layer 2 A2590318B	Ceramic Tile Bedding	Heterogeneous Tan Fibrous Bound	35%	Cellulose	50% Binder	15% Silicates	None Detected



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST: _____

Megan Rumble
Megan Rumble

APPROVED BY: _____

Tianbao Bai
Tianbao Bai, Ph.D., CIH
Laboratory Director





Turn Around Time: 24hr

Send results via: TrevorMarion@Esseltek.com, Nlahiri@esseltek.com,

Tbarazoto@esseltek.com, Tmiller@esseltek.com, Jwarren@esseltek.com

EsseL Technology Services, Inc.
351 California Street, Suite 615
San Francisco, CA 94104
Phone: 415-938-7002

⑩ A18-0518
A 2590309
A 2590318

Chain of Custody Form
Asbestos/Lead/Mold Bulk Sampling

Project No: 17178	Date: 1/6/2018	Client Name: SHRA
Laboratory Submitted To: CEI		
Relinquished By: <u>Trevor Marion</u>	Date: 1/6/18	Project Name: Twin Rivers Demo Survey
Print Name: Trevor Marion		
Relinquished to:	Date:	Project Location: 1214 Isabel St.
Print Name:		Sacramento, CA

Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
	1214-FP-1	Grey fibrous ceiling Panel	Above front door on eave		
	1214-FP-2	↓	↓		
	1214-CWT-A-1	White w/ small size specks 4x4 ceramic wall tile w/ grout	Bathroom #1 shower wall		
	-2	↓	↓		
	-3	Grey + black ceramic tile bedding			
	-4	↓	↓		
	1214-CFT-1	Grey 1x1 ceramic floor tile w/ grout and glue	Bathroom #1 - floor		
	-2	↓	↓		
	1214-CWT-B-1	White 4x4 ceramic wall tile w/ grout + bedding	Bathroom #2 - shower wall		
	-2	↓	↓		

Sampled by: Trevor Marion

Date: 1/6/18

Comments: _____

CEI LABS Accept Samples

Go 1/10/18 gmo



January 11, 2018

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demo Survey, 1211 Isabel Street Sacramento, CA;
17178
CEI LAB CODE: A18-0512

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on January 10, 2018. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT

By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demo Survey, 1211 Isabel Street
Sacramento, CA; 17178

CEI LAB CODE: A18-0512

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 01/11/18

TOTAL SAMPLES ANALYZED: 2

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo Survey, 1211 Isabel Street Sacramento, CA; 17178

CEI LAB CODE: A18-0512

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1211-CFT	Layer 1	A2590281A	Gray,White	Ceramic Floor Tile	None Detected
	Layer 2	A2590281A	White	Mortar	None Detected
	Layer 1	A2590281B	Beige	Glue	None Detected
	Layer 2	A2590281B	Black	Glue	None Detected
1211-CWT	Layer 1	A2590282A	Off-white	Ceramic Floor Tile	None Detected
	Layer 2	A2590282A	Gray	Mortar	None Detected
		A2590282B	Black	Glue	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A18-0512
Date Received: 01-10-18
Date Analyzed: 01-11-18
Date Reported: 01-11-18

Project: Twin Rivers Demo Survey, 1211 Isabel Street Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
1211-CFT Layer 1 A2590281A	Ceramic Floor Tile	Heterogeneous	85%	Binder	None Detected
		Gray, White Non-fibrous Tightly Bound	15%	Silicates	
Layer 2 A2590281A	Mortar	Heterogeneous	35%	Binder	None Detected
		White Non-fibrous Bound	65%	Silicates	
Layer 1 A2590281B	Glue	Homogeneous Beige Non-fibrous Bound	100%	Mastic	None Detected
Layer 2 A2590281B	Glue	Homogeneous Black Non-fibrous Bound	100%	Mastic	None Detected
1211-CWT Layer 1 A2590282A	Ceramic Floor Tile	Heterogeneous	85%	Binder	None Detected
		Off-white Non-fibrous Bound	15%	Silicates	
Layer 2 A2590282A	Mortar	Heterogeneous	35%	Binder	None Detected
		Gray Non-fibrous Bound	65%	Silicates	
A2590282B	Glue	Homogeneous Black Non-fibrous Bound	100%	Mastic	None Detected

Lab Notes: No beige glue present.



