

April 27, 2011

Asbestos and Pb (Lead) Survey UCSB Biological Sciences II Building 571

The University of California Santa Barbara (UCSB), Design and Construction Services (DC&S) has compiled this report to disclose existing knowledge of asbestos and Pb (Lead) containing building components located at Building 571 on the UCSB Campus.

Asbestos Sampling

Table 1.0 Asbestos Laboratory Reports lists the reports attached by Report Number, Date, Laboratory, Analysis Type, and Comments.

Table 1.0 - Asbestos Laboratory Reports

Report #	Report Date	Laboratory	Analysis Type	Comments
B147271	04/05/2011	Forensic Analytical	PLM EPA Method 600/R-93-116	Baseboard mastic in rm. 0129
B147048	04/01/2011	Forensic Analytical	PLM EPA Method 600/R-93-116	Floor tile and plaster samples in rm. 0129
B147699	04/14/2011	Forensic Analytical	PLM EPA Method 600/R-93-116	Caulking on chiller on roof.

Lead Paint Sampling Results

Table 2.0 Pb (Lead) Laboratory Reports lists the reports attached by Report Number, Date, Laboratory, Analysis Type, and Comments.

Table 2.0 – Pb (Lead) Laboratory Reports

Report #	Report Date	Laboratory	Analysis Type	Comments
M118004	03/23/2011	Forensic Analytical	TTLC Metal Analysis Flame AA	Various paint samples on components in rm. 0127.
M118250	03/31/2011	Forensic Analytical	TTLC Metal Analysis Flame AA	Paint on condensate return line in rm. 0127.
M118677	04/14/2011	Forensic Analytical	TTLC Metal Analysis Flame AA	Paint on surfaces on roof chiller unit.

UCSB's industrial wastewater permit¹ local limit for lead is 1.040 mg/l. The California Code of Regulations, Title 22 classifies waste containing more than 50 ppm lead as hazardous² without further waste characterization. If you have any question regarding this report please contact me at 805-451-1918 or gene.horstin@dcs.ucsb.edu

Sincerely,

Gene Horstin

University of California Santa Barbara
Asbestos and Pb Clerk of the Works
Asbestos Abatement Project Designer Cert# PD39-11
Asbestos Inspector & Management Planner Cert# BIMP91-11
Asbestos Contractor & Supervisor Cert# CS182-11
CDPH Lead Inspector/Assessor ID# 20134

¹Industrial Wastewater Discharge Permit Number IV-413, Part I, Wastewater Discharge Limitations and Monitoring Requirements – Local Limits

²TITLE 22, Social Security, Division 4.5, Environmental Health Standards for the Management of Hazardous Waste, Chapter 11, Identification and Listing of Hazardous Waste, Article 3, Characteristics of Hazardous Waste, §66261.24, Characteristic of Toxicity



Bulk Asbestos Analysis

(EPA Method 600/R-93-116, Visual Area Estimation)

U.C. Santa Barbara
Project Manager
Design and Construction Svcs
Building 370
Santa Barbara, CA 93106

Client ID: 5151
Report Number: B147271
Date Received: 04/04/11
Date Analyzed: 04/05/11
Date Printed: 04/05/11
First Reported: 04/05/11

Job ID/Site: Bio II Chiller Replacement, Building 571 room. 0129

FALI Job ID: 5151-6593

Date(s) Collected:

Total Samples Submitted: 3

Total Samples Analyzed: 3

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
20110330-571-PLM-01	11096844						
Layer: Tan Mastic			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
20110330-571-PLM-02	11096845						
Layer: White Paint			ND				
Layer: Tan Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
20110330-571-PLM-03	11096846						
Layer: Tan Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

James Flores, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

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University of California, Santa Barbara Bulk Sample Log
Environmental Health and Safety - Client # 5151 Asbestos
Asbestos and Lead Program – Contact J. Ripley 805-893-7984 jerome.ripley@dcs.ucsb.edu

Bulk Sample Log
Asbestos
e.ripley@dcs.ucsb.edu

W.O.#: 118-74

Building Name/Number: Bldg. 571 rm. 0129

Turn Around

PLM	12 HR	24 HR	Other
Lab Instructions:	Due Date: 04/04/2011 4.5.11		

[illegible]

