

MICRO ANALYTICAL LABORATORIES, INC.

PHASE CONTRAST MICROSCOPY



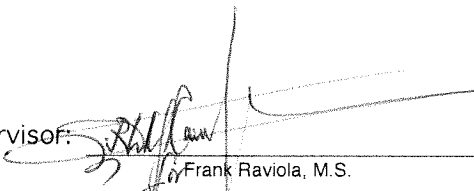
1023
Terracon Consultants, Inc.
1466 66th Street
Emeryville, CA 94608

PROJECT:

JOB NO. R1147447
AREA SAMPLING
DVC LIBRARY BLDG
FLOORS 2-3

Micro Log In **203304**
Total Samples 6
Date Sampled 03/09/2015
Date Received 03/09/2015
Date Analyzed 03/09/2015

Sample ID	Field Data	Lab Data	Fibers / cc	Limits
Client: R1147447-030915-A5 Micro: 203304-01 F2-NE-ENTRY AREA SAMPLE	Time 370 Rate 4.3 Liters 1591.0	Fibers 15 Fields 100 F/mm ² 19.1	0.005	LCL UCL 0.002 0.007 LOD LOQ 0.002 0.024 CV 0.25
Client: R1147447-030915-A6 Micro: 203304-02 F2-WEST SIDE-AT SHELVES AREA SAMPLE	Time 368 Rate 4.3 Liters 1582.4	Fibers 6.5 Fields 100 F/mm ² 8.3	0.002	LCL UCL 0.001 0.003 LOD LOQ 0.002 0.024 CV 0.25
Client: R1147447-030915-A7 Micro: 203304-03 F2-SE-INFORMATION COMMONS AREA SAMPLE	Time 404 Rate 4.3 Liters 1737.2	Fibers 23 Fields 100 F/mm ² 29.3	0.006	LCL UCL 0.004 0.009 LOD LOQ 0.002 0.022 CV 0.34
Client: R1147447-030915-A8 Micro: 203304-04 F3-NO-LUNCHROOM AREA SAMPLE	Time 395 Rate 4.3 Liters 1698.5	Fibers 3 Fields 100 F/mm ² < 7.0	< 0.002	LCL UCL 0.000 0.004 LOD LOQ 0.002 0.023 CV 0.67
Client: R1147447-030915-A9 Micro: 203304-05 LM F3-SE-AT SINK AREA SAMPLE	Time 381 Rate 4.3 Liters 1638.3	Fibers 2.5 Fields 100 F/mm ² < 7.0	< 0.002	LCL UCL 0.000 0.004 LOD LOQ 0.002 0.023 CV 0.67

Technical Supervisor: 

Frank Raviola, M.S.

3/9/2015

Date Reported

Analyst: _____

LM

AIHA IHLAP LABORATORY Accreditation / PAT ID No. 101768. SOP PCM1. Samples are analyzed using the NIOSH 7400 Method (NIOSH Manual of Analytical Methods, 4th Ed., Issue 2 of Rev. 3, 8/15/1994). The "A" Rules are used, unless otherwise noted. The limit of detection (LOD) is 7 fibers/mm². Limits of quantification for optimal precision and accuracy are 100 (LOQ) and 1300 fibers/mm². The 95% UCL and LCL (Upper and Lower Confidence Limits of the Two-sided 95% Confidence Interval) represent the highest and lowest expected concentrations (in fibers/cc) for a given fiber count, based on the reported concentration and overall lab statistics. Intralaboratory analyst coefficients of variation (CV) for various fiber loadings are reported. Limits for compliance testing may be calculated by the client, using the CV and an appropriate regulatory standard, e.g. UCL = (Concentration + [1.645 x CV x Standard]). If a CV is not recorded on this report, there are not yet enough data for the analyst. Concentrations are field blank-corrected. Time is in minutes, flow rate is in liters per minute. 8 Hour TWA: calculated time weighted average concentration (in fibers/cc) based on 8 hours. *Note: the 8 hour TWA may not be statistically accurate for actual total times less than 360 minutes. Zero concentration is assumed for remaining time if no information is given. Micro Analytical Laboratories, Inc. assumes no responsibility for clients' interpretation of any requested TWA data or calculations in this report.* Unless otherwise indicated on this report, all required Quality Control samples have been determined to be in control prior to releasing these results. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed. 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. Micro Analytical Laboratories, Inc. shall not be responsible for clients' deviations from any prescribed sampling parameters. Air volumes are based on client data. The laboratory's verifiability of results is limited to fibers per mm². This analysis counts total fibers and cannot distinguish asbestos from non-asbestos fibers. For asbestos identification and counts, TEM reanalysis of the same filter is recommended. N/A = not applicable.*

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PHASE CONTRAST MICROSCOPY



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Micro Log In **203304**
Total Samples 6
Date Sampled 03/09/2015
Date Received 03/09/2015
Date Analyzed 03/09/2015

Sample ID		Field Data		Lab Data		Fibers / cc	Limits	
Client:	R1147447-030915-A10	Time	371	Fibers	13.5	0.004	LCL	UCL
Micro:	203304-06	Rate	4.3	Fields	100		0.002	0.006
F2-NO. CENT		Liters	1595.3	F/mm ²	17.2		LOD	LOQ
AREA SAMPLE							0.002	0.024
							CV	0.25

Technical Supervisor:

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3/9/2015

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Analyst:

LM

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202704
PCM AIR SAMPLE DATA SHEET

* PCM Analysis
* NIOSH 7400A

PAGE 1 OF 2

SAMPLE ID CODE

Job Code - mmddyy - Sample Type - Sample # (11422-022405-P-1)