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
 Non-Trem = Non-Asbestiform Tremolite
 Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation


REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST: 
Taylor B. Metcalf

APPROVED BY: 
Tianbao Bai, Ph.D., CIH
Laboratory Director





Turn Around Time:

Send results via: TrevorMarion@Esseltek.com, Nlahiri@esseltek.com,
Tbarazoto@esseltek.com, Tmiller@esseltek.com, Jwarren@esseltek.com

Essel Technology Services, Inc.
 351 California Street, Suite 615
 San Francisco, CA 94104
 Phone: 415-938-7002

② A18-0512
 A2590281
 A2590282

24hr

Chain of Custody Form
 Asbestos/Lead/Mold Bulk Sampling

Project No: 17179		Date: 11/8/18	Client Name: SHRA		
Laboratory Submitted To: CEI			Project Name: Twin Rivers Demo Survey		
Relinquished By: Jamie Warren		Date:	Project Location: 1211 Isabel Street		
Print Name: <u>Jamie Warren</u>		Date:	Sacramento, CA		
Relinquished to:		Date:			
Print Name:					
Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
	1211 - CFT	2x2' light grey ceramic floor tile with associated white mortar and beige glue	Bathroom floor @ entrance		
	1211 - CWT	4x4" off white ceramic wall tile with associated white mortar and beige glue and gray mortar bed	Bathroom wall 5.		

Sampled by: Jamie Warren

Date: 11/9/18

CEI LABS Accept Samples
 C- 11/10/18 9:20



December 8, 2017

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demo Survey-Asbestos, 1207 Richards St.,
Sacramento, CA; 17178
CEI LAB CODE: A17-18299

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on December 7, 2017. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demo Survey-Asbestos, 1207 Richards St.,
Sacramento, CA; 17178

CEI LAB CODE: A17-18299

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 12/08/17

TOTAL SAMPLES ANALYZED: 6

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo Survey-Asbestos, 1207 **CEI LAB CODE:** A17-18299
 Richards St., Sacramento, CA; 17178

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1207-FRP-1	Layer 1	A2565116	Tan	Brown Fiber Reinforced Panel	None Detected
	Layer 2	A2565116	Yellow	Brown Fiber Reinforced Panel (mastic)	None Detected
	Layer 3	A2565116	Yellow	Brown Fiber Reinforced Panel (sheet Rock)	None Detected
1207-FRP-2	Layer 1	A2565117	Tan	Brown Fiber Reinforced Panel	None Detected
	Layer 2	A2565117	Yellow	Brown Fiber Reinforced Panel (mastic)	None Detected
	Layer 3	A2565117	Yellow	Brown Fiber Reinforced Panel (sheet Rock)	None Detected
1207-JC-1		A2565118	Tan	Hvac Bath Joint Cloth	None Detected
1207-JC-2		A2565119	Tan	Hvac Bath Joint Cloth	None Detected
1207-FP-1		A2565120	Off-white	Fibrous Panel- Exterior	None Detected
1207-FP-2		A2565121	Off-white	Fibrous Panel- Exterior	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A17-18299
Date Received: 12-07-17
Date Analyzed: 12-08-17
Date Reported: 12-08-17

