

MICRO ANALYTICAL LABORATORIES, INC.

TEM AIRBORNE ASBESTOS ANALYSIS



1023

Terracon Consultants, Inc.
1466 66th Street
Emeryville, CA 94608

PROJECT:

JOB NO. R1147447
DVC PERIMETER CLEARANCES
PLEASANT HILL

Micro Log In **203152**Total Samples **2**Date Sampled **03/04/2015**Date Received **03/05/2015**Date Analyzed **03/05/2015**

SAMPLE INFORMATION	ASBESTOS STRUCTURE COUNT	CALCULATED ASBESTOS STRUCTURE CONCENTRATION	
CLIENT ID	ASBESTOS TYPE	Str. per mm ²	Str. per cc
R1147447-030415-C5	CHRYSTOLE <input style="width: 30px;" type="text" value="0"/>	< 14	< 0.0044
MICRO ID 203152-01	GRUNERITE (AMOSITE) <input style="width: 30px;" type="text" value="0"/>		
Time 115	RIEBECKITE (CROCIDOLITE) <input style="width: 30px;" type="text" value="0"/>		
LPM 10.50	TREMOLITE <input style="width: 30px;" type="text" value="0"/>		
Liters 1207.5	ACTINOLITE <input style="width: 30px;" type="text" value="0"/>		
DESCRIPTION	ANTHOPHYLLITE <input style="width: 30px;" type="text" value="0"/>		
AT CB TO MEDIA ROOM	TOTAL ASBESTOS <input style="width: 30px;" type="text" value="0"/>		
TEM CLEARANCE			
Asbestos Structures Subdivided By Length			
	Length	No.	S/mm²
		S/cc	
	0.5 - 5 μm	0	< 14.0
	≥ 5 μm	0	< 0.0044
COMMENTS			
NO ASBESTOS DETECTED			
Total Asbestos	Grid Squares	Field Filter Data	
0	7	Type	MCE
Grid Square Area	0.0103 mm ²	Diameter	25 mm
Area Analyzed	0.0721 mm ²	Collection Area	385 mm ²
		Analytical Sensitivity	
		0.0044 Str. per cc	
		Quantitation Limit	
		0.0163 Str. per cc	
		Operating Parameters	
		TEM Magnification 15,000-20,000	
		SAED Photo No. / ID	

Technical Supervisor: _____

Frank Raviola, M.S.

3/5/2015

Date Reported

Analyst: _____

FPR

Micro Analytical Laboratories, Inc. is accredited for airborne asbestos analysis under NVLAP Lab Code 101872-0. NVLAP accreditation is limited to laboratory analyses. Analyses follow the analytical procedures of the U.S. EPA's "Interim Transmission Electron Microscopy Method" (1987), 40 CFR Part 763, Appendix A to Subpart E. Sampling parameters may differ from the AHERA method. Micro Analytical Laboratories, Inc. is not responsible for data collected by non-laboratory personnel. Results reported in both "Structures per cc" and "Structures per mm²" depend on the volume of air samples as measured by non-laboratory personnel, and are not covered by our NVLAP accreditation. Concentrations and limits expressed in "Structures per mm²" are applicable only to samples with volumes of 1199 or more liters (AHERA Method, 1987). Variability due to different airborne fiber distributions, whether on different portions of the same filter or from different filters from the same sampled area, may be significant. Analytical sensitivity is the airborne concentration represented by each asbestos structure counted in the area analyzed; it is not the same as the detection limit. Specific characterization of non-asbestos particles is not applicable to this analysis. This report must not be used to claim product endorsement by NIST or any other U.S. Government agency. Unless otherwise indicated on this report, all required Quality Control samples have been determined to be in control prior to releasing these analytical results. Duplicate QC samples have lower analytical sensitivities. Unless otherwise stated in this report, all samples were received in acceptable condition for analysis. Note: due to software limitations, the number of reported significant figures does not necessarily reflect the uncertainty of the analysis. This report shall not be reproduced except in full without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed.