Job Code: Numeric Code from RGA Project #
mmddyy: 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.: Area Sampling - DVC - library Bldg floors 2-3

RGA Project #: R1147447 Sampled By: N. Arscott Sampling Date: 3/9/15

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

ANALYZED BY RGA (NAME): DATE:

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

*** ADDITIONAL REPORT RECIPIENT(S): ***

1

SAMPLE ID: R1147447-030915-A5
 SAMPLE LOCATION F2 - NE @ entry
 WORK ACTIVITY: Area Sample

TIME ON: 0805 TIME OFF: 1415
 FLOW RATES: 4.3 (LPM)
 TOTAL MINUTES: 370 VOLUME: 1591 (L)
 Number of Fibers _____ Number of Fields _____
 AIRBORNE FIBER CONC. = _____ fibers/cc

2

SAMPLE ID: R1147447-030915-A6
 SAMPLE LOCATION F2 - west side - @ shelves
 WORK ACTIVITY: Area Sample

TIME ON: 0808 TIME OFF: 1416
 FLOW RATES: 4.3 (LPM)
 TOTAL MINUTES: 368 VOLUME: 1582.4 (L)
 Number of Fibers _____ Number of Fields _____
 AIRBORNE FIBER CONC. = _____ fibers/cc

3

SAMPLE ID: R1147447-030915-A7
 SAMPLE LOCATION F2 - SE - Information Commons
 WORK ACTIVITY: Area Sample

TIME ON: 0818 TIME OFF: 1502
 FLOW RATES: 4.3 (LPM)
 TOTAL MINUTES: 404 VOLUME: 1737.2 (L)
 Number of Fibers _____ Number of Fields _____
 AIRBORNE FIBER CONC. = _____ fibers/cc

4

SAMPLE ID: R1147447-030915-A8
 SAMPLE LOCATION F3 - No. - lunchroom
 WORK ACTIVITY: Area Sample

TIME ON: 0823 TIME OFF: 1458
 FLOW RATES: 4.3 (LPM)
 TOTAL MINUTES: 395 VOLUME: 1698.5 (L)
 Number of Fibers _____ Number of Fields _____
 AIRBORNE FIBER CONC. = _____ fibers/cc

5

SAMPLE ID: R1147447-030915-A9
 SAMPLE LOCATION F3 - SE - @ sink
 WORK ACTIVITY: Area Sample

TIME ON: 0838 TIME OFF: 1459
 FLOW RATES: 4.3 (LPM)
 TOTAL MINUTES: 381 VOLUME: 1638.3 (L)
 Number of Fibers _____ Number of Fields _____
 AIRBORNE FIBER CONC. = _____ fibers/cc

Relinquished By: N. Arscott Signature: [Signature] Date/Time: 3/9/15
 Received By: _____ Signature: [Signature] Date/Time: 3-9-15 6:29am
 Relinquished By: _____ Signature: _____ Date/Time: _____
 Received By: _____ Signature: _____ Date/Time: _____



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203304
PCM AIR SAMPLE DATA SHEET

* PCM Analysis
* NIOSH 7400A

PAGE 2 OF 2

SAMPLE ID CODE

Job Code - mmddyy - Sample Type - Sample # (11422-022405-P-1)

Job Code: Numeric Code from RGA Project #

mmddyy: 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.: Area Sampling, NVC, Library Bldg, floors 2-3

RGA Project #: R1147447 Sampled By: N. Ansoff Sampling Date: 3/9/15

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

ANALYZED BY RGA (NAME): DATE:

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

ADDITIONAL REPORT RECIPIENT(S):

SAMPLE ID: R1147447-030915-A10	TIME ON: 0852	TIME OFF: 1503
SAMPLE LOCATION: F2- No. Cent.	FLOW RATES: 4.3 (LPM)	TOTAL MINUTES: 341
WORK ACTIVITY: Area Sample	VOLUME: 1,595.3 (L)	AIRBORNE FIBER CONC. = fibers/cc
SAMPLE ID: _____	TIME ON: _____	TIME OFF: _____
SAMPLE LOCATION: _____	FLOW RATES: _____ (LPM)	TOTAL MINUTES: _____
WORK ACTIVITY: _____	VOLUME: _____ (L)	AIRBORNE FIBER CONC. = fibers/cc
SAMPLE ID: _____	TIME ON: _____	TIME OFF: _____
SAMPLE LOCATION: _____	FLOW RATES: _____ (LPM)	TOTAL MINUTES: _____
WORK ACTIVITY: _____	VOLUME: _____ (L)	AIRBORNE FIBER CONC. = fibers/cc
SAMPLE ID: _____	TIME ON: _____	TIME OFF: _____
SAMPLE LOCATION: _____	FLOW RATES: _____ (LPM)	TOTAL MINUTES: _____
WORK ACTIVITY: _____	VOLUME: _____ (L)	AIRBORNE FIBER CONC. = fibers/cc
SAMPLE ID: _____	TIME ON: _____	TIME OFF: _____
SAMPLE LOCATION: _____	FLOW RATES: _____ (LPM)	TOTAL MINUTES: _____
WORK ACTIVITY: _____	VOLUME: _____ (L)	AIRBORNE FIBER CONC. = fibers/cc

Relinquished By: N. Ansoff Signature: [Signature] Date/Time: 3/9/15

Received By: [Signature] Signature: [Signature] Date/Time: 2:9:15 6:30

Relinquished By: _____ Signature: _____ Date/Time: _____

Received By: _____ Signature: _____ Date/Time: _____