Project: Twin Rivers Demo Survey-Asbestos, 1207 Richards St., Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous	Cellulose	Non-Fibrous	Binder	
1207-FRP-1 Layer 1 A2565116	Brown Fiber Reinforced Panel	Heterogeneous Tan Fibrous Bound	80%	Cellulose	20%	Binder	None Detected
Layer 2 A2565116	Brown Fiber Reinforced Panel (mastic)	Heterogeneous Yellow Fibrous Bound	<1%	Cellulose	100%	Mastic	None Detected
Layer 3 A2565116	Brown Fiber Reinforced Panel (sheet Rock)	Heterogeneous Yellow Fibrous Bound	25%	Cellulose	75%	Gypsum	None Detected
1207-FRP-2 Layer 1 A2565117	Brown Fiber Reinforced Panel	Heterogeneous Tan Fibrous Bound	80%	Cellulose	20%	Binder	None Detected
Layer 2 A2565117	Brown Fiber Reinforced Panel (mastic)	Heterogeneous Yellow Fibrous Bound	<1%	Cellulose	100%	Mastic	None Detected
Layer 3 A2565117	Brown Fiber Reinforced Panel (sheet Rock)	Heterogeneous Yellow Fibrous Bound	25%	Cellulose	75%	Gypsum	None Detected
1207-JC-1 A2565118	Hvac Bath Joint Cloth	Heterogeneous Tan Fibrous Bound	80%	Cellulose	20%	Binder	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A17-18299
Date Received: 12-07-17
Date Analyzed: 12-08-17
Date Reported: 12-08-17

Project: Twin Rivers Demo Survey-Asbestos, 1207 Richards St., Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
1207-JC-2 A2565119	Hvac Bath Joint Cloth	Heterogeneous Tan Fibrous Bound	80%	Cellulose	20%	Binder	None Detected
1207-FP-1 A2565120	Fibrous Panel- Exterior	Heterogeneous Off-white Fibrous Bound	35% 30%	Cellulose Fiberglass	35%	Binder	None Detected
1207-FP-2 A2565121	Fibrous Panel- Exterior	Heterogeneous Off-white Fibrous Bound	35% 30%	Cellulose Fiberglass	35%	Binder	None Detected



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST:

Saithya Paikal

APPROVED BY:

Tianbao Bai, Ph.D., CIH
Laboratory Director





Turn Around Time: 24hr

Send results via: TrevorMarion@Essetek.com, Nlahiri@essetek.com,

Tbarazoto@essetek.com, Tmiller@essetek.com, Jwarren@essetek.com

EsseL Technology Services, Inc.
351 California Street, Suite 615
San Francisco, CA 94104
Phone: 415-938-7002

⑥ A7-18299
A2565116
A2565121

Chain of Custody Form
Asbestos/Lead/Mold Bulk Sampling

Project No: 17178	Date: 12/6/17	Client Name: SHQA
Laboratory Submitted To: CET		
Relinquished By: Trevor Marion	Date: 12/6/17	Project Name: Twin Rivers Demo
Print Name: Trevor Marion		Survey - Asbestos
Relinquished to: [Signature]	Date: 12/7/17 9:20	Project Location: 1207 Richards St.
Print Name:		Sacramento, CA

Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
1207-FRP-1	-2	Brown fiber Reinforced Panel w/tangle	Bathroom - S wall		
	JC-1	HVAC black joint cloth	1 st floor - Geothermal pump closet		
	FP-1	Grey fibrous Panel - Exterior	outside - N door - Ceiling		
	-2		outside - S door - Ceiling		

Sampled by: Trevor Marion

Date: 12/06/17

Comments: _____



January 11, 2018

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demo; 453 Mint St. Sacramento; 17178
CEI LAB CODE: A18-0514

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on January 10, 2018. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any questions, please feel free to call our office at 919-481-1413.

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demo; 453 Mint St. Sacramento; 17178

CEI LAB CODE: A18-0514

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 01/11/18

TOTAL SAMPLES ANALYZED: 4

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo; 453 Mint St.
Sacramento; 17178

CEI LAB CODE: A18-0514

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
453-CWT-1	Layer 1	A2590287	White,Blue	Ceramic Tile	None Detected
	Layer 2	A2590287	White	Grout	None Detected
	Layer 3	A2590287	Gray	Bedding	None Detected
453-CWT-2	Layer 1	A2590288	White,Blue	Ceramic Tile	None Detected
	Layer 2	A2590288	White	Grout	None Detected
	Layer 3	A2590288	Gray	Bedding	None Detected
453-FP-1		A2590289	Gray	Fibrous Panel	None Detected
453-FP-2		A2590290	Gray	Fibrous Panel	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A18-0514
Date Received: 01-10-18
Date Analyzed: 01-11-18
Date Reported: 01-11-18

