



EXPLANATION OF PCM ANALYTICAL & QUALITY ASSURANCE/QUALITY CONTROL DATA

MA DLWD Clearance Air Monitoring Standards

(For Response Actions >3 LF/SF Friable ACM removed by methods other than glovebag):

0.010 f/cc via PCM (non-school facilities and <160 SF or <260 LF for schools subject to AHERA)
70 s/mm² via TEM (>160 SF or >260 LF of asbestos material for schools subject to AHERA)

Laboratory Information:

Laboratory 1: Forbes Testing Labs
Location(s): 563 Center Street, Suite 201
P.O. Box 583, Ludlow, MA 01056 (413) 221-8233
Analyst: Stephen W. Niec, AIHA AAR/AAT Analyst ID No. 4830
AIHA, AAR/AAT Lab ID: 200242 ♦ MA Lic. #: AA000228

QA/QC Lab: ChemScope, Inc. (Round Robin/Sample Exchange)
15 Moulthrop Street, North Haven, CT 06473 (203) 8655605
AIHA Accreditation Lab ID: 100134

Quality Assurance / Quality Control Data (Forbes):

Method: NIOSH 7400, Issue #2, 15 AUG 1994
AIHA Lab #: 200242 (Forbes)
NIOSH LOQ: 100 f/mm² (78.5 fibers/100 fields)
NIOSH LOD: 7 f/mm² (5.5 fibers/100 fields)
10% QA/QC: Passes Sample Quality Test
Interlab Sr: 0.449 (IQC ROUND 39)
Intralab Sr: Overall = 0.19
5<20 f/100 = 0.23; 21<50 f/100 = 0.18; >50 f/100 = 0.14
Analyst CV: S. Niec - 5<20 f/100 = 0.23; 21<50 f/100 = 0.18; >50 f/100 = 0.14

Analytical Notations:

A minus ("-") or less than ("<") sign before the analytical result indicates that the result yielded a fiber density that is less than the Limit of Quantification (LOQ) for the PCM method. The results of these samples have greater than optimal variability and are probably biased and may not represent 95% confidence.

The laboratory is not responsible for improper sampling procedures for those samples collected by persons other than laboratory employees.

PCM is not specific to asbestos. It is used as an *indicator* of asbestos, as it measures only larger fibers of all types > 5 microns in length, and only fibers wider than about 0.25 micrometers can be counted due to the inherent resolution of the PC microscope technology (as compared to TEM, which measures *all asbestos* structures). These limitations are not serious for the use PCM in asbestos workplace settings where asbestos fibers comprise of a significant fraction of all airborne fibers. A general correlation has been established that the higher the level of PCM fibers the higher the level of asbestos fibers.

Forbes Testing Labs meets the applicable requirements of § 763.90(i)(2)(ii).