

The source for news and tips of interest to users of MSC-LIMS,  
an affordable laboratory information management system for small labs.

## Welcome

Welcome to **MSC-LIMS Insights**.

This newsletter will help current MSC-LIMS users get the most out of their software, and will complement the product literature and downloadable demo that prospective users can find on our web site at [www.msc-lims.com](http://www.msc-lims.com).



Join our mailing list for more information. Sign up at [www.msc-lims.com/lims/maillist.html](http://www.msc-lims.com/lims/maillist.html).

This newsletter is for and about MSC-LIMS users. We welcome your comments, and your suggestions for topics you would like to see addressed in upcoming issues. Please send your thoughts to [newsletter@msc-lims.com](mailto:newsletter@msc-lims.com). ▲

## Changing a Sample Pick List's Column Contents

While querying samples is often the most effective method to locate specific samples for most tasks, occasionally using a sample pick list is convenient.

For example, if you just logged a sample and you realize you mistakenly entered the wrong sample location, you can open the Sample Login screen, switch to edit mode, and then select the sample from the pick list. Your new sample will likely be found at the top of the list because sample pick lists present a list of recent samples in reverse chronological order.

You will find sample pick lists conveniently located on each of the following screens:

- Edit Analytical Batch (QC menu)
- Container Labels (Samples menu)
- Sample Login (Samples menu)
- Results by Sample Setup (Samples menu)
- QC Results Entry Setup (QC menu)
- QC Sample Login (QC menu)

(Continued on page 6)

## In this Issue

<i>Welcome</i>	1
<i>Changing a Sample Pick List's Column Contents</i>	1
<i>From the Developer</i>	2
<i>Log Samples from Excel</i>	2
<i>Notes from Technical Support</i>	5
Microsoft Access cannot open this file	5
Version 3.2 Bugs	5
<i>For Customers Only</i>	6
File Library	6
<i>Contact Us</i>	6

## From the Developer

MSC-LIMS version 3.2, which we released last September, has been well received. Thanks to all MSC-LIMS users. Whether you specifically suggested a new feature or your technical support questions sparked an idea, your contributions continue to help us improve our product. Without astute users, our job would be much more difficult.

The software development process remains part art and part science. With this mix, however, software defects (i.e. bugs) are inevitable. Even with rigorous testing of each new version some defects escape our detection. Beginning with this issue of *Insights* we are listing found bugs in "Version 3.2 Bugs" under Notes from Technical Support, page 5. If you are experiencing any of these known bugs, just let us know and we can add the fix to your system.

I am continually amazed by how useful MSC-LIMS' Excel interface has become for many users. With appropriate templates, moving data to and from Excel is a very powerful tool. In this issue of *Insights* we show another application of Excel with MSC LIMS, namely, logging LIMS samples from Excel. I can already envision additional Excel integration with sample login for future MSC-LIMS releases. Give it a try and then tell us what you think.



*Rick Collard is the founder of Mountain States Consulting and the principal developer of the MSC-LIMS software. You can reach Rick by email at [rcollard@msc-lims.com](mailto:rcollard@msc-lims.com).*

---

## Log Samples from Excel

MSC-LIMS' Excel interface is widely used to import final results and to export LIMS data. A main benefit of the Excel interface is reducing or eliminating duplicate data entry. If your customers or users already submit sample information electronically or you are considering this option you can improve your sample logging procedures by logging samples from Excel.

MSC-LIMS' Batch Login screen is a perfect solution when logging samples from Excel. The Batch Login screen stores sample information in its own temporary records table where you can build your sample batch dynamically, add and remove samples, and edit sample information before committing the samples to the LIMS database. Fortunately, this temporary records table is accessible to Excel so we can instruct Excel to add samples using Excel data.

Adding samples to the temporary records table is a very safe solution since samples are not committed to the LIMS database until the LIMS user completes the login in the Batch Login screen, and even here the samples can be edited or the login cancelled up until the last keystroke.