Project: Twin Rivers Demo; 453 Mint St. Sacramento; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
453-CWT-1 Layer 1 A2590287	Ceramic Tile	Heterogeneous			100%	Binder	None Detected
		White,Blue					
		Non-fibrous					
		Bound					
Layer 2 A2590287	Grout	Heterogeneous			50%	Binder	None Detected
		White			50%	Calc Carb	
		Non-fibrous					
		Bound					
Layer 3 A2590287	Bedding	Heterogeneous	<1%	Cellulose	70%	Silicates	None Detected
		Gray			20%	Calc Carb	
		Fibrous			10%	Binder	
		Bound					
453-CWT-2 Layer 1 A2590288	Ceramic Tile	Heterogeneous			100%	Binder	None Detected
		White,Blue					
		Non-fibrous					
		Bound					
Layer 2 A2590288	Grout	Heterogeneous			50%	Binder	None Detected
		White			50%	Calc Carb	
		Non-fibrous					
		Bound					
Layer 3 A2590288	Bedding	Heterogeneous	<1%	Cellulose	70%	Silicates	None Detected
		Gray			20%	Calc Carb	
		Fibrous			10%	Binder	
		Bound					
453-FP-1 A2590289	Fibrous Panel	Heterogeneous	20%	Cellulose	50%	Calc Carb	None Detected
		Gray			20%	Binder	
		Fibrous			10%	Paint	
		Loosely Bound					



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CEI Lab Code: A18-0514
Date Received: 01-10-18
Date Analyzed: 01-11-18
Date Reported: 01-11-18

Project: Twin Rivers Demo; 453 Mint St. Sacramento; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
453-FP-2 A2590290	Fibrous Panel	Heterogeneous	20%	Cellulose	50%	Calc Carb	None Detected
		Gray			20%	Binder	
		Fibrous			10%	Paint	
		Loosely Bound					



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
 Non-Trem = Non-Asbestiform Tremolite
 Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST: *Sarah Talley*
Sarah Talley

APPROVED BY: *Tianbao Bai*
Tianbao Bai, Ph.D., CIH
Laboratory Director





Turn Around Time: **24 hours**
 Send results via:

Essei Technology Services, Inc.
 351 California Street, Suite 615
 San Francisco, CA 94104
 Phone: 415-938-7002

④ A18-0514
 A2590287
 A2590290

Chain of Custody Form
Asbestos/Lead/Mold Bulk Sampling

Project No: 17179	Date: 1/8/18	Client Name: SHRA
Laboratory Submitted To: CEI Labs		
Relinquished By: JB	Date: 1/8/18	Project Name: Twin Rivers Demo
Print Name: Tyler Barazoto		
Relinquished to:	Date:	Project Location: 453 Mint St., Sacramento
Print Name:		

Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
A	453-CWT-1	white w/ small blue specks 4x4" ceramic wall tile w/ grout + bedding	Bathroom Shower Wall		
↓	453-CWT-2	↓	↓		
B	453-FP-1	Fibrous Panel, Gray	Above Front Door		
↓	453-FP-2	↓	↓		

Sampled by: **Trevor Marion** Date: **1/8/18**

CEI LABS Accept Samples
 CA 1/10/18 9:20

Comments: _____



January 11, 2018

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demo Survey, 361 Mint Street Sacramento, CA;
17178
CEI LAB CODE: A18-0517

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on January 10, 2018. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demo Survey, 361 Mint Street Sacramento,
CA; 17178

CEI LAB CODE: A18-0517

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 01/11/18

TOTAL SAMPLES ANALYZED: 8

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo Survey, 361 Mint Street **CEI LAB CODE:** A18-0517
Sacramento, CA; 17178