Chain of Custody

Company: UCSB

Date/Time: 1/1/2000 1:10:00 PM

Company: FASI

Date/Time: 4-4-11 @

10am 6/8

Date: 2019.03.31 08:54:32



Bulk Asbestos Analysis

(EPA Method 600/R-93-116, Visual Area Estimation)

U.C. Santa Barbara
Project Manager
Design and Construction Svcs
Building 370
Santa Barbara, CA 93106

Client ID: 5151
Report Number: B147048
Date Received: 03/30/11
Date Analyzed: 04/01/11
Date Printed: 04/01/11
First Reported: 04/01/11

Job ID/Site: W.O.# 118-74 - Bio II Chiller Replacement - Bldg. 571 Rms. 0129 and 0127**FALI Job ID:** 5151-6593**Date(s) Collected:** 03/29/2011**Total Samples Submitted:** 5**Total Samples Analyzed:** 5

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
20110329-571-PLM-01	11095303						
Layer: White Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
20110329-571-PLM-02	11095304						
Layer: White Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
20110329-571-PLM-03	11095305						
Layer: White Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
20110329-571-PLM-04	11095306						
Layer: White Plaster			ND				
Layer: Paint			ND				
Layer: Grey Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)	Fibrous Glass (10 %)						
20110329-571-PLM-05	11095307						
Layer: Tan Tile		Chrysotile	Trace				
Layer: Black Mastic		Chrysotile	2 %				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (Trace)							

Client Name: U.C. Santa Barbara

Report Number: B147048

Date Printed: 04/01/11

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
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James Flores, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

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Project: Bio II Chiller Replacement

Date: 03/29/2011

W.O.#: 118-74

Sampler Name: G. Horstin

Building Name/Number: Bldg. 571 Rms. 0129 and 0127

Sample Analysis

Turn Around

PLM	12 HR	24 HR	Other
Lab Instructions:	Due Date: 04/01/2011		

Sample No.	Material(s)	HID No.	Location
20110329-571-PLM-01	Tan paint, stucco, plaster.		Bldg. 571, rm. 0129, exterior, north wall, west end.
20110329-571-PLM-02	Tan paint, stucco, plaster.		Bldg. 571, rm. 0129, exterior, north wall, east end.
20110329-571-PLM-03	Tan paint, stucco, plaster.		Bldg. 571, rm. 0129, exterior, north wall, east end.
20110329-571-PLM-04	Firestop (plaster?), fiberglass.		Bldg. 571, rm. 0127, south wall, around condensate return line.
20110329-571-PLM-05	Tan 12" floor tile, black mastic.		Bldg. 571, rm. 0129, floor, 6" from north wall, 1' from west wall.

Chain of Custody

Relinquished by Name: G. Horstin Company: UCSB

Date/Time: 3-30-11

Received by Name: [Signature] Company: FASI

Date/Time: 3-30-11 @

10:15 am

bx

Printed by: G. Horstin
Date: 2011-03-29 10:15 AM
Page: 1 of 1



Bulk Asbestos Analysis

(EPA Method 600/R-93-116, Visual Area Estimation)

U.C. Santa Barbara
Project Manager
Design and Construction Svcs
Building 370
Santa Barbara, CA 93106

Client ID: 5151
Report Number: B147699
Date Received: 04/13/11
Date Analyzed: 04/14/11
Date Printed: 04/14/11
First Reported: 04/14/11

Job ID/Site: Bio II Chiller Replacement**FALI Job ID:** 5151-6593**Date(s) Collected:****Total Samples Submitted:** 1**Total Samples Analyzed:** 1

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
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20110412-571-PLM-01

11100695

Layer: Grey Semi-Fibrous Material

NDTotal Composite Values of Fibrous Components: **Asbestos (ND)**

Cellulose (Trace) Synthetic (5 %)

James Flores, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

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University of California, Santa Barbara
Environmental Health and Safety - Client # 5151

Asbestos and Lead Program - Contact J. Ripley 805-893-7984 jerome.ripley@dcs.ucsb.edu

Bulk Sample Log

Asbestos

Project: Bio II Chiller Replacement

Date: 04/12/2011

W.O.#: 118-74

Sampler Name: G. Horstin

Building Name/Number: Bldg. 571, roof

Sample Analysis

Turn Around:

PLM	12 HR	24 HR	Other
Lab Instructions:	Due Date: 04/14/2011		

Sample No.	Material(s)	FID No.	Location
20110412-571-PLM-01	Grey caulking.		Bldg. 571, roof, on chiller, east side.