The best way to explore sample login from Excel is with an example. Remember, because we are using Batch Login's temporary records table, you can safely try the example with your production database since

you can abandon the batch without logging the samples. To follow the example you will need:

1. An empty dynamic batch. If you don't already use dynamic batch login, simply create an empty batch named "Dynamic Batch" (for example) using the Login Batches screen on the Setup menu. See "Use a Dynamic Batch to Speed Login" in [MSC-LIMS Insights Issue No. 10](#) (August, 2008) for more information.
2. The example workbooks from [Excel Sample Login Examples](#). Download these from the [File Library](#).

Begin by opening example workbook MSC-LIMS Sample Login.xls and review the additional information on the Settings sheet. Select the "LIMSInterface" name from the Name Box pick list (see the screen below) and observe that this named range identifies a table defining the cells on the first worksheet where LIMS sample field values will be found.

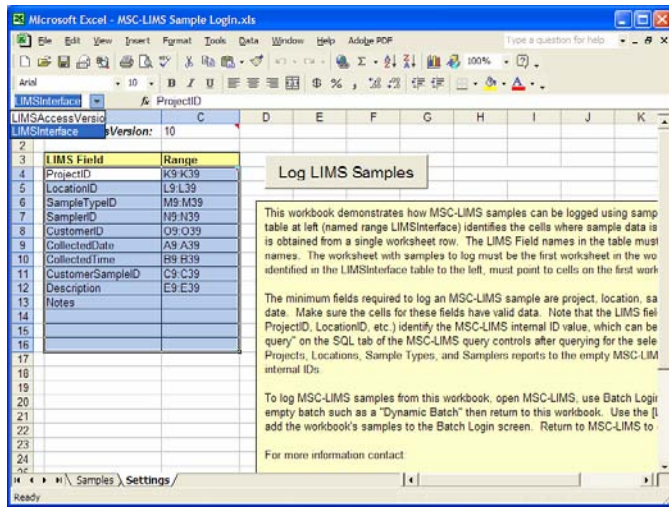
You can alter the Samples sheet to suit your needs then update the LIMSInterface table accordingly. For example, if you would like to import sample notes, add a Notes column to the Samples sheet then enter the notes' cell range in the LIMSInterface table. Additional sample fields including custom fields can be added.

(Continued on next page)

# MSC-LIMS™ *Insights*

(Continued from previous page)

Recall that the minimum information required to log a LIMS sample is project, location, sample type, sampler, and collected date. In the LIMSInterface table in our example below, note that we are using the internal identifier for sample fields that are related to other LIMS data.

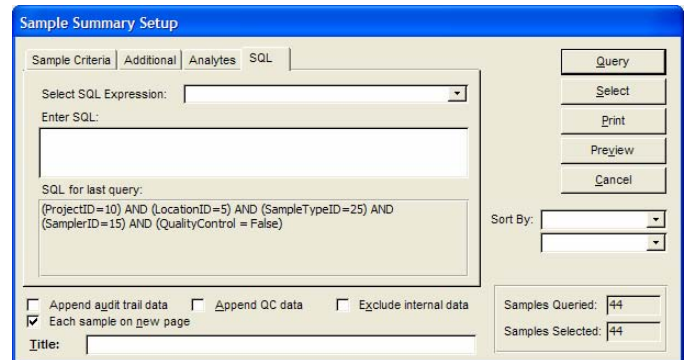


For example, since a sample must have a project and projects are configured elsewhere in the LIMS, a sample must include a value for the ProjectID field. We could use the project's name (more on that below) but the name is subject to change and our workbook would still need to look up the internal ProjectID for a given project name. Similarly, we must include valid values for LocationID, SampleTypeID, and SamplerID.