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
361-DW/JC-1		A2590301	White,Tan	Drywall/Joint Compound	None Detected
361-DW/JC-2		A2590302	White,Tan	Drywall/Joint Compound	None Detected
361-FRP-1	Layer 1	A2590303	Tan	Frp	None Detected
	Layer 2	A2590303	Tan	Glue	None Detected
361-FRP-2	Layer 1	A2590304	Tan	Frp	None Detected
	Layer 2	A2590304	Tan	Glue	None Detected
361-FP-1		A2590305	Gray	Fibrous Panel	None Detected
361-FP-2		A2590306	Gray	Fibrous Panel	None Detected
361-INS-1		A2590307	Gray	Insulation	None Detected
361-INS-2		A2590308	Gray	Insulation	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A18-0517
Date Received: 01-10-18
Date Analyzed: 01-11-18
Date Reported: 01-11-18

Project: Twin Rivers Demo Survey, 361 Mint Street Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
361-DW/JC-1 A2590301	Drywall/Joint Compound	Heterogeneous	15%	Cellulose	10%	Binder	None Detected
		White, Tan			65%	Gypsum	
		Fibrous			10%	Paint	
		Bound					
361-DW/JC-2 A2590302	Drywall/Joint Compound	Heterogeneous	15%	Cellulose	10%	Binder	None Detected
		White, Tan			65%	Gypsum	
		Fibrous			10%	Paint	
		Bound					
361-FRP-1 Layer 1 A2590303	Frp	Heterogeneous	45%	Cellulose	55%	Binder	None Detected
		Tan					
		Fibrous					
		Bound					
Layer 2 A2590303	Glue	Heterogeneous			100%	Mastic	None Detected
		Tan					
		Non-fibrous					
		Bound					
361-FRP-2 Layer 1 A2590304	Frp	Heterogeneous	45%	Cellulose	55%	Binder	None Detected
		Tan					
		Fibrous					
		Bound					
Layer 2 A2590304	Glue	Heterogeneous			100%	Mastic	None Detected
		Tan					
		Non-fibrous					
		Bound					
361-FP-1 A2590305	Fibrous Panel	Heterogeneous	35%	Cellulose	50%	Binder	None Detected
		Gray			15%	Silicates	
		Fibrous			<1%	Paint	
		Bound					



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CEI Lab Code: A18-0517
Date Received: 01-10-18
Date Analyzed: 01-11-18
Date Reported: 01-11-18

Project: Twin Rivers Demo Survey, 361 Mint Street Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
361-FP-2 A2590306	Fibrous Panel	Heterogeneous Gray Fibrous Bound	35%	Cellulose	50%	Binder 15% Silicates <1% Paint	None Detected
361-INS-1 A2590307	Insulation	Heterogeneous Gray Fibrous Bound	100%	Cellulose			None Detected
361-INS-2 A2590308	Insulation	Heterogeneous Gray Fibrous Bound	100%	Cellulose			None Detected



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST: _____


Megan Rumble

APPROVED BY: _____


Tianbao Bai, Ph.D., CIH
Laboratory Director





Turn Around Time: 24 hr
 Send results via: EsseL team

EsseL Technology Services, Inc.
 351 California Street, Suite 615
 San Francisco, CA 94104
 Phone: 415-938-7002

⑧ A8 0517
 A2590301
 A2590308

Chain of Custody Form
 Asbestos/Lead/Mold Bulk Sampling

Project No: 17178	Date: 1/8/18	Client Name: SHRA
Laboratory Submitted To: CEF		
Relinquished By: <i>Trevor Marion</i>	Date: 1/28/18	Project Name: Twin Rivers Demo Survey
Print Name: Trevor Marion		Project Location: 361 mint street
Relinquished to:	Date:	Sacramento, CA
Print Name:		

Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
	361-DWIX-1 ↓ -2	Composite drywall + joint compound	Bathroom - S wall behind FRP		
	361-FRP-1 ↓ -2	Beige/brown FRP w/ tan glue	Bathroom - S shower wall		
	361-FP-1 ↓ -2	Grey fibrous panel	Eave above front door		
	361-INS-1 ↓ -2	Grey insulation	Grey wall insulation - S - LVRM wall		

Sampled by: Trevor Marion

Date: 1/8/18

Comments: _____





January 11, 2018

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demo Survey, 370 Mint St. Sacramento, CA; 17178
CEI LAB CODE: A18-0515

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on January 10, 2018. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any questions, please feel free to call our office at 919-481-1413.

