



# SAMPLE MASTER<sup>®</sup>

## Asbestos Package



*The Asbestos Package of Sample Master<sup>®</sup> LIMS offers laboratories an efficient, automated functionality that will manage your asbestos data, generate NVLAP reports, and create invoices. Maximize your resources and increase your productivity with ATL's Asbestos Package.*

ATLAB.COM



## ABOUT SAMPLE MASTER®

Using the latest database technology, Sample Master® is Windows compatible, allowing seamless integration with Microsoft Office and other applications in a variety of network environments.

With the ease and familiarity of point-and-click computing, Sample Master® boasts feature-rich components such as an intuitive user interface, integrated calculations, automated email alerts, Master Query functionality, scheduling, and automated reporting. Users can easily modify screen captions to common terminology, run modifiable canned reports, as well as incorporate new screens, report forms, queries, menus, modules, and more.

Sample Master® is modular in design and affords laboratories unparalleled flexibility to choose hardware and software specific to their needs, as well as support expansion as operations grow. The investment can be rapidly implemented and is backed by outstanding customer service, comprehensive training programs, and timely, comprehensive technical support.

## Looking for a Better Way to Manage Your Laboratory's Asbestos Data?

### ATL's Sample Master® LIMS Asbestos Package Can Help!

Find out how your laboratory can increase productivity, automate reports, calculations and, facilitate regulatory compliance goals while maximizing your resources.



Chrysotile Asbestos CS Dispersion Staining Colors  
Image courtesy of J3 Laboratories, Houston, TX

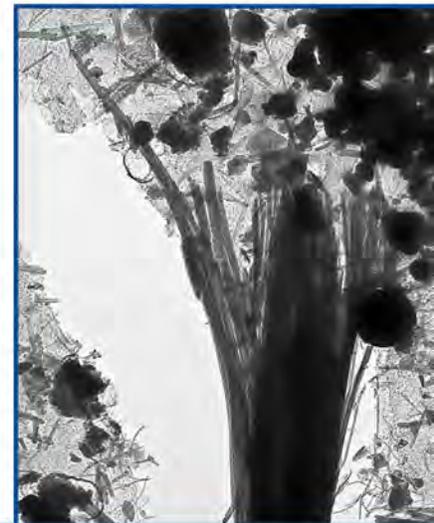
#### Introduction: Asbestos Testing

ATL LIMS helps laboratories to organize, track and securely manage asbestos testing data. Asbestos is a set of six naturally occurring *silicate minerals* used commercially for their desirable physical properties. They all have in common thin, *fibrous crystals*. *Asbestos* fibers can be *friable* (easily flaking off), releasing fibers more readily than encapsulated asbestos containing materials. Many laboratories specialize in asbestos testing, as well as other potential particles or microorganisms that cause indoor air quality concerns. For these laboratories, it is critical to have a system that allows samples to be accessioned, with the ability to scan in the associated chain of custody, efficiently enter in results, and automatically generate and email final analysis reports.

ATL works with many Industrial Hygiene and Asbestos testing laboratories, including one of the world's largest asbestos testing laboratories. Because each laboratory operates a little differently, ATL software solutions are extremely flexible, allowing for maximum efficiency and productivity. Over the past two decades, ATL has provided automation solutions for many Industrial Hygiene laboratories, configuring the system to match their workflows and creating unique web login forms to expedite sample receipt. ATL offers standard tools to achieve maximum productivity and efficiency in managing an asbestos and indoor air quality laboratory testing.