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PLEASANT HILL

Micro Log In **203152**
 Total Samples 2
 Date Sampled 03/04/2015
 Date Received 03/05/2015
 Date Analyzed 03/05/2015

SAMPLE INFORMATION	ASBESTOS STRUCTURE COUNT	CALCULATED ASBESTOS STRUCTURE CONCENTRATION	
CLIENT ID	ASBESTOS TYPE	Str. per mm ²	Str. per cc
R1147447-030415-C6	CHRYSOTILE <input style="width: 30px; text-align: center;" type="text" value="0"/>	< 14	< 0.0044
MICRO ID 203152-02	GRUNERITE (AMOSITE) <input style="width: 30px; text-align: center;" type="text" value="0"/>		
Time 110	RIEBECKITE (CROCIDOLITE) <input style="width: 30px; text-align: center;" type="text" value="0"/>		
LPM 11.00	TREMOLITE <input style="width: 30px; text-align: center;" type="text" value="0"/>		
Liters 1210.0	ACTINOLITE <input style="width: 30px; text-align: center;" type="text" value="0"/>		
DESCRIPTION	ANTHOPHYLLITE <input style="width: 30px; text-align: center;" type="text" value="0"/>		
IN MEDIA SERVICE OFFICE TEM CLEARANCE	TOTAL ASBESTOS <input style="width: 30px; text-align: center;" type="text" value="0"/>		

Asbestos Structures Subdivided By Length			
Length	No.	S/mm ²	S/cc
0.5 - 5 μm	0	< 14.0	< 0.0044
≥ 5 μm	0	< 14.0	< 0.0044

COMMENTS
 NO ASBESTOS DETECTED

Total Asbestos	Grid Squares	Field Filter Data	Analytical Sensitivity	Operating Parameters
0	7	Type MCE	0.0044 Str. per cc	TEM Magnification 15,000-20,000
Grid Square Area	0.0103 mm ²	Diameter 25 mm	Quantitation Limit	SAED Photo No. / ID
Area Analyzed	0.0721 mm ²	Collection Area 385 mm ²	0.0163 Str. per cc	

Technical Supervisor: 3/5/2015 Analyst: FPR
Frank Raviola, M.S. Date Reported

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203152
TEM AIR SAMPLE DATA SHEET

AHERA _____ Yamate II Method NIOSH 7402 _____

PAGE 1 OF 1

SAMPLE ID CODE

Job Code - mmdyy - Sample Type - Sample # (11422-022405-P-1)
Job Code: Numeric Code from RGA Project #
mmdyy: month day year (022405)
Sample Type: A-Area, P-Perimeter, B-Baseline, C-Clearance, BL-Blank
Sample #: 1, 2, 3, ...

Project Name/Address/Building No. : DVC, Pleasant Hill, Perimeter Clearances

RGA Project #: R1147447 Sampled By: N. ANSCOTT Sampling Date: 3/4/15

Sample(s) Sent To: EMSL Other: MAC TAT: Rush 24Hrs 3-5 Days

FAX OR E-MAIL REPORT TO: SEE ABOVE PROJECT MANAGER (PM)

ADDITIONAL REPORT RECIPIENT(S): _____

SAMPLE ID: <u>R1147447-030415-C5</u>	TIME ON: <u>1920</u>	TIME OFF: <u>2115</u>
SAMPLE LOCATION: <u>@ CB to Media Room</u>	FLOW RATES: <u>10.5</u>	(LPM)
WORK ACTIVITY: <u>Clearance</u>	TOTAL MINUTES: <u>115</u>	VOLUME: <u>1207.5</u> (L)

SAMPLE ID: <u>R1147447-030415-C6</u>	TIME ON: <u>1930</u>	TIME OFF: <u>2120</u>
SAMPLE LOCATION: <u>In media services office</u>	FLOW RATES: <u>11</u>	(LPM)
WORK ACTIVITY: <u>Clearance</u>	TOTAL MINUTES: <u>110</u>	VOLUME: <u>1210</u> (L)

SAMPLE ID: _____	TIME ON: _____	TIME OFF: _____
SAMPLE LOCATION: _____	FLOW RATES: _____	(LPM)
WORK ACTIVITY: _____	TOTAL MINUTES: _____	VOLUME: _____ (L)

SAMPLE ID: _____	TIME ON: _____	TIME OFF: _____
SAMPLE LOCATION: _____	FLOW RATES: _____	(LPM)
WORK ACTIVITY: _____	TOTAL MINUTES: _____	VOLUME: _____ (L)

SAMPLE ID: _____	TIME ON: _____	TIME OFF: _____
SAMPLE LOCATION: _____	FLOW RATES: _____	(LPM)
WORK ACTIVITY: _____	TOTAL MINUTES: _____	VOLUME: _____ (L)

Relinquished By: N. ANSCOTT Signature: [Signature] Date/Time: 3/4/15
 Received By: Kuo Suelkel Signature: [Signature] Date/Time: 3/5/2015
 Relinquished By: _____ Signature: _____ Date/Time: _____
 Received By: _____ Signature: _____ Date/Time: _____