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demo Survey, 370 Mint St. Sacramento,
CA; 17178

CEI LAB CODE: A18-0515

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 01/11/18

TOTAL SAMPLES ANALYZED: 4

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo Survey, 370 Mint St.
Sacramento, CA; 17178

CEI LAB CODE: A18-0515

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
370-FP-1		A2590291	Gray	Fibrous Panel	None Detected
370-FP-2		A2590292	Gray	Fibrous Panel	None Detected
370-FRP-1	Layer 1	A2590293	White	Frp	None Detected
	Layer 2	A2590293	Tan	Glue	None Detected
370-FRP-2	Layer 1	A2590294	White	Frp	None Detected
	Layer 2	A2590294	Tan	Glue	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A18-0515
Date Received: 01-10-18
Date Analyzed: 01-11-18
Date Reported: 01-11-18

Project: Twin Rivers Demo Survey, 370 Mint St. Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
370-FP-1 A2590291	Fibrous Panel	Heterogeneous	85%	Cellulose	5%	Paint	None Detected
		Gray Fibrous Bound			10%	Binder	
370-FP-2 A2590292	Fibrous Panel	Heterogeneous	85%	Cellulose	5%	Paint	None Detected
		Gray Fibrous Bound			10%	Binder	
370-FRP-1 Layer 1 A2590293	Frp	Heterogeneous	35%	Cellulose	60%	Binder	None Detected
		White Non-fibrous Bound			5%	Paint	
Layer 2 A2590293	Glue	Homogeneous			95%	Mastic	None Detected
		Tan Non-fibrous Bound			5%	Silicates	
370-FRP-2 Layer 1 A2590294	Frp	Heterogeneous	35%	Cellulose	60%	Binder	None Detected
		White Non-fibrous Bound			5%	Paint	
Layer 2 A2590294	Glue	Homogeneous			95%	Mastic	None Detected
		Tan Non-fibrous Bound			5%	Silicates	



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST: Candace Burrus
Candace Burrus

APPROVED BY: Tianbao Bai
Tianbao Bai, Ph.D., CIH
Laboratory Director





Turn Around Time: 24hr

Send results via:

Esse Technology Services, Inc.
 351 California Street, Suite 615
 San Francisco, CA 94104
 Phone: 415-938-7002

(4) A18-0515
 A2590291
 A2590294

Chain of Custody Form
 Asbestos/Lead/Mold Bulk Sampling

Project No: 17178	Date: 1/6/18	Client Name: SHRP
Laboratory Submitted To: CEI		
Relinquished By: Jason	Date: 1/6/18	Project Name: Twin Rivers Demo Survey
Print Name: Trevor Marion		
Relinquished to:	Date:	Project Location: 370 mint st.
Print Name:		Sacramento, CA

Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
	370-FP-1	Grey fibrous Panel	Above front door		
	↓ -2	↓	↓		
	370-FRP-1	White FRP w/ tan glue	Kitchen - Above sink		
	↓ -2	↓	Bathroom - Shower wall		

Sampled by: Trevor Marion

Date: 1/6/18

Comments: _____

CEI LABS Accept Samples

CS 1/6/18 9:20



December 8, 2017

Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CLIENT PROJECT: Twin Rivers Demo Survey-Asbestos, 1220 McCarthy Ct.,
Sacramento, CA; 17178
CEI LAB CODE: A17-18298

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on December 7, 2017. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for

Essel Environmental

CLIENT PROJECT: Twin Rivers Demo Survey-Asbestos, 1220 McCarthy Ct., Sacramento, CA; 17178

CEI LAB CODE: A17-18298

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 12/08/17

TOTAL SAMPLES ANALYZED: 6

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Twin Rivers Demo Survey-Asbestos, 1220 **CEI LAB CODE:** A17-18298
McCarthy Ct., Sacramento, CA; 17178