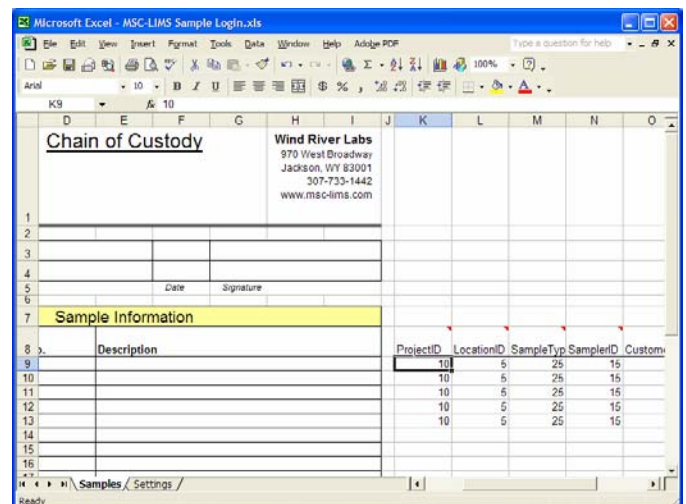
The workbook is greatly simplified by using the internal ID values. To find the internal ID values we can create a query in the LIMS and view the internal IDs in the SQL constructed for the query.

Start MSC-LIMS, open the Sample Summary report option on the Samples menu then build a query by selecting a project, location, sample type, and sampler you want to use to log a test sample from Excel. Click the [Query] button then select the SQL tab of the query controls and the internal ID values will be listed under "SQL for last query" (see example below).

Now return to the MSC-LIMS Sample Login.xls workbook, select the Samples sheet and enter your internal values for ProjectID, LocationID, SampleTypeID, and SamplerID in one or more rows.



The example below shows the values added to the first five rows. In practice, you might create separate workbooks for different combinations of project, location, sample type, sampler, and customer or use distinct regions of labeled rows for different combinations.



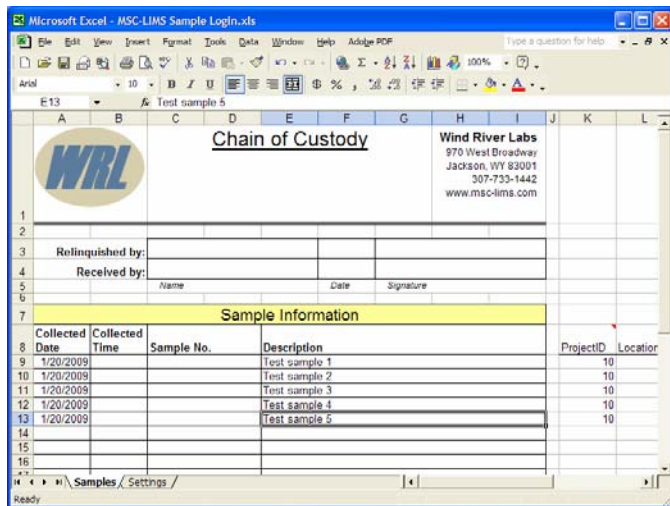
With values now defined for ProjectID, LocationID, SampleTypeID, and SamplerID we only need to enter collected dates to log our samples. Optionally, we can enter collected time, customer sample ID, and description because these LIMS sample fields have been configured in the LIMSInterface table on the Settings sheet.

The screen below shows our completed test samples. To log the samples, open MSC-LIMS, use the Batch Login option on the Samples menu, select your dynamic batch then click [OK] to open the Batch Login screen with an empty batch.