ATL's LIMS and laboratory automation solutions do more than manage laboratory analytical data; they also provide integrated barcoding, quoting, invoicing, sample tracking, data entry, scheduling, instrument integration, CRM, chemical inventory, QC, resource management and reporting. Additionally, they automate many of the day-to-day laboratory operations. There are also many features and functions, as described in ATL's Sample Master®, Result Point®, and Barcoding datasheets, which show how ATL's solutions help provide your organization with a competitive advantage plus how we can assist you meeting your regulatory compliance goals. ATL's Sample Master® LIMS offers the following key features in the Asbestos Package:

Chrysotile Bundle X15K  
Image courtesy of J3 Laboratories, Houston, TX



## SAMPLE MASTER® FEATURES

- Configurable System & Real-time Alerts
- Dashboard & Web
- Portal Barcoding & Audit Trail
- Automated Fax & Email
- Calculations & Limit Checking
- Internal Chain of Custody
- ELN & Instrument Integration
- Flexible Reporting & Chemical Inventory
- CRM & QA/QC
- Scheduling & EDDs
- Project & Resource Management
- Regulatory Compliance

**Continual Improvements:**  
SYSTEM ENHANCEMENTS & UPGRADES

**Detailed Analysis**  
Requirements

LIMS  
Configuration

Maintenance  
& Support

Implementation  
& Training

Verification  
(Quality Assurance  
& Testing)

## Polarized Light Microscopy (PLM)

In order for your laboratory to succeed, you need to use a reliable and versatile LIMS. Our PLM data entry screen allows users to add, delete, copy, and insert layers on the fly. All entry fields are equipped with a quick search feature from drop-down lists for fast data entry. Entire samples may be duplicated from any previously entered sample in the system, layer-for-layer. Calculations are performed in real-time, leaving out any guesswork as to how much is remaining in the sample. Analysts have the capability to view and/or modify microscopic observations associated with fibers identified in the sample. Analysts may also preview a report of the entered data with a click of a button. All of these features are performed via the same screen!

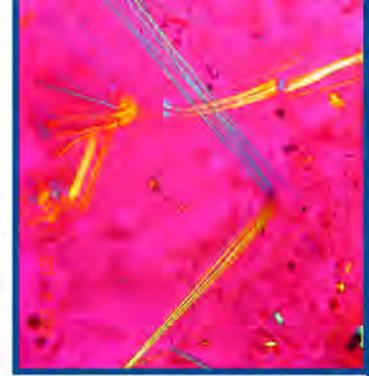
The analysis of Bulk Building Materials for asbestos content is conducted primarily by PLM and to a lesser degree, by XRD, SEM and TEM. The LIMS manages all aspects of PLM testing from login through analysis, to reporting and invoicing, to final sample disposal.

PLM results are reported as a percentage of the total sample. PLM utilizes a few standard protocols for the quantification process. These include visual estimation and point counting. The current method employed for these analyses is found in EPA 600/R-93/116. Other procedures, such as NIOSH 9002 and OSHA ID 191 are also utilized to supplement this method. The National Institute of Standards and Technology (NIST) through the National Voluntary Laboratory Accreditation Program (NVLAP) is the primary accreditation provider.

Sample results and related sample information can be entered via keyboard or use of drop down lists. The user can navigate through fields via the Tab or Enter key, or by placing the cursor in the desired field. The form size can be manipulated and moved to view multiple forms on the same screen. The record search feature allows users to move from one record to the next or to move to the first or last record in the order by clicking the arrows. The record search field allows the user to search and find a specific sample in the order.

### Key Features:

- User definable sample types list
- Calculations are performed in real time
- Percentages not equaling 100 will appear in red, and 100% appears in green
- For samples less than users can enter a '<' value
- Users can enter comments during the analysis/observation
- Copy sample function
- Copy layer function



Positive Sign of Elongation of Chrysotile and Amosite Asbestos  
Image courtesy of J3 Laboratories, Houston, TX

### PLM Asbestos Data Entry Form



### TEM (Transmission Electron Microscopy)

Whether entering AHERA samples or testing for asbestos in water, our TEM data entry screens are intuitive and user friendly. You can set default information regarding filter size, magnification, area of grid opening, and other options in order to streamline your analyst's time, increasing laboratory productivity. As asbestos fibers are identified and entered, pertinent drop down lists automatically become available with the ability to add comments, link image files and to perform automatic calculations.



### TEM AHERA Bench Sheet Data Entry Form

The Bench Sheet provides users with the ability to populate drop-down lists with descriptions that they typically use in their business. The Order ID Number and the first sample will be displayed in their respective fields. Storage Location can be either typed or chosen from the drop down list, comments regarding the sample may be entered at any time and users can upload multiple images of asbestos fibers from an instrument or from a computer.



