

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	TTLIC Metal Analysis Flame AA	Various paint samples on components in rm. 0127.
M118250	03/31/2011	Forensic Analytical	TTLIC Metal Analysis Flame AA	Paint on condensate return line in rm. 0127.
M118677	04/14/2011	Forensic Analytical	TTLIC 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'.

Analytical results and reports are generated by Forensic Analytical Laboratories Inc. (FALI) at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by FALI to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by FALI. The client is solely responsible for the use and interpretation of test results and reports requested from FALI. Forensic Analytical Laboratories Inc. is not able to assess the degree of hazard resulting from materials analyzed. FALI reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. All samples were received in acceptable condition unless otherwise noted.

Project: Bio II Chiller Replacement

Date: 03/30/2011

W.O.#: 118-74

Sampler Name: G. Horstin

Building Name/Number: Bldg. 571 rm. 0129

Sample Analysis

Turn Around

PLM	12 HR	24 HR	Other
Lab Instructions:	Due Date: <u>04/04/2011 4:5:11</u>		

Sample No.	Material(s)	ID No.	Location
20110330-571-PLM-01	Tan baseboard mastic.		Bldg. 571, rm. 0129, north wall.
20110330-571-PLM-02	Tan baseboard mastic.		Bldg. 571, rm. 0129, north wall.
20110330-571-PLM-03	Tan baseboard mastic.		Bldg. 571, rm. 0129, east wall.

Chain of Custody

Relinquished by Name: G. Horstin Company: UCSB

Date/Time: for 7/10/11

Received by Name: [Signature] Company: FASI

Date/Time: 4-4-11 @ 10am [Signature]

Digitally signed by G. Horstin
 DN: cn=G. Horstin, o=UCSB, ou=Design and Construction, email=g.horstin@dcs.ucsb.edu
 Reason: I am the author of the document
 Date: 2011.03.31 08:54:32 -0700



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: for 4/5

Received by Name: [Signature] Company: FASI

Date/Time: 3-30-11 @ 10:15 am
[Signature]

Printed by: G. Horstin
 Date: 2011-03-29 14:14:01
 CT02



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
20110412-571-PLM-01	11100695						
Layer: Grey Semi-Fibrous Material			ND				
Total 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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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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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		
	TTLc Pb	12 HR	24 HR
Lab Instructions:	Due Date: <u>03/23/2011</u>		

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: for 11:00

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=horstin@ucsb.edu
 Reason: I am the author of this document.
 Date: 2011.03.21 14:10:04 -0700

*10 an
 [Signature]*



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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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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