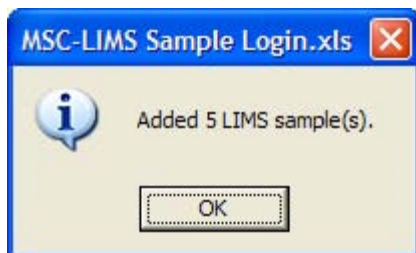
(Continued on next page)

# MSC-LIMS™ *Insights*

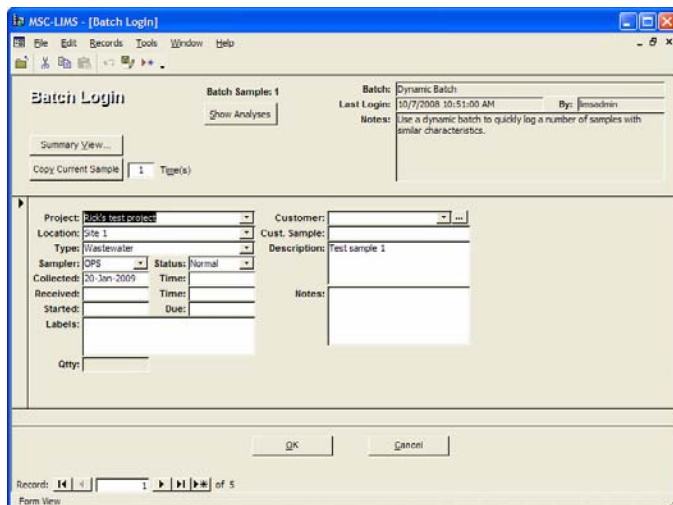
(Continued from previous page)



Return to the MSC-LIMS Sample Login.xls workbook, select the Settings sheet and click the [Log LIMS Samples] button. You will receive a confirmation message showing the number of LIMS samples added. Click the [OK] button to dismiss the message.



Return to MSC-LIMS and view the samples added to the Batch Login screen (see screen below).



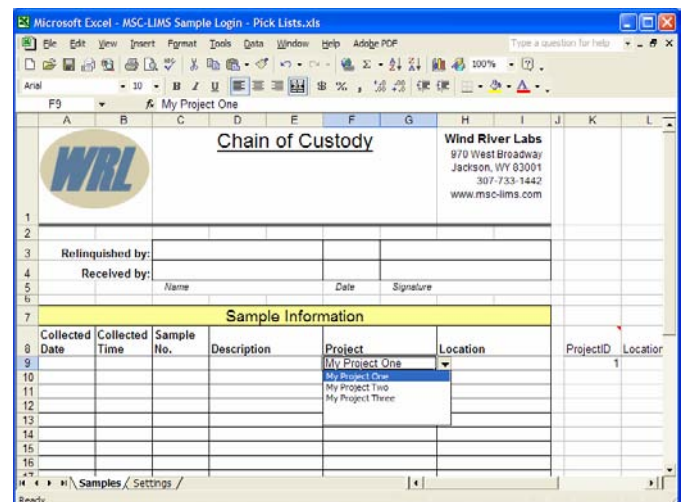
The samples have simply been added to the screen's temporary records table so you can modify the samples and their analyses and complete or cancel the login as you would with any other batch.


Now that you have completed the example above you can begin to envision the benefits of logging samples from Excel. Let's consider another example.

Open example workbook MSC-LIMS Sample Login - Pick Lists.xls and again review the additional information on the Settings sheet. You will see that this example defines lists of LIMS projects and locations with their internal IDs.

Switch to the Samples sheet and select a Project or Location cell. Notice the cell's dropdown pick list (see screen below) which was defined using Excel's data validation option and the corresponding table on the Setting sheet.

This workbook's LIMSInterface table is the same as our first example. However, the Sample sheet's cells where ProjectID and LocationID are found now contain formulas to look up the internal ID using the selected project or location name. Consider such pick lists when you want a more flexible method to select sample characteristics while restricting selections to a subset of options.



Explore these example workbooks and you may find ways to streamline your sample login process and begin logging samples from Excel with your own workbooks. 

## Notes from Technical Support

### Microsoft Access cannot open this file


After downloading a subscription update or other LimsCode update from our web site or as an attachment to an email message, many MSC-LIMS users have encountered the following or similar message:

*Microsoft Access cannot open this file. This file is located outside your intranet or on an untrusted site. Microsoft Access will not open the file due to potential security problems. To open the file, copy it to your machine or an accessible network location.*

The simple solution is to unblock the file by right-clicking LimsCode3.mde in Windows Explorer, click Properties then click Unblock in the General tab.