Chain of Custody

Relinquished by Name: G. Horstin Company: UCSB

Date/Time: 4-13-11

Received by Name: St Company: FASI

Date/Time: 10:00 4-13-11

Digitally signed by G. Horstin
DN: cn=G. Horstin, ou=UCSB, ou=Chem and
Consultation, email=horstin@dcs.ucsb.edu
Reason: I am the author of this
document.
Date: 2011.04.12 10:22:28
+07'00'



Metals Analysis of Paints

U.C. Santa Barbara
Project Manager
Design and Construction Svcs
Building 370
Santa Barbara, CA 93106

Client ID: 5151
Report Number: M118004
Date Received: 03/22/11
Date Analyzed: 03/23/11
Date Printed: 03/23/11
First Reported: 03/23/11

Job ID / Site: Bio II Chiller Replacement , W.O.# 118-74
Date(s) Collected: 3-21-2011

FALI Job ID: 5151-6593
Total Samples Submitted: 4
Total Samples Analyzed: 4

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
20110321-571-PB-01	30397519	Pb	2400	ppm	200	EPA 3050B/7420
20110321-571-PB-02	30397520	Pb	24000	ppm	2000	EPA 3050B/7420
20110321-571-PB-03	30397521	Pb	3300	ppm	200	EPA 3050B/7420
20110321-571-PB-04	30397522	Pb	80	ppm	70	EPA 3050B/7420

* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory level. The Units for the Reporting Limit are the same as the Units for the Final Results.

Dave Sandusky, CIH, Laboratory Supervisor, Hayward Laboratory

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University of California, Santa Barbara
Environmental Health and Safety - Client # 5151
Asbestos and Lead Program - Contact J. Ripley 805-893-7984 jerome.ripley@dcs.ucsb.edu

Bulk Sample Log
Pb (Lead)

Project: Bio II Chiller Replacement

Date: 03/21/2011

W.O.#: 113-74

Sampler Name: G. Horstin

Building Name/Number: Bldg. 571, rm. 0127

Sample Analysis

Turn Around

TTL Pb	12 HR	24 HR	Other
Lab Instructions:	Due Date: 03/23/2011		

Sample No.	Material(s)	HID No.	Location
20110321-571-Pb-01	Brown paint on concrete substrate.		Bldg. 571, rm. 0127, floor, north of rm. 0129.
20110321-571-Pb-02	Grey paint on metal substrate.		Bldg. 571, rm. 0127, on pad for pump CHWP-1.
20110321-571-Pb-03	Green paint on concrete substrate.		Bldg. 571, rm. 0127, on pad for pump CDWP-1.
20110321-571-Pb-04	Orange paint on metal substrate.		Bldg. 571, rm. 0127, on supports on pad for pump CDWP-1.

Chain of Custody

Relinquished by Name: G. Horstin Company: UCSB

Date/Time: 3-22-11

Received by Name: [Signature] Company: FASI

Date/Time: 3-22-11

Digitally signed by Gene Horstin
DN: cn=Gene Horstin, o=UCSB, ou=Design and Construction, email=ghorstin@ucsb.edu
Reason: I am the author of this document.
Date: 2011.03.21 14:10:04 -0700

10 an
BP



Metals Analysis of Paints

U.C. Santa Barbara
Jerome Ripley
Design and Construction Svcs
Building 370
Santa Barbara, CA 93106

Client ID: 5151
Report Number: M118250
Date Received: 03/30/11
Date Analyzed: 03/31/11
Date Printed: 03/31/11
First Reported: 03/31/11

Job ID / Site: Bio II Chiller Replacement , Bldg. 517, rm .0127
Date(s) Collected: 3/29/2011

FALI Job ID: 5151-6593
Total Samples Submitted: 1
Total Samples Analyzed: 1

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
20110329-571-PB-01	30398207	Pb	180000	ppm	20000	EPA 3050B/7420

* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory level. The Units for the Reporting Limit are the same as the Units for the Final Results.