### Phase Contrast Microscopy (PCM)

Your analysts can perform Phase Contrast Microscopy (PCM) tests and enter results into Sample Master® without having to look away from the microscope! The PCM calculator automatically totals the number of fibers, fields, and averages fibers per field. When 100 fibers are counted in at least 20 fields, an audible tone sounds to notify the analyst that this rule has been met, minimizing the analysts' time while increasing productivity in the laboratory.



### PCM Calculator

Phase Contrast Microscopy (PCM) is widely used to measure fiber concentrations of air samples. The ATL LIMS PCM Calculator is used to facilitate the entry of PCM asbestos data into Sample Master® LIMS. Using the form, each grid location analyzed has the number of fibers found entered into the calculator, if no fibers are found, a zero is entered.

### MINIMUM TECHNICAL SPECIFICATIONS

CLIENT REQUIREMENTS: Windows XP through Windows 7 or higher, Pentium 4 2.0 Ghz, 2 GB of RAM or higher, Microsoft Access 2010 (32-bit) runtime engine, Microsoft Access, Crystal, Excel, or any standard reporting tool that is desired.

SERVER REQUIREMENTS: Windows Server 2003 through 2008 R2 or higher, Pentium 4, 3.0 GHz, 2 GB of RAM or higher, 1 GB of free hard drive space. Recommendations are general and will vary by installation. Microsoft SQL Server, SQL Express or Oracle as the database engine.



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## About Accelerated Technology Laboratories

Founded in 1994, Accelerated Technology Laboratories, Inc. launched the first commercially-available Windows-based Laboratory Information Management System (LIMS) powered by database engines including Oracle and Microsoft SQL Server.

Today, Sample Master® is installed in hundreds of laboratories with thousands of users around the world. ATL software has provided software solutions for Fortune 500 companies and to a variety of industries including water & wastewater, analytical, energy (coal, electrical, nuclear), environmental, food & beverage, chemical, government,

public health, industrial hygiene, biotechnology, forensics, clinical testing and manufacturing, and many others.

We hold a strong commitment to quality and invest heavily in research and development to provide our customers with the best available technology and tools. We hire experts — in the fields of chemistry, water & wastewater, microbiology, medical technology, laboratory management, validation, software development, computer science, engineering, and business — who hold various degrees ranging from A.S., B.S, M.S., and PhD.

Sample Master® is the easiest LIMS to use and deploy; unlike systems that require teams of programmers and years to implement, ATL clients are typically live within 3-6 months depending on the number of instruments to be integrated, users to be trained, and level of configuration required.

ATL provides superior pre- and post-sales support and dedicated training. All software is backed by a comprehensive world-class support plan, and customers with GOLD or PLATINUM plans benefit from a dedicated Account Manager, a live Support Engineer, extended support hours, and more.

In addition to on-site and web-based training, LIMS Boot Camp courses are held biannually to train end users

one-on-one with certified instructors. ATL is also dedicated to keeping customers informed of industry news by publishing a quarterly newsletter.

Whether automating data management and reporting or replacing an existing system, ATL will work with you closely to develop and execute a sound implementation plan. We will install your data management software, train your database administrator and users on the features and functions of the system, and provide long-term comprehensive support on all levels.

**Improve laboratory data management processes and increase productivity and profit with Sample Master® LIMS. To determine the most suitable solution for your laboratory, please contact an ATL representative today!**

ATL is one of few independent LIMS firms that is ISO 9001:2008 certified. Quality is in our company DNA. We have attained Gold Certified Partner status in the Microsoft Partner Program and BioIT Alliance. ATL is also an Oracle Business Alliance Partner, and a Citrix Technology Partner. This proves our involvement and expertise in the technology marketplace.

Our alliances and certifications enable us to offer our customers superior software solutions to help them manage their laboratory business — today and into the future — with complete confidence and support at an affordable cost.