But why was the file blocked in the first place? In Windows XP Service Pack 2 (SP2), Microsoft added an Attachment Manager feature, whose function is purportedly to safeguard your computer from unsafe email attachments and files you download from the Internet.

In practice, most of our systems are already protected from malicious files by firewalls and anti-virus software. But Microsoft succumbed to the barrage of criticism when they added the Attachment Manager to Windows XP SP2. The Attachment Manager automatically blocks "high risk" files, including MDE and MDB files, downloaded from the Internet.

For more information see Microsoft's [Description of how the Attachment Manager works in Windows XP Service Pack 2](#). 

### Version 3.2 Bugs

To date, the following bugs have been uncovered in MSC-LIMS version 3.2. If you are experiencing any of these issues contact MSC for the fix.

- Problem: Querying by received date excludes samples that do not have a received time (L-000867).  
Fixed: 1-Oct-08
- Problem: Some recipients of emails sent by MSC-LIMS Messaging receive an attached winmail.dat file instead of the expected attachment. (L-000869).  
Fixed: 13-Oct-08
- Problem: The customer sample login options popup opened from the single sample login screen may list more than just the selected customer's options (L-000868).  
Fixed: 20-Nov-08
- Problem: The sample login screen's sample selection pick list displays the sample's customer in the third column when all other sample selection pick lists display the sample's location (L-000870).  
Fixed: 19-Jan-09 (see Changing a Sample Pick List's Column Contents to implement your own fix) 

## Changing a Sample Pick List's Column Contents


(Continued from page 1)

Sample pick lists present recent samples in reverse chronological order where the most recent sample is at the top of the list. However, the number of samples displayed is configurable by workstation, using the "Populate Sample List" option on the Workstation Configuration screen.

The contents of the pick list's five columns normally (see Version 3.2 Bugs) default to the following fields:

<u>Column</u>	<u>Field</u>
1	Sample ID
2	Project
3	Location
4	Sampler
5	Collected Date

The first column of all sample pick lists must always display the Sample ID, but the contents of columns two through five can be changed. For example, if yours is a commercial lab, you may benefit by listing the sample's customer in one of the pick list's columns. Each pick list's column widths are fixed so you should select an appropriate column for the data to be displayed.

Configure the column contents using specific syntax and the Options tab of the System Configuration screen. This technique is available for both Full System and Annual Subscription licenses. For detailed instructions see [How to Change a Sample Pick List's Column Contents](#) in the [Knowledge Base](#) on our web site at [www.msc-lims.com](http://www.msc-lims.com). 

---

## For Customers Only

This section of *MSC-LIMS Insights* is devoted to current users of MSC-LIMS. In this *Insights'* column, articles featured in past issues of *MSC-LIMS Insights* are summarized. Use your login name and password to log on to the Customers Only section of our website, and follow the links to *MSC-LIMS Insights* archives.

### File Library

#### [Excel Sample Login Examples](#)

Do your users submit sample information electronically or could you streamline sample login if they did? Consider the benefits if you received sample information electronically and you could include that

data during sample login without any additional data entry. Create your own sample login workbooks from one of these examples and log MSC-LIMS samples from Excel. See this month's feature article "**Error! Reference source not found.**" for more information.

---

## Contact Us

Questions, comments, suggestions?  
Reach us at:



Mountain States Consulting, LLC  
970 West Broadway #471  
Jackson, Wyoming 83001 USA  
Ph +1 307-733-1442  
Fax +1 303-379-6850

[info@msc-lims.com](mailto:info@msc-lims.com)  
[www.msc-lims.com](http://www.msc-lims.com)

Copyright © 2009 Mountain States Consulting, LLC.  
All rights reserved.