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1220-JC-1		A2565110	White	Cloth	None Detected
1220-JC-2		A2565111	White	Cloth	None Detected
1220-FP-1		A2565112	Gray,White	Panel	None Detected
1220-FP-2		A2565113	Gray,White	Panel	None Detected
1220-FRP-1	Layer 1	A2565114	Brown	Panel	None Detected
	Layer 2	A2565114	Yellow	Glue	None Detected
1220-FRP-2	Layer 1	A2565115	Brown	Panel	None Detected
	Layer 2	A2565115	Yellow	Glue	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
 351 California Street, Suite 615
 San Francisco, CA 94104

CEI Lab Code: A17-18298
Date Received: 12-07-17
Date Analyzed: 12-08-17
Date Reported: 12-08-17

Project: Twin Rivers Demo Survey-Asbestos, 1220 McCarthy Ct., Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
1220-JC-1 A2565110	Cloth	Heterogeneous White Fibrous Bound	40%	Fiberglass	60%	Binder	None Detected
1220-JC-2 A2565111	Cloth	Heterogeneous White Fibrous Bound	40%	Fiberglass	60%	Binder	None Detected
1220-FP-1 A2565112	Panel	Heterogeneous Gray,White Fibrous Bound	85%	Cellulose	10%	Binder 5% Paint	None Detected
1220-FP-2 A2565113	Panel	Heterogeneous Gray,White Fibrous Bound	85%	Cellulose	10%	Binder 5% Paint	None Detected
1220-FRP-1 Layer 1 A2565114	Panel	Heterogeneous Brown Fibrous Bound	90%	Cellulose	10%	Binder	None Detected
Layer 2 A2565114	Glue	Homogeneous Yellow Non-fibrous Bound			100%	Mastic	None Detected
1220-FRP-2 Layer 1 A2565115	Panel	Heterogeneous Brown Fibrous Bound	90%	Cellulose	10%	Binder	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Essel Environmental
351 California Street, Suite 615
San Francisco, CA 94104

CEI Lab Code: A17-18298
Date Received: 12-07-17
Date Analyzed: 12-08-17
Date Reported: 12-08-17

Project: Twin Rivers Demo Survey-Asbestos, 1220 McCarthy Ct., Sacramento, CA; 17178

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
Layer 2 A2565115	Glue	Homogeneous Yellow Non-fibrous Bound		100% Mastic	None Detected



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
 Non-Trem = Non-Asbestiform Tremolite
 Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

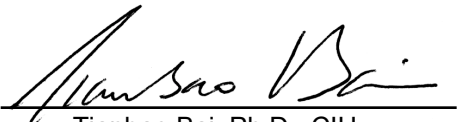
REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST: 
Taylor B. Metcalf

APPROVED BY: 
Tianbao Bai, Ph.D., CIH
Laboratory Director





Turn Around Time: 24 hr

Send results via: TrevorMarion@Esseltek.com, Nlahiri@esseltek.com,
Tbarazoto@esseltek.com, Tmiller@esseltek.com, Jwarren@esseltek.com

Essel Technology Services, Inc.
 351 California Street, Suite 615
 San Francisco, CA 94104
 Phone: 415-938-7002

⑥ 17-18298
 A2565110
 A2565115

Chain of Custody Form
 Asbestos/Lead/Mold Bulk Sampling

Project No: 17178	Date: 12/6/17	Client Name: SHRA
Laboratory Submitted To: CEF		
Relinquished By: <i>Jmw</i>	Date: 12/6/17	Project Name: Twin Rivers Demo
Print Name: Trevor Marion		Survey - Asbestos
Relinquished to: GT	Date: 12/7/17 9:20	Project Location: 1220 McCarthy Ct - Sacramento, CA
Print Name:		

Homogeneous Material Group	Sample Number	Material description	Sample Location	Condition Friability	Quantity
↓	1220-JC-1	HVAC white Joint cloth	1 st floor geothermal Pump closet		
	↓ -2	↓	↓		
	FP-1	Grey fibrous Panel - Ext	Above - N door		
	↓ -2	↓	Above - S door		
	FRP-1	Brown fiber reinforced Panel w/ tan glue	Bath - S wall		
↓	↓ -2	↓	Bath - E wall		

Sampled by: Trevor Marion

Date: 12/6/17

Comments: _____