Dave Sandusky, CIH, Laboratory Supervisor, Hayward Laboratory

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University of California, Santa Barbara
Environmental Health and Safety - Client # 5151
Asbestos and Lead Program - Contact J. Ripley 805-893-7984 jerome.ripley@dcs.ucsb.edu

Bulk Sample Log
Pb (Lead)

Project: Bio II Chiller Replacement

Date: 03/29/2011

W.O.#: 118-74

Sampler Name: G. Horstin

Building Name/Number: Bldg. 571, rm. 0127

Sample Analysis

Turn Around

TTL C Pb	12 HR	24 HR	Other
Lab Instructions:	Due Date: 03/31/2011		

Sample No.	Material(s)	HID No.	Location
20110329-571-Pb-01	Green-blue paint on metal substrate.		Bldg. 571, rm. 0127, on condensate return line.

Chain of Custody

Relinquished by Name: G. Horstin Company: UCSB

Date/Time: for 4/1/11

Received by Name: Alan Company: FASI

Date/Time: 3-30-11 @

10:15am

lpx

Digitally signed by G. Horstin
DN: cn=G. Horstin, o=UCSB, ou=Design and Construction, email=horstin@ucsb.edu
Reason: I am the owner of this document
Date: 2011.03.29 11:37:10 -0700



Metals Analysis of Paints

U.C. Santa Barbara
Jerome Ripley
Design and Construction Svcs
Building 370
Santa Barbara, CA 93106

Client ID: 5151
Report Number: M118677
Date Received: 04/13/11
Date Analyzed: 04/14/11
Date Printed: 04/14/11
First Reported: 04/14/11

Job ID / Site: Bio II Chiller Replacement , Bldg. 571 , roof , W.O.# 118-74
Date(s) Collected: 4/12/2011

FALI Job ID: 5151-6593
Total Samples Submitted: 3
Total Samples Analyzed: 3

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
20110412-571-PB-01	30399449	Pb	< 60	ppm	60	EPA 3050B/7420
20110412-571-PB-02	30399450	Pb	< 70	ppm	70	EPA 3050B/7420
20110412-571-PB-03	30399451	Pb	1700	ppm	70	EPA 3050B/7420

* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory level. The Units for the Reporting Limit are the same as the Units for the Final Results.

Dave Sandusky, CIH, Laboratory Supervisor, Hayward Laboratory

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University of California, Santa Barbara
Environmental Health and Safety - Client # 5151

Asbestos and Lead Program - Contact J. Ripley 805-893-7984 jerome.ripley@ucsbs.edu

Bulk Sample Log

Pb (Lead)

Project: Bio II Chiller Replacement

Date: 04/12/2011

W.O.#: 113-74

Sampler Name: G. Horstin

Building Name/Number: Bldg. 571, roof

Sample Analysis

Turn Around

TTL Pb	12 HR	24 HR	Other
Lab Instructions:	Due Date: 04/14/2011		

Sample No.	Material(s)	HID No.	Location
20110412-571-Pb-01	Red primer on metal substrate.		Bldg. 571, roof, on chiller I-beam.
20110412-571-Pb-02	Grey paint on wood substrate.		Bldg. 571, roof, on wood chiller platform.
20110412-571-Pb-03	Tan paint over red primer on metal substrate.		Bldg. 571, roof, on chiller I-beam.

Chain of Custody

Relinquished by Name: G. Horstin Company: UCSB

Date/Time: 4-13-11 10:00

Received by Name: E T Company: FASI

Date/Time: 4-13-11 10:00

Feoex

Digitally signed by Gene Horstin
DN: cn=Gene Horstin, o=UCSB, ou=Design and Construction, email=horstin@ucsbs.edu
Reason: I am the author of this document.
Date: 2011.04.12 16:12:42 -0700