MICRO ANALYTICAL LABORATORIES, INC.

BULK ASBESTOS ANALYSIS - PLM (EPA/600/R-93/116, 1993)



1102 Bob Kuykendall The Denali Group 2255 Morello Avenue, Suite 208 Pleasant Hill, CA 94523

PROJECT:

BUILDING 8 GYM WALL B14-16-18 COLONNADE ROOFS JOB NO. 09582 Micro Log In

153407

Total Samples

Date Sampled

04/27/2011

Date Received

04/29/2011

Date Analyzed

04/29/2011

ASBESTOS INFORMATION

SAMPLE IDENTIFICATION

QUANTITY (AREA %) / TYPES / LAYERS / DISTINCT SAMPLES

DOMINANT OTHER MATERIALS

Client #:	DG-1		
Micro #: 153407-01 Analyst: SC GRAY FIBROUS COVERING ON SOUTH GYM WALL BUILDING 8		20% CHRYSOTILE ASBESTOS	40 % FIBROUS GLASS Matrix BINDER, OTHER, Type: MISCELLANEOUS.
B14-B16	DG-2 153407-02 Analyst: SC 8 NORTH END ROOF COLONNADES BLACK ROOF COVERING MULTI LAYER	GLOSSY TAR: NONE DETECTED CELLULOSE FELT LAYERS: NONE DETECTED	30 % CELLULOSE Matrix TAR/ASPHALT, BINDER Type:
B14-B16	DG-3 153407-03 Analyst: SC SOUTH END OF ROOF COLONNADES TARRY ROOF COVERING MULTI ROOF	GLOSSY TAR: NONE DETECTED CELLULOSE FELT: NONE DETECTED	30 % CELLULOSE Matrix TAR/ASPHALT, BINDER Type:
B16 - B1	DG-4 153407-04 Analyst: SC 8 SOUTH END OF ROOF COLONNADES ATERIAL GRAY UPPER BLACK BOTTOM	GRAY PAINT (TOP): NONE DETECTED BLACK ROOF MATERIAL: NONE DETECTED TAN COATING (BOTTOM): 20% CHRYSOTILE ASBESTOS	Matrix TAR/ASPHALT, BINDER Type:
B16 - B1	DG-5 153407-05 Analyst: SC GR 8 NORTH END OF ROOF COLONNADES ATERIAL GRAY UPPER BLACK BOTTOM	GRAY ROOF MATERIAL: NONE DETECTED BLACK ROOF MATERIAL: NONE DETECTED	2 % CELLULOSE 5 % FIBROUS GLASS 2 % SYNTHETIC FIBERS Matrix TAR/ASPHALT, BINDER Type:

Technical Supervisor:

Gamini Ranatunga, Ph.D.

4/29/2011 Date Reported

Asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below ~1 µm may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM is recommended. Only dominant non-asbestos materials are indicated. Interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. Layers are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. Composite asbestos percentages are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Samples that were reanalyzed are denoted by two sels of analyst initials. Accreditation: NVLAP Lab Code 101872-0. CA ELAP Certification #1037. EPA 1993 method is based on EPA Interim Method (1982), with improved analytical techniques. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not

C	lient	ID	1

Relinquished By

MICRO ANALYTICAL LABORATORIES, INC.

Date / Time

5900 Hollis St., Suite M, Emeryville, CA 94608 Name / Client / Address: (510) 653-0824 - (510) 653-1361 - FAX Bob Kuykendall Asbestos **Project** Denali, Inc (TEM) Building 8 gym wall PLM Asbestos 2255 Morello Ave., Suite 208 B14-16-18 colonnade roofs Lead Only Pleasant Hill, California 94523 **Metals** (Specify) Tel. (925) 602-2333 Mold, Non-Viable (925) 687-1258 Job No. 09582 Other E-mail denaligp@ix.netcom.com (Specify) **Number of Samples Turn-Around Time** 5 24 HOURS Time Sampled Start / Stop / Micro ID# Date Average LPM Total Filter (For Lab Use Only) Client Sample ID# Description Sampled Total Minutes Liters Pore Size gray fibrous covering on south gym wall DG-1 04/27/2011 0.00 Building 8 0 B14-B16 north end roof colonnades 1 DG-2 04/27/2011 0.00 Black tarry roof covering multi layer 0 7 B14-B16 south end roof colonnades DG-3 04/27/2011 0.00 Black tarry roof covering multi layer 0 B16-B18 south end of roof colonnades DG-4 04/27/2011 0.00 roof material gray upper-black bottom 0 B16-B18 north end of roof colonnades DG-5 04/27/2011 0.00 roof material gray upper-black bottom 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 E-mail To: denaligp@ix.netcom.com Instructions / Comments: Sample Return: YES NO If "YES" is checked, samples will be returned to the client or archived at Micro Analytical if required. If "NO" is checked, solid samples may be disposed of within three months (one week for liquid samples, lab suspensions, and digestates). to Feel Note to Lab: If any samples are not acceptable, record reasons for rejection. Drop Box / Courier Relinquished By Date / Time Received By Date / Time

Received By

Date/Time